



EVOLUTION OF NERVOUSNESS.

AMERICAN NERVOUSNESS

ITS CAUSES AND CONSEQUENCES

A SUPPLEMENT TO NERVOUS EXHAUSTION (NEURASTHENIA)

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would require another volume at least half the size of the present one.

To those who are beginning the study of this interesting theme the following epitome of the philosophy of this work may be of assistance, as a preliminary to a detailed examination.

First. Nervousness is strictly deficiency or lack of nerve-force. This condition, together with all the symptoms of diseases that are evolved from it, has developed mainly within the nineteenth century, and is especially frequent and severe in the Northern and Eastern portions of the United States. Nervousness, in the sense here used, is to be distinguished rigidly and systematically from simple excess of emotion and from organic disease.

Secondly. The chief and primary cause of this development and very rapid increase of nervousness is modern civilization, which is distinguished from the ancient by these five characteristics: steampower, the periodical press, the telegraph, the sciences, and the mental activity of women.

Civilization is the one constant factor without which there can be little or no nervousness, and under which in its modern form nervousness in its many varieties must arise inevitably. Among the secondary and tertiary causes of nervousness are, climate, institutions—civil, political, and religious, social and business—personal habits, indulgence of appetites and passions.

Third. These secondary and tertiary causes are of themselves without power to induce nervousness, save when they supplement and are interwoven with the modern forms of civilization.

Fourth. The sign and type of functional nervous diseases that are evolved out of this general nerve sensitiveness is, neurasthenia (nervous exhaustion), which is in close and constant relation with such functional nerve maladies as certain physical forms of hysteria, hay-fever, sick-headache, inebriety, and some phases of insanity; is, indeed, a branch whence at early or later stages of growth these diseases may take their origin.

Fifth. The greater prevalence of nervousness in America is a complex resultant of a number of influences, the chief of which are dryness of the air, extremes of heat and cold, civil and religious liberty, and the great mental activity made necessary and possible in a new and productive country under such climatic conditions.

A new crop of diseases has sprung up in America, of which Great Britain until lately knew nothing, or but little. A class of functional diseases of the nervous system, now beginning to be known everywhere in civilization, seem to have first taken root under an American sky, whence their seed is being distributed.

All this is modern, and originally American; and no age, no country, and no form of civilization,

not Greece, nor Rome, nor Spain, nor the Netherlands, in the days of their glory, possessed such maladies. Of all the facts of modern sociology, this rise and growth of functional nervous disease in the northern part of America is one of the most stupendous, complex, and suggestive; to solve it ir all its interlacings, to unfold its marrellous phenomena and trace them back to their sources and forward to their future developments, is to solve the problem of sociology itself.

But although nervousness, and the functional nervous diseases derived from it, are most frequent in America, and were here first observed and first systematically studied, they are now and for some time have been, becoming more and more frequent in Europe.

Sixth. Among the signs of American nervousness specially worthy of attention are the following:
The nervous diathesis; susceptibility to stimulants
and narcotics and various drugs, and consequent
necessity of temperance; increase of the nervous
diseases inebriety and neurasthenia (nervous exhaustion), hay-fever, neuralgia, nervous dyspepsia, asthenopia and allied diseases and symptoms; early
and rapid decay of teeth; premature baldness; sensitiveness to cold and heat; increase of diseases not
exclusively nervous, as diabetes and certain forms
of Bright's disease of the kidneys and chronic ca-

tarrhs; unprecedented beauty of American women; frequency of trance and muscle-reading; the strain of dentition, puberty, and change of life; American oratory, humor, speech, and language; change in type of disease during the past half-century, and the greater intensity of animal life on this continent.

Seventh. Side by side with this increase of nervousness, and partly as a result of it, longevity has increased, and in all ages brain-workers have, on the average, been long-lived, the very greatest geniuses being the longest-lived of all. In connection with this fact of the longevity of brain-workers is to be noted also, the law of the relation of age to work, by which it is shown that original brain-work is done mostly in youth and early and middle life, the latter decades being reserved for work requiring simply experience and routine.

Eighth. The evil of American nervousness, like all other evils, tends, within certain limits, to correct itself; and the physical future of the American people has a bright as well as a dark side; increasing wealth will bring increasing calm and repose; the friction of nervousness shall be diminished by various inventions; social customs with the needs of the times, shall be modified, and as a consequence strength and vigor shall be developed at the same time with, and by the side of debility and nervousness.

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I know not where to find a better demonstration of the lack of logical and scientific training among educated men, than in the published reports of the discussion on this question of the increase of nervous diseases, at the recent meeting of the International Medical Congress in Philadelphia. While the weight of opinion, so far as that goes, was in favor of the views advocated by this paper, yet the speakers-men of ability and distinction—nearly all illustrated the very common habit—and with the laity quite excusable-of looking at one side of a subject. Thus, one declared that there were no new diseases; another that nervous diseases had only appeared to increase through the mistaken observations of specialists. One said that alcohol did not produce insanity; another declared that it did, and that in connection with it. tea, coffee, and tobacco caused more disease than brain work. "Wickedness" was solemnly assigned as the cause of the increase of nervous diseases, as though wickedness were a modern discovery. One man wildly declared that "the idea that a man could hurt himself over books, was preposterous." But one of the strongest objections made was, that longevity had increased, and that intellectual men are generally long-lived. me this objection was of special interest, from the fact that when a number of years ago I first published my investigations on the longevity of brain-workers, showing that they lived longer than muscle-workers,

and that great men, on the average, lived longer than ordinary men, and that longevity had clearly increased with the progress of civilization, I stated that nervous diseases of the functional variety had increased pari passu with this increase of longevity, and that the facts, so far from being inconsistent, really explained each other, and for the reasons above noted.

Increase of the Nervous Diathesis.

It is observed that nearly all the sufferers from nervous exhaustion are those in whom the nervous diathesis temperament predominates. It is observed that the majority of these cases have what I have termed the *nervous diathesis*—an evolution of the nervous temperament.

I may quote here my remarks on the nervous diathesis as published originally in the first edition of Beard and Rockwell's "Medical and Surgical Electricity," p. 286:

By the term nervous diathesis we design to express a constitutional tendency to diseases of the nervous system. It includes those temperaments, commonly designated as nervous, in whom there exists a predisposition to neuralgia, dyspepsia, chorea, sick-headache, functional paralysis, hysteria, hypochondriasis, insanity, or other of the many symptoms of disease of the central or peripheral nervous system. What the gouty and scrofulous diathesis is

to the blood, such is the nervous diathesis to the nerves.

The characteristic features of the nervous diathesis are:

- 1. A fine organization. The fine organization is distinguished from the coarse by fine, soft hair, delicate skin, nicely chiselled features, small bones, tapering extremities, and frequently by a muscular system comparatively small and feeble. It is frequently associated with superior intellect, and with a strong and active emotional nature. By these general features the fine organization is so positively distinguished from one of an opposite character that it is most readily recognized even by those least accustomed to the study of temperaments. It is the organization of the civilized, refined, and educated, rather than of the barbarous and low-born and untrained - of women more than of men. It is developed, fostered, and perpetuated with the progress of civilization, with the advance of culture and refinement, and the corresponding preponderance of labor of the brain over that of the muscles. As would logically be expected, it is oftener met with in cities than in the country, is more marked and more frequent at the desk, the pulpit, and in the counting-room than in the shop or on the farm.
- 2. Liability to varied and recurring attacks of diseases of the nervous system. The nature of these attacks and the frequency of their repetition will be

variously modified by climate, the seasons, and other external conditions; by the personal habits and manner of life, and especially by sex and age. The typical manifestations of the nervous diathesis in infancy are convulsions, irritability, and sometimes grave cerebral disorder; of childhood, chorea, and analogous symptoms; of puberty, headache, chlorosis, spermatorrhœa, and occasionally epilepsy; of maturity, sick-headache, neuralgia, dyspepsia, with its accompaniments, constipation, insomnia, nervousness, and emaciation, functional and reflex and occasionally organic paralysis, hypochondriasis, neurasthenia, and, in women, hysteria, spinal irritation, and the long train of nervous conditions associated with diseases of the organs of reproduction; of old age, "softening of the brain," and slow paralysis. A child born with nervous diathesis may suffer in infancy from attacks of spasms of the glottis; in childhood, from chorea; at puberty, from spermatorrhea; between the age of twenty and fifty or sixty, from the different grades and forms of dyspepsia, sick-headache, and neuralgia; and, in old age, may gradually fail beneath the slow advance of cerebral degeneration.

3. Comparative immunity from ordinary febrile and inflammatory diseases. The nervous diathesis appears, within certain limits, to *protect* the system against attacks of fever and inflammation.

There seems, indeed, to be something in the ner-

vous diathesis which is antagonistic to the febrile conditions, or at least to those forms which are developed by ordinary malaria, for it is certain that on the average (with numerous exceptions, of course, on both sides) fevers and inflammations are less fatal among brain-workers than among muscle-workers, even when subjected to the same exposure. Now, it is among the brain-working class that the nervous diathesis is most distinctly marked and most frequently observed.

This great law also applies to races and nations. Although the question is so complicated by differences of external conditions that it is impossible to establish by statistics the relative quantity and quality of disease in civilized and barbarous lands, yet history and general observation seem to show that nearly all savage tribes are more liable to fatal attacks of certain forms of inflammatory and febrile disease than the civilized. The history of the North American Indians seems to point to this fact with considerable conclusiveness. Making all proper allowance for the better sanitary conditions, the higher prudence, and the stronger force of will of the civilized man, it would appear that he is less liable to contract certain forms of inflammatory disease than the barbarian, even when exposed to the same influences.

The nervous is the prevailing diathesis in the United States.

The nervous diathesis should be distinguished from

the tuberculous, with which it is frequently combined, and with which also it is liable to be confounded. The external appearances of the two are not very dissimilar, but their symptoms and their behavior under exposure, and especially their prognosis when existing separately, are radically different. The tuberculous diathesis frequently accompanies a fine organization; but fine organizations only in a certain proportion of cases have a tuberculous diathesis. The nervous diathesis is frequently not only not susceptible to tuberculosis, but apparently much less so than the average, and sometimes, indeed, seems to be antagonistic to it, for there are many nervous patients in whom no amount of exposure or hardship or imprudence seems to be able to develop phthisis, although they may appear to suffer intensely and constantly from the various phases of nervous disease. The tuberculous diathesis frequently appears in the coarsely organized, the plethoric, and the muscular. It develops most rapidly and perhaps commits its greatest ravages among the poor, the oppressed, and degraded. On the contrary, the nervous diathesis, though found more or less among all classes of civilized lands, is chiefly found among the higher orders. Both of these diatheses are the results and concomitants of depressed vitality; but the nervous is peculiar to brain-workers and civilization, while the tuberculous also afflicts the day-laborer and the savage. The one is perhaps an

impoverishment of the blood, the other an impoverishment of the nervous force.

The distinction between the nervous and the tuberculous diathesis is seen again in the contrast in their prognosis. The nervous diathesis in many of its manifestations is speedily relieved, but rarely permanently eradicated; the tuberculous diathesis is less susceptible to actual relief, but in occasional instances may be absolutely cured. The nervous diathesis, by protecting the system against inflammations, seems to lengthen life; the tuberculous, by attacking and destroving a vital organ, most fearfully shortens it. In both the conflict between the remedies and the disease is always hard and sometimes long; in the nervous diathesis it is a guerrilla warfare, in which there are frequent skirmishes, with continual fightings and retreatings, where the enemy is disinclined to concentrate his forces or allow himself to be drawn into a decisive encounter. In the tuberculous diathesis it is a pitched battle for the possession of a vital organ, where the enemy fights behind intrenchments, and usually obtains the mastery.

Increased susceptibility to stimulants and nar cotics.

Among the signs of nervousness is increased sensitiveness to stimulants and narcotics. This is itself proof enough of the heightened nerve sensitiveness of

Competitive Examinations.

Modern competitive examinations are but slightly in advance of the system of recitations and lectures. They seem to have been invented by some one who wished to torture rather than benefit mankind, and whose philosophy was, that whatever is disagreeable is useful, and that the temporary accumulation of facts is true wisdom, and an accurate measure of cerebral force. Crammed-knowledge is ignorance; in Montaigne's words, "Knowing by heart is not knowing;" the greatest fool may often pass the best examination; no wise man can always tell what he knows; ideas come by suggestion rather than by order; you must wait for their appearing at their own time and not at ours; we may be ready to shoot them when they fly, like birds on the wing, but we cannot tell when they will rise; he who can always tell what he knows, knows little worth knowing.

Recent Improvement in the American Physique.

Herein is the partial, though not the entire elucidation of the observed fact that, during the last two decades, the well-to-do classes of America have been visibly growing stronger, fuller, healthier. We weigh more than our fathers; the women in all our great centres of population are yearly becoming more plump and more beautiful; and in the lead-

ing brain-working occupations our men also are acquiring robustness, amplitude, quantity of being. On all sides there is a visible reversion to the better physical appearance of our English and German ancestors. A thousand girls and boys, a thousand men in the prime of years, taken by accident in any of our large cities, are heavier and more substantial than were the same number of the same age and walk of life twenty-five years ago.

Many years of careful study of the physical appearance of our higher classes, in those places where representative types from all parts of the country are constantly seen—in our leading churches and concert halls, on Fifth Avenue and Broadway—have convinced me long ago that the combined influences of wealth and culture, of better manners and better diet, are already bringing fulness and freshness to the angular cheek of the traditional Yankee; the American race is filling out; the next generation, as the experience of the late war gives us reason to hope, may equal our European ancestors in strength, in solidity, and endurance, as our women have long surpassed them in personal attractiveness and beauty.

This improvement in the *physique* of the Americans of the most favored classes during the last quarter of a century is a fact more and more compelling the inspection both of the physician and the

sociologist. Of old it was said that the choicest samples of manly form were to be found in the busy hours of the Exchange at Liverpool; their equals, at least, now walk Broadway and Fifth Avenue. The one need for the perfection of the beauty of the American women—increase of fat—is now supplied.

It could not, in fact, be different, for we have better homes, more suitable clothing, less anxiety, greater ease, and more variety of healthful activity than even the best situated of our immediate ancestors. So inevitable was this result, that had it been otherwise, one might well suspect that the law of causation had been suspended.

The first signs of ascension, as of declension, in nations are seen in women. As the foliage of delicate plants first show the early warmth of spring and the earliest frosts of autumn, so the impressible, susceptive organization of woman appreciates and exhibits far sooner than that of man the manifestations of national progress or decay.

Not long since I had occasion to take a train at Providence on my way to Boston. It was a very stormy morning, and I was surprised to see a large number of ladies in the cars. I observed that the majority of them were, if not handsome, at least strong and vigorous, as though they lived well, and were equal to a long walk or, if necessary, a hard

day's work. Still further, I noticed that many of them were of an intellectual cast of feature; various ages were represented, but nearly all were mature. On inquiring what had called out such a host of brave females on so disagreeable a day, I learned that a Woman's Congress had just closed its sessions in Providence, and that the members were returning to their homes. On subsequently reading the reports of the congress, as published in the Providence papers, I was both interested and mildly surprised to find that the essays were of a far higher order in topics and in treatment than I had been accustomed to expect in organizations sustained wholly by women; the subjects selected being more closely related to science, in its various branches, and the discussions were carried on in the scientific spirit; far less was said of politics, and far more of what requires higher and broader intellect than politics - the difficult and complex problems of psychology, physiology, sociology, and educational reform.

A well-trained intellect is itself medicine and hygiene, enabling its possessor to guard successfully against the appeals of passion and the storms of emotion, keeping the mind constantly supplied with the fresh and varied material for thought and action, and rendering the avoidance of exhausting pleasures at once spontaneous and intelligent. The nervous female patients of our time do not come

from the most intellectual of the sex. The pioneers in feminine development are often sturdy and patient of physical and mental toil—capable of enduring the fatigue of travel, of public speaking, ot literary and philanthropic activity; and if, like George Eliot, of a sensitive frame, yet able to keep themselves out of helpless invalidism and in fair working order.

This improvement in the physical appearance of our women is not equally distributed through all classes, nor has it reached all sections. The late Centennial gave an unusual opportunity to study American physique such as we have not had for a century, since there it was possible to see, on any day, every phase of American society, and from every State. It was observed that the women from many distant country places represented, in size, color, and features, the type that twenty-five years ago was national, almost universal; the wave of physical improvement had not yet reached their class of neighborhood; they were thin, angular, stooping, anxious, pale, and, in not a few cases, emaciated. The wives and daughters of farmers are often in some respects less favored hygienically than the fashionable classes of our great cities; they give far too little thought and care to the preparation and mastication of food; they labor oftentimes out of proportion to their. strength, and, in want of temptation to walk out

or even to ride during inclement seasons, really suffer more from confinement in excessively heated rooms than their sisters in city or town or village.

American inventions are now assisting both American men and American women to diminish their nervousness; palace cars and elevators and sewing machines are types of recent improvements that help to diminish the friction of modern life. Formerly inventors increased the friction of our lives and made us nervous.

Germanization of America.

The Germanization of America - by which I mean the introduction through very extensive immigration, of German habits and character - is a phenomenon which can now be observed, even by the dullest and nearest-sighted, in the large cities of the Northern portion of our country. As the Germans in their temperament are the opposite of the native Americans, this process promises to be in all respects beneficial, encouraging in every way out-door life and amusements, tending to displace pernicious whiskey by less pernicious beer and wine, setting the example of coolness and calmness, which the nervously exhausted American very much needs. Quite true it is that the second and third generations of Germans do themselves become Americanized, through the effects of climate and the