the same time bodily as well as mental strain, are all more or less neurasthenics. Not rarely repeated losses of a considerable quantity of blood produce neurasthenia by causing a general anæmia, yet we must definitely state that the neurasthenia may occur very well in such cases without the anæmia. Traumatism also may cause neurasthenic conditions. About these, which are usually intermediate forms between this disease and hysteria, we shall have to speak later, under the head of "traumatic neuroses." Finally, neurasthenia has been known to occur after infectious diseases, typhoid fever, cholera, variola. In these cases the bad state of nutrition and the faulty condition of the blood have to be held responsible.

Treatment.—The treatment of neurasthenia is one of the most troublesome tasks which the physician encounters. It is, of course, not sufficient to give the patient a prescription and let him go. We must frequently examine him, not only on our own account, but for his own sake as well, because he is comforted by the attention and solicitude of the physician, although the examination itself is usually disagreeable to him. There are neurasthenics who are actually relieved by repeated examinations, although nothing is ever prescribed. They gain therefrom the quieting conviction that somebody is looking out for them, and this gives them hope. But here also the direct psychical treatment, such as we usually find to be of value in hysteria, is of the greatest importance. The patient must again and again be encouraged and told that all his organs are healthy, that it is only a nervous overstrain which he is suffering from, a deficit in his nerve capital which it is somewhat difficult to replace. To exert a mental influence upon the patient in this manner time is necessary, and those physicians who can not afford sufficient time for the purpose should not take charge of a grave case of neurasthenia at all.

If hypochondriacal notions are prominent features, so that the patient is beyond the reach of consoling and encouraging words, the question whether or not he should be removed to an institution must come under consideration. In addition to the fact that change of air and scene exerts in itself a favorable influence, it is advisable to place a neurasthenic after a certain time among different surroundings, so that he has to meet with different people and has something fresh to occupy his mind with, and care should be taken to keep him constantly under the guidance of a physician. As supplying such requirements

sanitaria for nervous people, in which insane cases are not received, are to be highly recommended. Of course the pecuniary condition of the family must, before deciding upon this, be taken into account, since all establishments of this kind in which patients are well cared for are rather expensive. Sometimes in the more favorable instances a stay of from four to six months is sufficient to bring about a very decided improvement, in which case even families who are not very well off should be able to afford the expense.

There are especially two factors from which much is to be expected in the treatment of neurasthenia, and these are electricity and hydrotherapy, particularly the cold-water treatment. With regard to the former it may well be stated that there is no other nervous affection in which its application is followed by such excellent results as here. Used at the proper time and in proper doses, so to speak, it is most beneficial. The method which is best employed and to which we give by far the preference is the so-called general faradization as recommended by Beard and Rockwell, as well as the general galvanization. The results are especially striking if we make use of the brush, which, in Beard's method, is not only applied to the back-although it is kept here longest-but (with the exception of the head) all over the body. Although the patient may complain of disagreeable and painful sensations for the five or eight minutes during which the sitting lasts, the after effects which soon follow are most gratifying. The patients feel invigorated and leave the physician with a sense of having gained a new lease of life. According to our experience the faradization as advised by Beard is superior in its action to the electrical baths, which are much more circumstantial and have not been as yet sufficiently studied.

With reference to the cold-water treatment, to which we have repeatedly called attention in different places, we must in this more than in any other affection warn against overzeal-ousness and insist upon caution. Low temperatures are borne very badly by these nervous and irritable patients. They become excited and sleepless, and our aim is not only frustrated, but actually more harm than good is done. However, if we cautiously begin with a temperature of from 86° to 78° F., and confine our measures to gentle rubbings, affusions of short duration, cool hip baths, also of short duration, and avoid douches altogether, if care is taken at the same time to insure

proper nourishment and exercise for the patient, the best form of which, perhaps, is a walk in the woods, the results are encouraging and lasting, if neither physician nor client lose their patience too soon. A course of treatment of this kind can not, however, be compressed into the usual four weeks of a summer vacation, but to do any good six, eight, or ten weeks should be taken. Sometimes sea baths will be more useful than the simple cold-water treatment, but then also care must be taken in their selection. For the excitable and nervous who suffer from insomnia the places on the Baltic will on the whole be preferable to those on the North Sea, while the latter are especially adapted for very prostrated patients and individuals suffering from cerebral anæmia.

A long stay in pure mountain air, at a not too high altitude and where the barometer is not too low, is usually beneficial to neurasthenics. Daily systematic, but not forced, tramps in the mountains, continued for weeks, do more good sometimes than all the medicines of the pharmacopæia taken during the long winter. The internal medicines are anyhow of not much avail in the treatment of neurasthenia. Iron, quinine, arsenic, the stomachics, all will disappoint us; all will sometimes accomplish nothing; they rather tend to derange the digestion, and with this take away the last remnant of the patient's courage. The only drugs necessary will be such as are required for the proper regulation of the bowels.

Among the above-described symptoms there are two the treatment of which deserve special mention-first, the sleeplessness; secondly, the impotence. About the former nothing needs to be added to what has been said on page 162. To meet the latter much is to be expected—if, of course, organic disease, spermatorrhœa, and the like, have been excluded—from the local application of electricity. A large electrode, the anode, is placed over the lumbar cord, while the cathode is moved from the external inguinal ring down along the spermatic cord or applied without being shifted (Erb). With this may be combined the application of the faradic brush over the whole genital region. One electrode, the cathode, may also be placed in the rectum, the other upon the sacrum or perineum (Möbius). Finally, a bladder electrode, which has the shape of a catheter, and which is insulated up to its metallic tip, may be introduced into the urethra as far as the fossa navicularis, while the anode is applied over the lumbar cord,

and at the negative pole the current is made and broken several times. From this method, which has been recommended more especially for paralysis of the bladder and incontinence of urine, we have repeatedly seen good effects in the treatment of impotence.

The feeding system of Weir Mitchell, which has also been recommended in neurasthenia, we shall discuss in the chapter on hysteria.

## LITERATURE.

Beard. On Neurasthenia. New York, 1880.

Eisenlohr. Deutsche med. Wochenschr., 1884, x, 21. (Differential Diagnosis between Tabes and Neurasthenia.)

Beard und Rockwell. Die sexuelle Neurasthenie. Wien, 1885.

Möbius. Die Nervosität. Leipzig, 1885, 2. Aufl.

Thayer. Neurasthenia. Phil. Med. and Surg. Report., 1886, liv, 17, 18.

Berdt Hovell. On some Conditions of Neurasthenia. London, 1886, Churchill. Averbeck. Die acute Neurasthenie. Deutsche Med.-Ztg., 1886, vii, 30, 31, Langstein, H. Die Neurasthenie. Wien, 1886.

Mitchell, S. Weir. An Essay on the Treatment of Certain Forms of Neuras-

thenia and Hysteria. Phila., Lippincott, 1885.

Uherek. Die functionellen Neurosen beim weiblichen Geschlecht und ihre Beziehungen zu den Sexualleiden. Berlin, Neuwied, 1886.

Clark. Some Observations concerning what is called Neurasthenia. Lancet, January 1, 1886, i.

Krafft-Ebing, v. Ueber Neurasthenia sexualis beim Mann. Wiener med. Presse, 1887, xxviii, 5, 6.

v. Ziemssen. Die Neurasthenie und ihre Behandlung. Leipzig, Vogel, 1887. Hanc. Ein seltener Fall sexueller Neurasthenie. Wiener med. Klinik, x, 5.

Pippinsköld. On neurastheniens förekomst bland kroppsarbetare. Finska läkaresällsk. handl., 1887, xxix, 11.

Burkart. Berliner klin. Wochenschr., 1887, xxiv, 45. (Recommends Weir Mitchell's treatment.)

Mathieu. Neurasthénie et hystérie combinées. Progr. méd., 1888, xvi, 30.

Lemoine. Pathogénie et traitement de la neurasthénie. Ann. méd. psych., Septembre, 1888, 7me sér., viii.

Webber. A Study of Arterial Tension in Neurasthenia. Boston Med. and Surg. Journ., May, 1888, cxviii, 18.

Fürbringer. Zur Kenntniss der Impotentia generandi. Deutsche med. Wochenschr., 1888, xxv, 28.

Wagner. Zur Begriffsbestimmung und Therapie der Neurasthenie. Schweizer Correspondenzbl., 1888, xviii, 9.

Pelizaeus. Zur Differentialdiagnose der Neurasthenie. Deutsche Med.-Ztg., 1889, 27, 28.

Löwenfeld. Die moderne Behandlung der Nervenschwäche (Neurasthenie), der Hysterie und verwandter Leiden. Wiesbaden, Bergmann, 1889, 2. Aufl.

Pitres-Bitot. De la Neurasthénie et de l'hystéro-neurasthénie traumatique. Progrès méd., 1890, 49. Bottey. Hydrothérapie et Neurasthénie. Revue d'hygiène thérap., Fevr. 1892.

Jacobs. Gen. Tijd. voor Nederld. Indie., 1892, xxxii, 5.

Sollier. Sur une forme circulaire de la neurasthénie. Revue de méd., 1893, xiii, 12.

Müller (Alexanderbad). Handbuch der Neurasthenie. Leipzig, Vogel, 1893. (Indispensable for special studies.)

Kothe. Wesen und Behandlung der Neurasthenie. Weimar, 1894.

## CHAPTER II.

## HYSTERIA.

HYSTERIA has this in common with neurasthenia, that it does not depend upon any demonstrable anatomical lesions of the nervous system, but it differs from it in the fact that for its development a certain predisposition on the part of the patient is absolutely necessary. Although we are not as yet in a position to say of what nature this predisposition is, we must assume that the whole nervous system of a hysterical patient, central as well as peripheral, is in some points, which we are still unable to determine, different from that of healthy individuals. The greater extent to which these persons observe themselves (Oppenheim), the increased impressionability, the hyperæsthesia of the central nervous organs, the increased sensitiveness of the peripheral nervous system, the diminished energy with which influences coming from outside as well as from within are met, the lower general power of resistance and self-control, these are on the whole the traits which characterize hysterical persons, and explain why the symptoms are so manifold and change so rapidly, and why in no other disease of the nervous system can be found a train of manifestations so diverse and so numerous.

Only by unwearied, long-continued study has it been possible to show that even for the apparently arbitrary appearance of the different symptoms there exist certain laws. In a manner which none before or after have been able to rival, hysteria has been studied by Charcot and his pupils, to whom we owe the most interesting observations and investigations of the past two decades.

## LITERATURE.

Hasse. Krankheiten des Nervensystems. In Virchow's Handbuch der speciellen Pathologie und Therapie. Erlangen, 1869. (Contains the older literature.)
Briquet. Traité clinique et thérapeutique de l'Hystérie. Paris, 1859. (Original article, upon which all the studies on hysteria by the French authors are based.)