out some days the whole afternoon without great fatigue. Pain in hip, knee, and calf, only an ache. Hands and feet constantly warm. Sleeps soundly; slight palpitation of the heart remains. Ordered: Tinct. ferri chloridi 3i., after meals, in water, and tinct. digitalis, minims x., potas. bromid., gr. x., tinct. cinchon. co. minims 20. Take in water before meals.

May 19th. No pain; weight increased; appetite excellent; sleeps profoundly. Patient is convalescent, taking long walks daily. To continue the use of the ice two hours every day for a month.

June 31st. Patient well, having gained fifteen pounds in weight, and feeling just as strong as she ever did.

In this case the sympathetic or vaso-motor and sensory centres were both affected, as shown by the pain and the constantly cold upper and lower extremities.

I did not see the case as often as I wished, or I could have made more minute notes of the daily effect produced by the treatment. The only medicines used were in the prescriptions given above, and they were not prescribed until the patient had advanced far toward convalescence. This lady was told to use the ice one hour per day until the end of August, but did not do so. Since June last there has been, I believe, one slight return of the pain.

GREAT PROSTRATION AFTER PROLONGED LABOR.

CASE III. is one of prolonged labor in primipara, otherwise normal, left occipito-anterior position; great prostration after confinement, but no alarming hæmorrhage. The child was born January 19, 1881. Up to March 4th following the patient remained prostrated; about holding her own. During this period she suffered with night-sweats, continued constipation, and quite severely from catarrh of the posterior nares. The appetite was excellent throughout this time, but she remained so weak that she would become much fatigued by even standing a few moments upon her feet. Her extremities were cold very frequently. She was treated by doses of laxatives, and various laxative foods, to relieve the constipation, — belladonna for the night sweats and a variety of tonics, iron, quinine, and strychnia, with no result beyond the most temporary benefit. Ice was applied upon March 4th from the fourth cervical to the last lumbar vertebra for one hour per day. The patient began to improve in general strength after the second application. Within a week she was walking out every day, and upon March 20th came to my office, a distance of three quarters of a mile. She steadily improved, the constipation disappeared, and the nasal catarrh was much relieved.

According to Dr. Chapman's views, the ice acted in this case upon the vaso-motor centres, thereby warming the cold extremities, and supplying at the same time a greater amount of blood to the anæmic muscles of the intestine, stimulating the bowels therefore to normal peristaltic action, and so relieving the constipation. It acted also as a sedative upon the nerve centres controlling the gland cells of the posterior nares, which, by their over action, produced the nasal catarrh; it checked this trouble permanently. The child of this patient was also troubled by the most severe flatulence and constipation. After three weeks spent in useless endeavors to relieve it by the usual remedies, I applied ice to the dorso-lumbar region in a very small bag, with permanent relief to the disease in a few days.

CASE IV. is that of a Boston gentleman who consulted me in December of 1881. He had been troubled with sleeplessness for a long period; very much impaired digestion; nervousness which showed itself by great mental excitability, alternating with delusions and intense depression. The bowels were costive, while the feet and legs were constantly more or less cold and moist. The head was hot, and as the patient expressed it, "felt too full of blood all the time, accompanied by a hissing sensation in the ears."

Ice was applied from the second dorsal to the fifth lumbar vertebra, one and one half hours, twice a day. Improvement was immediate to the sleeplessness; the digestive powers became gradually stronger, and the bowels moved regularly. The lower extremities were soon permanently warm and dry, and the nervous symptoms disappeared to a great degree, although the patient was subject to much mental worry during the treatment. This improvement lasted from January until May, when he had a temporary relapse, which has been overcome, and the strength renewed. His physical strength has much increased under the treatment. He is a man of middle age.

AMERICAN DYSPEPSIA.¹

BY JAMES H. ROBBINS, M. D., OF HINGHAM.

WE are beginning to realize that at the present day there is a notable failure of the organs of digestion.

Many would persuade us that such failure affects especially the people of the United States, and use the term American dyspepsia as if the existence of such a complaint were fully conceded, though, by what we can gather from medical periodicals, and observant tourists, the same delicacy of stomach prevails in Great Britain and on the European Continent, while an eminent English physician, Dr. J. Milner Fothergill, is the first to emphatically call attention to the matter. To it he devotes, in a text-book of practice, a chapter worthy of the importance of the subject, nor does he anywhere hint that a failure of digestion is more common here than in other countries.

It is the object of this paper merely to speak of dyspepsia among our own people, and to emphasize and illustrate the fact that, more than of anything else, it is the result of neurosal causes.

Eighteen years ago, in the edition of 1866 of Dr. Flint's Book of Practice, the author says in his general remarks upon dyspepsia, that "It is undoubtedly less prevalent than it was a quarter of a century ago in this country"; but in examining the medical periodicals of to-day, and in conferring with busy physicians, we find that a large proportion of those who seek medical treatment, a larger proportion than at any previous time, complain of poor digestion and biliousness.

Scientific research and skill in therapeutics are stimulated to their utmost to furnish stomach tonics, food digestants, and different aliments already digested and ready for absorption by the debilitated stomach. The leaves of even our medical journals abound with advertisements of therapeutic agents of this nature, while physicians in their great desire to furnish their dyspeptic patients with the most elegant, palatable, and scientific aids to digestion, become willing instru-

¹ Read before the Massachusetts Medical Society at its Annual Meeting, June 14, 1882.

ments in the sale of large quantities of proprietary or trade-marked medicines. The prevalence of indigestion is also evinced by the popularity of a vast number of quack preparations for the stomach, and by the great and increasing quantities of laxatives and cathartics taken for constipation, almost every family having its favorite patent pill.

In spite of all this therapeutical effort, designed to meet the vast demand of this prevalent debility of the digestive organs, indigestion increases, while the means for its relief lag far behind, leading one to question whether the coming American is to digest his food himself at all, or whether it will not be digested for him outside his body, and administered ready for absorption and assimilation.

This prevalent, so-called *American dyspepsia*, seems to be without a morbid anatomy, which is perhaps the very reason why we often practically overlook it, our text-books of theory and practice being sadly deficient in hints concerning this form of weak digestion. While they abound in treatises upon gastric catarrh, ulcer, gastric carcinoma, dilatation, liver diseases, and distinct intestinal maladies, we have to be content with scraps and hints occurring sparingly in books of general practice, works on gynecology, diseases of the nervous system, and monographs concerning neurasthenia, for light upon mere weakness and failure of the digestive organs. Dr. J. Milner Fothergill, so far as I can find, is the only author who furnishes us with a chapter on the subject, at all commensurate with its importance. Some of the principal causes usually assigned for *American dyspepsia* are as follows:—

First. Rapidity in eating.

Of course no one would defend hurried eating as beneficial, but I fancy its injurious influence has been over-stated.

Nearly all animals eat in haste. And it is an old proverb among farmers, "Quick to eat, quick to work," which applies equally to men and horses. A horse that eats slowly is slow mettled and dull. If a farmer wishes to employ a new laborer he is prejudiced immediately against the man who eats with deliberation, which proves that the rate at which a man consumes his food is merely a matter of temperament.

Another fruitful source of this trouble is supposed to be found in unsuitable or improperly prepared food, such as badly cooked meats, bread fresh from the oven, or ill made, too hot beverages, tea over-steeped or even boiled, fried food, and that national institution, the pie, which it is now the fashion to condemn. As Charles Dudley Warner humorously says, "There has come over this country within the last generation a great wave of condemnation of *pie*. It has taken the character of a movement. . . . It is safe almost anywhere to denounce pie, yet nearly everybody eats it on occasion. A great many people think it savors of life abroad to speak with horror of pie."

True as it is that the foregoing edibles are not the best food for a weak stomach, it yet seems to me that they do not necessarily produce weak stomachs. Every physician knows that such food is very commonly given, even to infants, among certain of the laboring classes, with no such disastrous effects as one would expect.

Over-eating is a very common bugbear. It is true that many eat more than they can well digest, which is over-eating for them. But it is as true of the animal economy as of any other machinery, that force requires fuel according to its degree.

Americans, if we compare them with people of other nations, are not large eaters, and do not consume any more than is necessary to produce the required bodily and mental force. Alas, the trouble is, they are not able to digest so much as they need.

Dr. Flint and other writers say that gluttony does not often produce dyspepsia, but is more likely to give rise to gout or some other malady.

The use of ice-water is unsparingly condemned. Enthusiasts attribute to it all our stomach weakness, whereas, it is really not used to any great extent outside the cities and large towns. The effects of over-indulgence in it are so immediate that people soon learn the extent to which they may drink it, and thousands have learned either not to use it at all, or sparingly, while many insist that it is better to use ice-water moderately than to keep the stomach afloat with excessive quantities of water not iced.

The universal use of fine white flour, which consists principally of starch, with gluten and phosphates bolted out, is often mentioned as a cause of impaired vitality and dyspepsia.

To it is attributed the degeneration of the teeth, and the starvation of the nervous system. We may well hail the day when our people shall make their bread of the entire grain, but we must acknowledge that the poorer classes who subsist most largely upon white flour, are not the greatest sufferers from stomach failure.

But we cannot here examine the great number of alleged causes of *American dyspepsia*.

One great principle in nature is apt to be overlooked by many theorists, namely, the very remarkable power of the human system of adapting itself to all sorts of dietetic conditions and even enormities, and appearing to thrive upon them. German babies are not uncommonly given a daily allowance of beer, beginning when a few weeks old.

School boys of the rugged sort will eat three meals, visit the pantry every time they come into the house, and by way of variety regale themselves on green apples, lobster bought on the street, or some other strange thing which only boys will eat. Nature may revolt now and then by emesis, but seldom by the Nemesis of chronic dyspepsia. The fact is that no special habits of eating, times of eating, nor articles of diet can the weakness of the American stomach be attributed, either wholly or in any important degree.

We are now brought to the brief consideration of a class of causes which thinking physicians must admit to have a powerful and wide-spread effect, detrimental to digestion and nutrition, compared to which all other causes are insignificant, namely, those causes of a nervous nature.

Every one is familiar with the effects upon digestion of mental and emotional states even in the healthy subject. Dr. Carpenter, in his great work on physiology, has much to say on this head, with vivid illustrations. Every physician can recount similar illustrations from his own observation by the score. Bad news will arrest or retard digestion, and often cause vomiting. No influence in the world is more powerful to take away all appetite for food and create a loathing for it than grief. Anxiety and apprehension and a good digestion are incompatible. Fear will dry up the saliva, stop digestion, and frequently bring on diarrhoea. Many a soldier from this cause has been put on the sick list on the eve of battle. Worry and petty

mental annoyance are, perhaps, the most universal, at the same time the least recognized, of influences affecting digestion. Mental strain, overwork, or complete absorption for a length of time by a train of thought hold the digestive functions in abeyance. Ambition, the goal of which is unattained or far removed, sharp competition, without immediate or satisfactory results, cause wasting of the body, and feeble nervous supply to keep the nutritive functions up to their work. Shakespeare makes Cæsar say, —

"Yond Cassius has a lean and hungry look;
He thinks too much . . .
Such men as he be never at heart's ease
Whiles they behold a greater than themselves."

Conversely to all this it may be stated that pleasurable emotions, a contented mind, congenial employment, a measure of success in one's endeavors, sufficient recreation, and opportunity for nervous repose seem indispensable to a healthy stomach.

These conditions existing, a person may endure a great deal of arduous toil, either bodily or mental, without detriment, but rather with benefit, to a healthy working of function. The machine is then well lubricated, and does not wear from friction.

But what peculiar reference has this class of nervous causes to American dyspepsia?

I take it to be this: Such causes operate with special power upon us of the present generation of the Anglo-Saxon race, whose ancestors came to this country several generations ago, for the reason that from these ancestors we inherit nervous systems of impaired vigor. Our parents and grandparents were so strenuously engaged in an arduous, ambitious, and competitive endeavor, amid the rapidly changing conditions of life in a new country, to secure competency and respectable social position, that they expended to a great degree their own vital powers, and have accordingly transmitted to their children delicate and neurotic constitutions. If it is granted that we inherit a diminished vitality, it is easy to see how ingeniously the pressure, the wear and tear, the strain, the excitement, the hurry and worry incident to this breathless, bustling life of ours affect the nervous system. It is also evident that impairment of digestion and mal-nutrition must be the certain result of such a condition of things.

Among the causes which are thus acting upon large numbers and classes of our population are, first, the manner of rearing our children.

Weakly at the start, they are forced into precocity by multitudes of ingenious and complex toys, plays, and amusements suited to rouse and stimulate intellectual and emotional activity, by sight-seeing and excitements more than are wholesome, by making premature men and women of them instead of romping children.

Under this head comes our system of education, with its high pressure, its cramming, and competition during too many weeks of the year. Arrived at adult life, our children are sparse in body, stooping in form, nervous, emotional, and possessed of stomachs which have to be treated by rule in order that they may perform their functions.

Second. School teaching.

Teachers of both sexes form an astonishingly large class in our communities if we add to the numbers in active duty the hosts who have given the best of their lives to teaching, and are either completely or partially broken down by the pursuit. It is difficult to estimate the onerous and nerve exhausting work de-

manded of instructors by our exacting modern systems. A teacher who has taught for a few years, and has a good, healthy digestion, is exceptional.

Third. Lack of simplicity and honesty in living.

This applies especially to mothers of families, who, in addition to their simple domestic duties, strive too much for appearances in the dress of themselves and of their children, and in other ways endeavor to maintain a style of living beyond their means.

Fourth. Business strain, worry, and apprehension.

During the late financial crisis it was a matter of common observation among physicians that business men, as a class, were out of health and dyspeptic, and that it was an almost hopeless task to benefit one of these dyspeptics by medical means.

Fifth. The present unsettling of religious beliefs.

The unrest of the age has pervaded the domain of conscience, and harassing doubts usurp the place of confident faith. The conflict of the old beliefs with modern Agnosticism is a fruitful source of mental disquietude of the most disturbing kind. Sleepless and tormented nights bring to many a sensitive soul days of physical suffering proportioned to the mental anxiety that has preceded them.

Sixth. The state of the weather.

This subject would furnish material for an extended essay. Multitudes of people are in fair health when the weather is fine, and the barometric pressure high, but with the falling mercury their nervous vigor wanes, and if dull weather is long continued they lose appetite, and become dyspeptic. Many people's digestion is impaired by the heat of summer, and their stomachs do not recover tone till the coming of the cold season. In so variable a climate as ours, with its trying extremes of temperature, the effect of the changes is in calculable upon people of weak vitality.

Seventh. Valetudinarianism.

Under this head comes the very general anxious effort at personal comfort and hygiene, the solicitous watching and study of the different functions of the body, which are best performed unconsciously. Very many of the believers in homœopathy early acquire the pernicious habit of watching their daily and even hourly symptoms, thus cultivating, by what Carpenter calls "expectant attention," a state of general hyper-æsthesia, and often a condition of actual functional disease.

Since the completion of this essay I have noticed that Dr. Oliver Wendell Holmes, in his recent lecture, *Medical Highways and By-Ways*, has touched upon this very point concerning homœopathy in his usual witty and incisive manner.

Our catalogue of widely acting causes is by no means full, but I have not time to extend it. Upon the treatment of this stomach debility I have no original nor peculiar views. As I said at the beginning of this paper, I wish merely to emphasize a class of causes which busy physicians are prone at times to overlook. If what I have said bears the test of common sense, it behooves us to be mindful of these considerations whenever called upon to treat our many cases of mal-nutrition and dyspepsia.

We may be powerless to stay or modify the influences of the present phase of our civilization upon the nerves and stomachs of the Anglo-Saxon race in this country, nevertheless, by being ever aware of these vast and wide-spread influences we shall find means outside the *materia medica* to benefit many a patient to whom drugs alone can bring but little help.