A Practical Treatise on Nervous Exhaustion (Neurasthenia).
By George M. Beard, A.M., M.D., &c. New York: William Wood and Company, 27 Great Jones Street, 1880.

According to Dr. Beard, nervous diseases, the result of nervous exhaustion, have increased to a fearful extent of late years in America. He has given especial attention to the subject, and has included all the various forms of defective nervous power under the term Neurasthenia. The symptoms of this malady, judging from Dr. Beard's account of them, are of a most complicated and protean character, and are attributed by him to the effects of civilisation. He admits that they defy logical order, but for the sake of convenience and for easy reference, he arranges them as follows, beginning with the brain and going downwards:

"Tenderness of the Scalp (Cerebral Irritation).—This is a phenomenon which is to the head what spinal irritation is to the spine. As in spinal irritation, the whole spine may be tender all the way from the first cervical vertebra to the coccyx; or the tenderness may be confined to the middle dorsal and middle lumbar vertebrae; so, in cerebral irritation, there may be
tenderness over the entire scalp, or it may be confined to the vertex, or to certain points in the forehead. Sometimes the scalp is so tender that brushing the hair causes pain; even touching the tips of the hair is disagreeable. At the vertex the tenderness is sometimes accompanied by a feeling of heat and burning, that may be somewhat relieved by firm pressure. This cerebral tenderness, like spinal tenderness, is superficial and peripheral, not deep-seated nor central, as some have supposed. It is, in many if not in all cases, tenderness of the ramifications of the occipital and other nerves that supply the scalp, just as spinal irritation is tenderness of the superficial nerves of the bones of the spinal column.

"Dilated Pupils.—Dilatation of the pupils is so often seen in neurasthenia that it may be considered as an important fact to be noted in the study of a case.

"Abnormal activity of the pupil—sudden and frequent alternations between contraction and dilatation—is a sign of neurasthenia, or, at least, of nervous irritability, of perhaps more importance than mere dilatation, just as in organic diseases of the cord, sluggishness of the pupils, slowness to contract or dilate, has been recently suggested as a better diagnostic sign than mere contraction of one or both pupils.

Temporary inequality of the pupils—one being at times more dilated than the other—I have seen in neurasthenia. Permanent inequality of the pupils is a sign of organic disease; but this neurasthenic inequality is inconstant, varying with the general condition.

"Sick Headache and Various Forms of Head Pain.—Sick headache is both a symptom and a safety-valve. If one must be nervous, an occasional attack of sick headache, if it be not too severe, is an excellent way for this nervousness to manifest itself, and, no doubt, saves other and worse affections. When sick headaches suddenly and permanently leave us, there may be reason to beware, though not probably in all cases. Some years ago I had under my care, for a short time, a case of shaking palsy that had followed a sudden and apparently causeless cessation of sick headache. When sick headache leaves us as a result of improvement of the nervous system through treatment or hygiene, it is so far forth a good sign.

"Pain, Pressure and Heaviness in the back of the head and over the vertex and through the whole head, very commonly attend the neurasthenic state, especially when the brain is congested; but may also appear where there is no evidence of an excess of blood on the brain. Lightness of the head is also a common complaint; also a symptom usually defined as 'I cannot tell how I feel.'
"Changes in the Expression of the Eye.—The mere expression of the eye is modified by disease in a way that it is hard to analyse or describe. In chronic nervous exhaustion from any cause or combination of causes, this expression of debility may become chronic—a permanent state that is revealed at once on meeting and addressing the sufferer. In the exhaustion that precedes death, the eye, as has been observed, sometimes protrudes far more than is natural. It is believed that this phenomenon takes place through the sympathetic.

"Congestion of the Conjunctiva.—One of the many ways in which neurasthenia affects the eyes is, by congestion of the conjunctiva. This passive congestion comes and goes, like all the other symptoms, being very bad in the morning, and almost disappearing by night, or perhaps in the course of an hour or two.

"Disturbances of the Nerves of Special Sense.—A malady of the eye is what I may call neurasthenic asthenopia, or the irritable eye, from nervous exhaustion, not depending solely on any muscular or accommodative trouble, but mainly symptomatic, revealing nothing very satisfactory to the ophthalmoscope or other tests of modern ophthalmology, but none the less painful, distressing, and sometimes exceedingly obstinate. This disease of the eye, symptomatic of nervous exhaustion, I observed a number of years ago, but could find no formal recognition of it in the standard text-books of ophthalmology. Dr. Mathewson, in conversation on the subject, tells me that this third form of asthenopia is now, however, under various names, coming into recognition in the journals and societies devoted to diseases of the eye. For a time it was supposed that Donders had solved all the problems of asthenopia; but it is now known that there are many cases that cannot be cured by glasses. These cases are common in this country, and, Dr. Roosa tells me, were first observed by our ophthalmologists.

"Musce Volitantes, or floating specks before the eyes, often annoy even the slightly nervously exhausted; in these cases the ophthalmoscope is only of negative assistance. Under exciting causes the specks suddenly appear and disappear. The liability to them may be a habit of one's life. They come and go like other nervous symptoms.

"Noises in the Ears in the shape of sudden explosions or pulsations, to say nothing of other varieties of tinnitus aurium, are quite common in cerebral exhaustion, especially when attended with congestion. These explosions may come on without any warning, while one is sitting quite still, and there is no apparent exciting cause. These symptoms may occur even when there is no perceptible disease of the auditory apparatus,
and may disappear as suddenly as they appear. A feeling of fulness and oppression in the head sometimes attends these symptoms. Subjective odours of various kinds—as of ozone or phosphorus; also abnormal subjective tastes—bitter or sour, with other fleeting symptoms of cerebral exhaustion, are observed.

“Sometimes there is a pumping sound in one or both ears, synchronous with the movements of the heart, worse usually during or after exertion, as going up-stairs; and it may be very annoying when one is very still, as when lying down in bed in the night; it is apt to be worse when stooping, or when worried or annoyed or flurried by any mental emotion. If this symptom were a constant one, and were always associated with demonstrable disease of the drum or middle ear, it might not perhaps be so great a mystery; but appearing, as it sometimes does, in those whose hearing is clearly perfect, or nearly so, and coming and going alternate with other symptoms of neurasthenia, without oftentimes any exciting cause being traced, it is probably due to the hyperesthesia of the auditory nerve, and analogous to that of the retina; and, like the retinal hyperesthesia, it is inconstant, variable, and capricious. My friend Dr. Schell, of Philadelphia, tells me that he has seen a number of cases where there were attacks of pain and aching in the ear, analogous to the pain and aching of the neurasthenic eye; but to account for which no objective appearances can be found.

“Atonic Voice.—When neurasthenia lays its hands on a man, it is liable to leave its impress on every organ and function of the body; from the crown to the toe there is not a fibre that is safe from attack. If some parts escape in one individual, they suffer in others. If at one stage of the malady certain regions are unaffected, it may be only that they may be attacked with all the greater violence at another stage. Thus the hair, the scalp, the eyes, the ears, the nasal and respiratory passages; the brain, in whole or in part, the cranial nerves, the heart, the spinal cord in any portion, the sensory and motor nerves, the stomach and bowels, the reproductive system, the skin, the nails, the secretions, the excretions, the absorbents—are all objects of assault.

“Deficient Mental Control.—Inability to concentrate the intellect on any task, as in writing or thinking, is a notable symptom. The mind wanders away in every direction, and when brought back by an effort of the will, is liable to be soon again lost in reverie.

“In some cases the exercise of concentration, or even slight attention, is exceedingly irksome and painful, causing distress
sometimes in the head, sometimes in the back or extremities, or other parts of the body.

"Inability to control the mind shows itself in various ways. An individual may take up a newspaper or book and read over a paragraph a half-dozen times, without knowing anything about that paragraph, without being able even in a general way to tell what he has been reading. Sometimes, in discouragement, they throw down the book; in despair they may attempt to write a letter, and find that they must give it up before a single page is completed, the mind wanders in sort of a day dream as far as possible from the subject to which they would direct their thoughts; they find that their brains are masters, and not themselves. Such a person often finds himself absorbed in a kind of dream, perhaps sitting quite still and forgetful of the work to which he has directed himself. A clergyman who consulted me in the past year for cerebrasthenia, or brain exhaustion, tells me that, although he can read even profound treatises, and converse on different themes, yet if he should attempt even to dictate and systematise a sermon he would be obliged to give up; the very idea of sustained, directed thought at once takes away all his power.

"Closely allied to this deficient mental control, and indeed a part of it, is what a layman, Mr. Richard Grant White, calls 'Heterophemy,' that is, saying one thing and meaning another, saying oftentimes directly the opposite to what we meant to say; saying precisely what we wish to avoid; the word we wish slips in ahead of the one that we would bring to the front. Persons in health are frequently guilty of this very interesting blunder; but in disease of the brain it becomes a very bad, sometimes very amusing as well as very annoying symptom. One of my old patients (the wife of a patient just referred to), who has both brain exhaustion and spine exhaustion, sometimes is compelled to mention a number of different words before she strikes the word she wishes. If, for example, she would have a book, perhaps she would say chair or sofa. She was not troubled in this way until she became neurasthenic, and since that time she has been troubled constantly.

"Mental Irritability.—A man comes home at night specially tired, and finds himself, or his friends find him, in a condition to fret and worry and become irascible over trifles which, when feeling well and calm, would have no influence upon him. The flurries of domestic life, the cares of the house, disappointments and vexations, the noise of play of children, become a source of great distress, and he expresses this distress in his words and actions.

"This behaviour may be either physiological or pathological—the habit of a perfectly healthy man or a symptom of neurast-
thenia appearing in one previously good-tempered, and associated with other neurasthenic symptoms it becomes of diagnostic value.

"Hopelessness.—When a patient is dying, in the last stages of consumption or cancer, he is often, if not usually, hopeful; and sometimes he does not abandon the expectation of recovery even when on the edge of the grave. After friends have given up utterly, and the physician only comes to relieve, the patient himself is full of hope.

The philosophy of this symptom of hopelessness appears to be similar to that of morbid fear—an instinctive consciousness of inadequacy for the task before us. We are hopeless because our nerve force is so reduced that the mere holding on to life seems to be a burden too heavy for us. A certain amount of nerve strength is necessary to supply the courage requisite for simple existence. Abstaining from dying demands a degree of force just as the mere keeping in an erect position—standing up without taking a single step—is only possible to those who have a certain quantity of strength. Abstaining from dying, like abstaining from falling, is in one respect a negation only, but neither is possible without an expenditure of force.

"In our half-awakened moments at midnight, a slight noise causes the heart to beat rapidly, for we are conscious of not having full possession of our powers to meet any attack or danger. The nervously-exhausted man is always in this state, physically insolvent, and unequal to the task of living.

"The despair of sea-sickness well illustrates this phenomenon. In the short space of an hour, or less, one can be reduced from a state of perfect bliss to perfect misery, simply from the perturbations caused by the motion of the vessel.

"One time, when returning from England, our steamer collided with a sailing vessel in such a way and under such circumstances as to give just reason for the belief that we might be in serious peril. In the height of the excitement and alarm a sea-sick passenger came out from his room, where he had been shut up ever since our departure, and inquired what the trouble was all about. He was informed that our steamer was leaking, and that we were fast sinking. ‘If that’s all, I’ll turn in again,’ he replied, and went back to his berth, whence he did not emerge until we all landed in New York.

"Morbid Fear.—The emotion of fear is normal to the human mind. It is as natural and necessary to be afraid as to be courageous. Fear is, indeed, a part of the first law of nature, self-existence. This emotion is, therefore, physiological, varying both in degree and kind, with race, sex, age, and the individual. In neuropathology, especially in the pathology of functional nervous diseases, the difference between health and disease is of degree rather than of kind; the phenomena that
belong to what we call health passing, by indefinite and not distinctly defined gradations, into the phenomena of what we call disease; pathology being, in truth, has as been said, but the shady side of physiology.

"Westphal more recently has described a form of morbid fear under the term agoraphobia, or fear of places. This title, however, is quite inadequate to express the many varieties of morbid fear which the expression fear of places covers. The Greek word agora, from which Westphal derives his term, means an open square—a market place, a public place where assemblies were held—and as applied to the cases first described by him, the term is practically, though not etymologically, a correct one, for the fear of going across open squares or places, at a distance from houses to shops, was the chief feature in all of those cases.* This fear of open squares or places is, however, but one of a large number of phases that the fear of places assumes, as I have elsewhere described. In strictness, fear of places should be described from the Greek word topos, place, a generic term, while agora is a special kind of place; agora- phobia would, therefore, be a species of topophobia, or a general fear of places, which symptom seems to be capable of infinite variety.

"A form of morbid fear that has long been known to the profession, is pathophobia, or fear of diseases—more commonly known as hypochondriasis. This form of morbid fear seldom exists alone, but is found in company with other symptoms—some real disorder of the nervous system. The pathophobic sufferer, with brain or stomach, or both, exhausted for some reason, may fear disease of the heart, of the stomach, or of the brain, or of the reproductive system, even when there is no sign of disease except his fear. The mistake usually made in the study of these cases is to assume that this fear of disease is the only symptom which the patient has, and that it is the cause of the disease; whereas, usually, it is the result of the disease of cerebral exhaustion, like the other forms of morbid fear, whatever the cause may be; and as such it should be studied and treated.

"There is a manifestation of morbid fear which is not uncommon, and to which we might perhaps give the term pantaphobia, or fear of everything; all responsibility, every attempt to make a change of movement being the result of dread and alarm. The wife of one of my patients has a morbid fear in reference to one of her sons, a lad of about fifteen years of age; and so distressed is she by it that she cannot allow him to go out of the house, or out of her sight, fearing lest he may be kid-

* In etymological strictness agoraphobia means fear of large assemblies of human beings, and not of the place where the people meet.
napped, or some harm may come to him, as in the case of Charlie Ross. The poor fellow is thus kept a prisoner most of the time, and the whole family is disturbed and annoyed. He must remain in the city during the summer, as she cannot allow him to leave town; and at no season can he go anywhere unless accompanied by his tutor.

"For convenience of reference this classification of morbid fears may be thus tabulated:

"Astraphobia—Fear of lightning.

"Topophobia—Fear of places; a generic term, with these subdivisions:

"Agoraphobia—Fear of open places.

"Claustrophobia—Fear of narrow, closed places.

"Anthropophobia—Fear of man; a generic term including fear of society.

"Gynophobia—Fear of woman.

"Monophobia—Fear of being alone.

"Pathophobia—Fear of disease, usually called hypochondriasis.

"Pantaphobia—Fear of everything.

"Phobophobia—Fear of being afraid.

"Mysophobia—Fear of contamination.

"Flushing and Fidgetiness.—Patients of this class sometimes easily flush and easily faint; the inhibitory action of the sympathetic is readily interfered with by any slight emotion. Fidgetiness and nervousness, inability to keep still—a sensation that amounts to pain—is sometimes unspeakably distressing. Although it cannot be defined, it may be an accompaniment of growing pains, and is one of the myriad results of spinal irritation. Sometimes in writing, the hand and arm become so nervous and fidgety that to continue writing would be the severest torture. When the legs feel this way, the sufferer must get up and walk or run, even though he be debilitated and is made worse by severe exercise. A gentleman once under my care could not sit still in the chair long enough to take an application of electricity.

"Frequent Blushing.—A very common effect of nervous exhaustion, in both sexes, is frequent and severe blushing from the slightest possible mental or physical causes, and extending sometimes, not only over the face, forehead, and ears, but down the neck, and apparently over other portions of the body. Suddenly meeting anyone, a stranger or acquaintance, the hearing of an unexpected noise, the taking of food or drink into the stomach, especially when rapidly swallowed, any stooping, or straining, or any slight muscular or mental exertion, may bring on this unpleasant, perplexing, and annoying symp-
tom. In some cases the symptom appears without any objective cause whatever; the person may be sitting all alone, and the face, under some thought, or fear, or anxiety, or feeling of responsibility, may become as red as though suddenly entering company.

"Insomnia.—The different phrases of insomnia in neurotic patients are exceeding interesting.

One man finds no difficulty in getting to sleep on retiring but soon wakes, and must remain awake for the rest of the night. Another man rolls and tumbles for hours before he falls into oblivious slumber, but when once asleep does not usually wake until morning. I was recently consulted for a case of insomnia of many years' duration, where there had never been any difficulty in sleeping after getting to sleep.

"Drowsiness is the opposite symptom, and is experienced by persons whose symptoms in other respects are very much the same as those of the sleepless.

"Tenderness of the Teeth and Gums.—Attacks of tenderness of all the teeth, accompanied by a whitish appearance of the gums, I have noticed in nervous exhaustion. In these attacks, which may result from over-work, or excess, all the teeth may be very tender on pressure, although none of them are decayed. Here, then, is another opportunity to study with the naked eye the pathology of spinal irritation. In nervous exhaustion, whether complicated with anaemia or not, there may be tenderness of any part of the body or of the whole body. Tenderness of the head is cerebral irritation; of the spine, spinal irritation; of the tip of the spine, coccydynia; of the breast, irritable mammae; of the ovaries, irritable ovaries; of the teeth here described, dental irritation; and so on of the womb; and the pathology of any one of these symptoms is probably the pathology of all.

Nervous Dyspepsia (Dyspepsie Asthénique).—In cases—not a few—nervous dyspepsia is the first noticeable symptom of nervous exhaustion—the earliest sign that the body is giving way; and for years the stomach may be functionally disordered before the brain, or spinal cord, or other parts or organs, show signs of yielding. The true philosophy is, that nervous dyspepsia is a symptom of the same general pathological condition as all the orders of symptoms here noted, and it may follow or accompany, as well as lead this multitudinous army. A literary gentleman whom I once met, gave a history of nervous exhaustion from over-confinement, that after some years broke out through the pneumogastric nerve, causing profound and obstinate dyspepsia, that for a long time made him a complete invalid; the symptoms were almost as bad as those of
cancer of the stomach, and yet the disturbance was entirely functional, and the patient improved. Flatulence with annoying rumbling in the bowels these patients complain of very frequently; also nausea and diarrhoea.

"Deficient Thirst, and Capacity for Assimilating Fluids—Quite recently a physician who consulted me in regard to himself, called my attention to the highly interesting fact that he rarely drank water either at meals or between meals; and he stated that the average quantity of liquid that he consumed was far below the normal standard. Investigation of other cases of neurasthenic has convinced me that this deficiency of thirst is one of the symptoms of that state, and it would appear that it is not an unusual symptom, but exists in not a few cases; there are many who for years have a poor appetite for fluids, as they have a poor appetite for solid food; they live on a small quantity of liquid, and, perhaps, without suspecting it, until their attention is directed to the fact. There are those who find that, if they take much liquid, the stomach suffers, even when little or no solid food is mingled with it. One advantage, with some disadvantages, of the free use of beer with our German friends is in the quantity of fluid that they thereby imbibe—the water of the drink more than the alcohol. Drinking milk has a similar advantage.

"Desire for Stimulants and Narcotics.—When the nervous system loses, through any cause, much of its nervous force, so that it cannot stand upright with ease and comfort, it leans on the nearest and most convenient artificial support that is capable of temporarily propping up the enfeebled frame. Anything that gives ease, sedation, oblivion, such as chloral, chloroform, opium, or alcohol, may be resorted to at first as an incident, and finally as a habit. Such is the philosophy of many cases of opium or alcohol inebriety. Not only for the relief of pain, but for the relief of exhaustion, deeper and more distressing than pain, do both men and women resort to the drug shop. I count this as one of the great causes of the recent increase of opium and alcohol inebriety among women. Frequently an inherited tendency to inebriety is utterly latent, and does not break out until affliction, or some form of worry or distress, robs the brain of its nerve-force. Very many cases illustrative of this have been published by my friend Dr. T. D. Crothers, now superintendent of the Walnut Hill Asylum for Inebriates, Hartford, Ct.

"One sign of neurasthenia, especially of an acute attack, is inability to bear certain kinds of stimulants and narcotics to which patients have been accustomed; thus patients have told me, that during illness of any kind, they were obliged to sus-
pend smoking; they say that tobacco makes them sick. This happens to those who have been accustomed to use large quantities both chewing and smoking. As they regain their strength, they also regain their power of using stimulants.

"Abnormalities of the Secretions.—In nervous exhaustion, the eyes may become moistened more readily than in health, and under a very slight emotion of pleasure or pain. The flood-gates seem, as it were, to stand ajar; and on trifling agitation the tears flow forth. In grave cerebral disease, this symptom is common enough, but in functional disease—simple nervous exhaustion—it is even more common; and 'softening of the brain' is feared.

"In nervous debility, also, the sebaceous glands may refuse to do their duty; the hair and beard become dry and stiff, and much pomade is needed. The hair then falls off or becomes gray in patches.

"Abnormal Dryness of the Skin, Joints, and Mucous Membranes.—In some cases of neurasthenia the skin of the whole body is unnaturally dry; this is especially and most readily noticed in the hands, but all parts of the surface may present this peculiarity. A scaliness or scurfiness may accompany this dryness, as though there were a deficiency of fluids and of sebaceous secretion. There would also appear to be a relation between this condition and a disinclination to drink, or use fluids freely.

"Sweating Hands and Feet, with Redness (Palmar Hyperidrosis).—Sweating of the hands—of the palmar surface, or of the entire hand—palmar hyperidrosis—is a symptom of neurasthenia at once so interesting and so frequent that I wonder that the literature of the subject is so meagre.

"This phenomenon—abnormal perspiration of the hands—is certainly more common in males than in females, although it occurs, as, indeed, all forms of hyperidrosis occur, in both sexes. The milder phases are common enough, but there are severe manifestations that this symptom may assume, which seem well-nigh beyond belief. Thus, a young man now under my care is so distressed thereby that he threatens suicide unless he is permanently cured. In his case there are various evidences of a bad inheritance, a poor constitution, although this palmar sweating is just now the only very annoying expression of the depraved diathesis. A young lady in the northern part of the State is compelled to take a number of handkerchiefs with her when she goes to school, and on her return they are all saturated from the excessive perspiration of her hands. My friend, Dr. M. Josiah Roberts, of this city, tells me that in a similar case, lately brought to his attention, there was clear proof of uterine disease.
"Salivation.—Dryness of the mouth, through suppression of the salivary secretion, is often noticed, both as an effect of emotion and as an effect of nervous substitution; the opposite condition, salivation, is not so common.

"A year ago, an intelligent physician informed me that, at one time, while in a neurasthenic state, he went to bed, and by an effort of the will, as he expressed it, brought on free salivation. Subsequent nights the same effect occurred, contrary to his wishes, and it was some time before he was restored to his normal, original condition.

"Tenderness of the Spine (Spinal Irritation), and of the whole Body (General Hyperæsthesia).—When the spine is so tender as to become an important and permanent affliction, and to over-shadow other symptoms of the neurasthenic state, it is called spinal irritation; but, strictly, it is a symptom, like cerebral irritation, not properly a disease as such, although, as a matter of convenience, there can be no harm practically in describing it as a disease. In regard to this symptom of nervous exhaustion, these points are noticeable: First, its great frequency in the upper classes, especially among women. I suppose if one should go through Fifth Avenue, of New York City, and examine the spines of all the ladies between fifteen and forty-five years of age, he would find, in quite a percentage of cases, that, at times, there would be tenderness either of the whole length of the spine, or more likely, at certain points, as the nape of the neck, and between the shoulder-blades, and on the middle lumbar vertebrae. Crawling, creeping, and burning sensations often accompany this tenderness. This condition would be found at times in those who do not call themselves invalids, and who are not under medical treatment. It would furthermore be found that, with some of these cases, there would be tenderness of the scapula, or hip bones, of the breast bone, and, indeed, of the whole surface of the body. This general hyperæsthesia, like the local hyperæsthesia of the spine, appears and disappears under any subjective or objective exciting causes, and is attended usually by a feeling of debility, and oftentimes, though not always, by backache, headache, insomnia, and mental depression.

"The transient nature of this symptom of spinal and general irritation is shown by the fact that it may disappear often after a single application of electricity. Many women always have spinal irritation during the period of menstruation. Spinal irritation—tenderness on pressure—is not the only symptom of spinal exhaustion; it is but one of many symptoms of that state. In some cases of spinal exhaustion, also, there is no tenderness of the spine on pressure."
"Coccyodynia.—A very common and sometimes most distressing form of spinal irritation is what is called coccyodynia—that is, tenderness with pain, and sometimes severe neuralgia at the tip of the spine, what is called the coccyx. This is far more common with women than with men; indeed, in man it very rarely occurs. It almost always accompanies irritations of other portions of the spine.

One of the symptoms of this form of spinal irritation is a feeling as though the spine were too long; when sitting, this feeling is a distressing one.

Peculiarities of Pain in the Back.—In neurasthenia all parts of the back may be the seat of pain, although certain districts are more affected than others. There may be tenderness when there is no pain, and conversely pain, even severe pain, when there is no tenderness. There may be much distress in the loins and over the hips, when careful examination shows no tenderness anywhere.

This pain in the hips and loins is something quite different from ordinary neuralgia or sciatica; it rather resembles muscular rheumatism or a common cold, and is, indeed, often confounded with one or both of these diseases, even by able diagnosticians. The liability to confound irritation of the upper part of the spine at the nape of the neck with rheumatism is very great; the symptoms, indeed, are quite the same—pains, stiffness, aching, inability to move the head without discomfort. Sometimes this condition perfectly simulates wry-neck, and is mistaken for it. One of the very ablest neurologists in Germany, on being consulted by a case of irritation in the upper part of the spine, made diagnosis of rheumatism, and treated the patient accordingly. This back pain, and the tenderness that may or may not accompany it, fluctuates like all these neurasthenic symptoms: to-day they are present in full force, to-morrow they are all gone, but on any provocation are liable to return. They fly about in every direction; now just below the shoulder-blade; now in the centre of the spine; and at another time between the shoulder-blades, or in the middle lumbar region; sometimes with heat and burning, at others with biting penetrating sensations, or a feeling as though ants were crawling just under the skin.

Heaviness of the Loins and Limbs.—One of the most frequent complaints among the neurasthenic (myelasthenic form) is heaviness and vague aching of the loins and limbs, and sometimes of the whole body. This is a symptom hard to define in exact words, but it is very common, and it is a cause of great distress. This symptom is quite apt to follow over physical exertion, as in walking or standing, but may come on without any apparent or special exciting causes. This feeling so closely
resembles rheumatism that it is often confounded with that affection by those who are unfamiliar with neurasthenia, and even one well acquainted with nervous exhaustion in all its forms, might, on first being called to a patient, mistake this heaviness and aching for a common cold, or for a rheumatic attack.* I have lately been consulted by a gentleman suffering from myelasthenia, where this aching of the lower part of the back and loins is almost the only subjective symptom. In sexual exhaustion, pains in the loins and limbs, not amounting to neuralgia, but sufficient to be a severe annoyance, are frequent enough, but they are not restricted to the sexual variety of neurasthenia.

"There would seem to be a degree of truth in the suggestion, which has often occurred to me in studying these cases of pain in the back and loins and the lumbar region, that they were to men what so-called spinal irritation is to women. It may be said that this condition is to spinal irritation what hypochondriasis is to hysteria.

"Shooting Pains simulating those of Ataxy.—If there be any difference between the familiar shooting, lightning-like pains in the extremities, that have so long been considered as peculiar to ataxy, and the shooting pains of neurasthenia, I have not been able as yet to find it out. Generally, these neurasthenic pains are milder than those of ataxy, but this average fact does not interfere with the fact of observation, that this difference in degree is not of itself sufficient to make it possible to establish the differential diagnosis; for the shooting pains of ataxy are by no means always severe, and in many cases of the disease do not exist at all. The mistake of writers in so strenuously insisting on the diagnostic importance of these shooting pains has been, and is, the source of terrible annoyance to physicians, especially who happen to be themselves sufferers from these neurasthenic symptoms.

"The same remark applies to fibrillary contractions, which have been looked upon as indicating muscular atrophy, but which, as I have elsewhere stated, may exist as one of the many symptoms of neurasthenia.

"Podalgia (Pain in the Feet).—One of the symptoms of ataxy in the early stages is a feeling of numbness of the feet.

Sometimes there is a feeling as though straw were at the bottom of their feet, or as of walking on velvet, or rubber, or wool. A feeling of heat and burning is also noticed; and both in neurasthenia and in ataxy, it comes from the spine. It has,

* How the symptoms of ataxy have been, and are, mistaken for rheumatism is well known to the physician.
however, a very different significance; in one case it means an organic, and in the others a nervous, functional disease.

"In some cases there are painful spots on the feet, either on the sides or at the bottoms. These spots are more painful from pressure of the boot or shoe; they are felt even when in bare feet or in slippers.

"Pains of the feet may be observed in persons not specially nervous, but they are to be found also as symptoms and results of neurasthenia.

"There is little question but that in some cases they are reflected from the stomach or genital apparatus.

"Tremulous and Variable Pulse and Palpitation of the Heart (Irritable Heart).—In the nervous, the rapidity and quality of the pulse-beats may vary in many ways during the process of counting. Frequently the pulse of the nervously exhausted is compressible, and almost always it is more rapid than normal, ranging between 75 and 90, frequently going up to 95, 100, or 110 and more. In exceptional instances nervous exhaustion has a very slow pulse, in the neighbourhood of 40 or less, or there may be alternations between a very high and a very low pulse.

"Local Spasms of Muscles (Tremors).—What are called "fibrillary contractions," and which sometimes occur in progressive muscular atrophy, are also noticed in the various shades of nervous exhaustion. An individual muscle or part of a muscle may twitch occasionally or frequently, so as to cause considerable annoyance, and, in some cases, unnecessary anxiety. As these vibrations occur in the orbicularis, and other muscles of the face, these spasms are very familiar; they come and leave without warning, and suddenly, lasting all the way from a few minutes to hours, or even days. They are not very bad, sometimes, nor especially troublesome, except when they become chronic, and the twitching extends to other muscles of the face. This result is exceptional; and so far as I have observed, chronic facial spasm does not occur in those who have nervous exhaustion. I was once conversing on nervous diseases with a well-known physician, when, all at once, the orbicularis of one of his eyes began to twitch vigorously; he said it was the first time in his life that he had experienced anything of the kind; he regarded the use of tobacco as the probable cause.

"The stomach, in nervous dyspepsia, may be the seat of similar spasms, which may follow any excitement or emotion, as of fear or responsibility. A sensation like that of a reverse aura seems to go downward to the pit of the stomach from the nerve centres, and excites spasms, apparently, of the muscles of the stomach itself.
"Dysphagia (Difficulty of Swallowing).—Dysphagia is sometimes a result of neurasthenia. I have seen it in severe cases of hay-fever, where there is great prostration. I have seen it also as a chronic condition in persons who are exceedingly nervous—coming and going—made better or worse, apparently, by no objective cause that can be ascertained.

"Convulsive Movements, especially on going to Sleep.—Nervous sufferers, just as they are dropping off to sleep, are sometimes suddenly and painfully awakened by a violent, spasmotic movement of an arm, or leg, or of the whole body. This appears without any warning, and is most likely to occur when preceded by unusual excitement or fatigue. In some cases there will be a recurrence of these spasms, so that much difficulty is experienced in getting to sleep. I have known instances where the whole body seemed to be thrown off the bed, or rather the sensation was as though the body were projected upward. This symptom is not so alarming as some of those who experience it believe. It indicates an exhausted, a worn condition of the nervous system; but it is not as ominous for evil as many other phenomena that belong to the nervously exhausted state. A friend of mine—a public speaker, constantly before audiences, and always at work—with a frame of unusual size and an extraordinary capacity for enduring mental excitement and toil—tells me that, with all his vigour, he has been annoyed by these jerkings on falling to sleep, although he has no other evidence of neurasthenia.

"Cramps.—One of the symptoms of certain phases of neurasthenia is the occurrence of cramps; usually in the calf of the leg and more frequent at night. Sometimes these pains are so severe as to awaken the patient out of a sound slumber, and are only relieved by severe rubbing, or by energetic movements.

"In some cases these cramps are felt as soon as one gets fairly in bed and asleep.

"Special Idiosyncrasies in regard to Food, Medicine, and External Irritants.—When the nervous system becomes exhausted, it is apt to develop various idiosyncrasies not before observed; some of them are of high interest. Opium, for example, is likely to aggravate insomnia in many neurasthenic patients, instead of putting them to sleep, unless, indeed, very large doses are used. Formerly opium was our chief—almost our only—dependence when we wished to put one asleep. Now we scarcely think of using it for that purpose in the treatment of the nervous, except when there is severe pain to be relieved. Opium for the nervously exhausted prevents sleep almost as much as coffee. So frequent is this idiosyncrasy that, were it not for
the bromides and cannabis indica and electricity, we should be utterly disarmed in the presence of these cases.

"Incidentally, I will remark that the development of idiosyncrasies, through nervous sensitiveness, acquired or inherited, is the real philosophy of hay-fever—a malady which, as I have shown in my work on that subject, has increased as culture and civilisation have increased, and which is found usually in those who have had some other nervous symptoms. As an effect of this inherited or acquired nerve-sensitiveness, there appears in one person an idiosyncrasy against bright sunlight, so that exposure to it brings on the symptoms of hay-fever; in another, a similar idiosyncrasy as to dust—the most common of all the excitants of this disease; in another, against fresh hay; in another, against ipecac or other drugs; in another, against old hay; in another, against the odour of roses, or other flowers; in another, against the pollen of corn, or of some of the grasses, or of certain weeds, as Roman wormwood, or golden rod; in another, against some of the common fruits—as grapes, apples, pears, or peaches, or strawberries, or raspberries, or watermelons, and so on infinitely—new developments appearing every year. On this theory I based the nerve treatment of hay fever, and predicted that by electricity, strychnine, belladonna, camphor, arsenic, zinc, and other sedative and tonic remedies, we should be able to greatly relieve and break up the attacks of this distressing disorder. For several years this prediction has been fulfilled, not only in my own practice, but also in that of other physicians.

"Another idiosyncrasy developed by nervous exhaustion is sensitiveness to cold or hot water. A patient of mine could never bear to even dip his hands in hot water, so disagreeable were the sensations it produced; the same patient was abnormally ticklish and timid.

"Sensitiveness to Changes in the Weather is a very often observed symptom of nervous debility; depression of the nerves makes the body a good barometer. For twenty-four hours and more before a storm comes on, the aching and worn nerves foretell in every part of the physical organism what is coming. The sky may be clear, but the spirits are cloudy. The tenderness of bunions and corns, the aching and stiffness of rheumatic and neuralgic sufferers, the general gloominess and misery of the exhausted before and during bad weather, are not imaginations, but realities as truly as small-pox or the measles, and quite as much worthy of professional study and consideration.

"Localised Peripheral Numbness and Hyperaesthesia.—In any portion of the periphery—the face, the arms, the ends of the fingers, the thighs, the legs, and the toes—there may be,
nervously exhausted patients, persistent numbness of a definitely localised character, or excessive sensibility, similarly localised. In some cases this local peripheral hyperæsthesia amounts to a very distressing disease.

"A Feeling of Profound Exhaustion Unaccompanied by Positive Pain.—Attacks of a sensation of absolute exhaustion, as though the body had not strength to hold together, comes on very often in the nervously exhausted. This feeling of exhaustion, though not exactly pain in the usual sense of the word, is yet, in many cases, far worse than pain. These attacks may come on suddenly without warning, and may suddenly disappear. In the morning one may be able, or feel able, to run on a wager; in the afternoon of the same day, sitting quietly in a chair seems to be an exhausting effort to which every nerve and bone and muscle is unequal. The going-to-die feeling is quite common in these cases, and at first causes alarm. It may be experienced either in the day or at night, on going to sleep, or on awaking from sleep. This symptom, like many of these symptoms, appears at puberty and at the change of life; it indicates that the system is straining under the burden placed upon it.

"Ticklishness.—Nearly all persons are susceptible to the form of irritation that we call tickling; but in nervous exhaustion this susceptibility may become a severe annoyance. A gentleman once under my treatment for many of the symptoms described in this paper—spinal irritation being prominent—was so ticklish on the breast, stomach, and abdomen, that it was very difficult—indeed quite impossible—to apply electricity to those parts with any satisfaction.

"Vague Pains and Flying Neuralgias.—The so-called "growing pains" in the young are of this class; the force in the system is insufficient to maintain growth without suffering a degree of impoverishment which expresses itself by a subdued growl of pain.

Waving, beating, rolling sensations are often felt by the neurasthenic, even when not exactly hysterical. Shooting neuralgic pains in the limbs, or nearly all parts of the body, cause much suffering with this class of patients.

"General or Local Itching (Pruritus).—Itching occurring without any visible change in the appearance of the skin, is a common experience; but is not regarded as pathological unless it be quite severe and persistent. In certain nervous states it becomes an element of positive distress. Itching of the scalp sometimes immediately follows any prolonged and exhausting intellectual exertion.

General and Local Chills and Flashes of Heat.—Distur-
bance of circulation both follows and accompanies disturbance of innervation. Creeping chills up and down the spine are commonplace; but there are symptoms allied to this not so familiar.

"Cold Feet and Hands are symptoms that the neurasthenic complain of in at least half the cases.

"Nervous Chills.—Attacks of chills, in many respects resembling chills and fever, especially the dumb ague, are often experienced by a certain class of neurasthenic sufferers.

"Sudden Giving Way of General or Special Functions.—The treacherousness of nervous exhaustion is one of its most constant characteristics; its symptoms lurk in ambush and burst upon us when least looked for, when we fancy ourselves utterly and for ever delivered from their presence. The neurasthenic patient cannot, therefore, trust himself a half-hour or even a moment in advance. In the morning he may be, or feel, able to walk five miles; in the afternoon, from no traceable cause, it may be a task to cross the street. Even in the midst of any labour—mental or muscular—his strength gives out as suddenly as if he were struck by lightning. I knew a man prostrated for two years with profound neurasthenia, who, if he rose and crossed the room, might become absolutely aphonie. Two ladies have been under my care who could walk readily for perhaps a block or more, when instantly, and without warning, their limbs would give way beneath them.

"Temporary Paralysis.—Temporary functional paralysis of certain muscles on arm or leg, or of the muscles of the larynx, are sometimes noticed in cases of neurasthenia.

"In one of my cases, paralysis of an arm, lasting but a short time, was the first noteworthy phenomenon of the disease.

"There is no evidence that paralysis of this kind depends on any structural disturbance of the nerve-centres.

"Diseases of Men (Involuntary emissions, partial or complete impotence, irritability of the prostatic urethra).—Occasional seminal emissions in the healthy and unmarried are physiological—that is, they are not symptoms of disease. Such involuntary discharges, when excessively frequent, may be both results and causes of disease, indicating an abnormal, usually an exhausted state of the nervous system, and in turn reacting on the nervous system, increasing the very exhaustion that causes it. Such, in general, is the philosophy of all, or nearly all, cases of frequent involuntary seminal emissions.

"Diseases of Women.—Many of the diseases belonging to woman, as woman, may be either the causes or effects of neurasthenia.

"It has been the custom to regard the various nervous
symptoms with which women suffer as the results of any uterine disease with which they may have been afflicted; but the wiser gynaecologists of the present are aware that, with women as with men, disease of the reproductive organs may be a result of exhaustion.

"The various congestions, and displacements, and inflammations, and especially uterine and ovarian irritability, may, and do, come from mal-nutrition, which mal-nutrition is a result and part of general mal-nutrition of the whole system. Irritability of these organs, of the ovaries, of the uterus, is sometimes analogous to the condition of the brain which we call cerebral irritation, or of the spine, which we call spinal irritation, and will not yield to purely local treatment. Cases of this kind are sometimes treated for a long time without any satisfaction, simply because the general constitutional treatment is neglected. Constitutional treatment alone, if judiciously and faithfully carried out, may sometimes cure these cases without any local application, or with but little, as has been lately shown by one of our prominent gynaecologists, Dr. Goodell.

"Oxalates, Urates, Phosphates, and Spermatozoa in the Urine.—The relation of oxalate of lime to various nervous symptoms was long ago pointed out by Golding Bird, and the importance of examining the urine for the deposits of the oxalates was strenuously insisted on by him; but the true relation of such deposits to the nervous system seems not to have been fully understood either by him or by those who have since written on the subject.

"Excessive Gaping and Yawning.—As evidences of temporary fatigue, gaping and yawning are familiar enough, even though their physiology may be obscure. In organic disease of the brain, also, frequent and prolonged gaping has been noticed.

"In one case of glosso-labial paralysis that I saw a number of years ago, this symptom of gaping was so frequent, and the act so prolonged, as to be ludicrous.

"Appearance of Youth.—Persons afflicted with neurasthenia very often, and, I think, in the majority of cases, where the condition is long-standing, look younger than their years; they bear the weight of time more easily than the phlegmatic and the strong; and when between, say, thirty-five and forty-five, will pass for five or ten years below their actual age. I have reached this generalisation not hastily, but after much observation and reflection. Constantly I find myself astonished when a new patient, whom I have never before seen, tells me his age. I observe that those who have had a long battle with their morbid feelings, who have been, perhaps, disabled, crippled,
exiled by nervous incapacity, look ten years younger than their vigorous friends. The neurasthenic are, as a rule, less wrinkled and worn; they have less fat and muscle that furnish the materials for flabbiness and coarseness of feature. Their skins are thinner and softer, and show the blood more readily. They are also less likely to be attacked with those degenerative changes in the blood-vessels and the skin that are the signs and results of age. In a word, they look young for the same reason that they live long.

"Rapid Decay and Irregularities of the Teeth.—The rapid decay of the teeth is one of the symptoms of nervous exhaustion. Although a nervous person may have an excellent set of teeth, providing they are well taken care of and properly filled every time a cavity appears, yet early decay of teeth in the nervous is to be ranked as one of the results of an impoverished state of the nervous system.

"That premature decay of teeth is a result of civilisation is an undeniable fact; and in those whose constitutions are depleted of force the teeth are rarely good, and they are only kept in fair working order by the great skill of modern dentistry. Dentists are the barometers of civilisation, their rise and prosperity is one of the most instructive facts in modern sociology. American dentists are the best in the world, because American teeth are the poorest in the world.

"Hemi-Neurasthenia.—I have discovered that neurasthenia sometimes affects one part of the body more than the other; to this difference I have applied the term hemi-neurasthenia. Thus there may be a special degree of pain on the left side of the head, the eye on the same side may be weaker, more painful on over use, more severely photophobic, the lid may drop lower, suggesting general paresis, the eye not open so fully and freely; the arm and the leg on the same side may be much weaker than on the other side; likewise there may be a disposition to tremor in both of the extremities and the muscles of the face on one side. The noises in the ears, which I have described as one of the symptoms of neurasthenia, may be restricted entirely to the right or the left side, even when there is no demonstrable disease of the ears.

"Likewise muscae volitantes, or specks before the eyes, may be, and indeed often are, confined to one eye, or are very much more marked in one eye than the other. The symptom of sick headache is, as a rule, far more common on the left than on the right side, although it may appear on both sides in the same individual; likewise the symptoms of chilliness, of creeping, crawling, of muscular spasms, fibrillary contractions, localised heat and cold, may be especially observed on one or the other
side of the body. The pains in the calf of the leg and cramps may be restricted to the right or the left side, or may be far more decided on the one side than on the other. One leg or one foot, or one arm or hand, may be cold for several hours or days, while the limbs on the other side are of normal temperature. One ear may be red and hot, the other may be of normal colour and temperature.

"Hemi-anæsthesia of one side of the body is quite a familiar symptom, especially in hysteria; but very many other phases of nervous debility may be likewise confined to one side of the body."

We have felt bound to give copious extracts from this long and formidable category of the symptoms of neurasthenia, in order to do justice to Dr. Beard's minute and careful analysis. Fortunately, for this country, the neuroses are not so rife here, as on the other side of the Atlantic. It is to be hoped that the love of athletic sports, now so fashionable, will materially tend to counteract that morbid sensibility, the result of high civilisation, and which, according to Dr. Beard, is now so prevalent in the United States.

No doubt many of the forms of neurasthenic diseases owe their origin to constitutional taint, and Dr. Beard admits they are often hereditary.

Dr. Beard gives many valuable suggestions as to the treatment of neurasthenia. We have not space to do more than refer to them, and must content ourselves with recommending the work itself to our readers.

Twenty-second Annual Report of the General Board of Commissioners in Lunacy in Scotland. 1879. (Second Notice.)

The closing of a number of private asylums in Scotland has exercised an important bearing on the distribution of the insane population, and especially in reference to the poorer classes. The Commissioners report that "it is possible that a certain proportion of this great increase in the number of pauper lunatics is due to the greater tendency that there has been to place insane persons on the Poor Roll owing to the decrease in the number of private asylums, and the increase in the amount of accommodation provided in district and parochial asylums." It is further added that "the class of private asylums which received patients at the lowest rates have now entirely disappeared in Scotland, and the accommodation pro-