duced by passive motion a return of the pain and stiffness in the joint.

Dr. Townsend could not see how anyone could believe that an osteitis due to traumatism represented the same pathological process as one due to tuberculosis, although the clinical symptoms might be identical.

The Chairman said, that while all must admit that the statistics presented in the paper are not only brilliant, but exceedingly valuable, in comparing them with the statistics of those who do not resort to excision of joints, allowance must be made for those joints which had gone on to excision. This would also affect the mortality. One point which was very strongly brought out in the paper, was the positive, decided, and immediate relief of pain obtained in the majority of cases from traction properly applied. In hip joint disease, it is fair to infer, as is also evident from the results obtained, that if the pain is relieved, the treatment is beneficial to the joint. He believed in immobilization in the acute stage, so far as it could be produced by traction, but he did not believe it was necessary to go up to the axilla and immobilize the spinal column. Sometimes traction must be supplemented by recumbency, and sometimes by the use of crutches; these were all the necessary elements for the proper management of those cases which can be successfully treated by mechanical means. His own experience had led him to think that by far the most efficient method of applying traction was by means of the long traction splint.

Dr. Sayre, in closing the discussion, said that the statistics presented were only those which had been fully completed, and they represented forty years of work. He thought Dr. Phelps had misunderstood him about the question of motion at the joint. He had always advocated, repeatedly and persistently, rest of an inflamed joint, but he *permitted* such motion as the patient would himself make. He did not consider that any motion which would not cause pain was injurious. He applied sufficient traction to prevent pressure on the joint, and it was all-important that this traction should be made in the proper direction. He did not approve of an unyielding strap which, in the splint used by Dr. Taylor and Dr. Shaffer, is attached to the pelvic band and the shaft of the splint; in his opinion, it should be made of elastic webbing.

As regards the etiology of his cases, he did not pretend to say whether or not the processes were tubercular or non-tubercular. At the time he began his investigations, everything was called "scrofula," and medical men believed that tubercle was always found in the lungs before it was deposited in other parts of the body. Having learned from autopsies on some cases of hip joint disease that there were no tubercles in the lungs, he began to doubt the tubercular nature of this disease, and he was led to look upon it as a chronic inflammation resulting from a greater or less degree of traumatism. Now that the presence of the tubercle bacilli furnished a definite basis for a diagnosis, he was trying to learn something about the occurrence of tubercle in these cases. Clinical experience had taught him, however, that whether those cases were tubercular or not, fresh air, good food, and freedom from pain were the essentials for a cure.

Referring to the occurrence of ankylosis, he said that one single case of absolute, firm ankylosis of all the joints in the body was worth more to him than any number of experiments on dogs. In the case which he had reported in his paper, there was no fever, no evidence of any nervous derangement, in fact, there was no constitutional disturbance. To apply a splint without traction is wrong; nothing makes better immobilization than plaster of Paris, and it is much more comfortable than the Thomas brace, yet it is insufficient without traction to overcome the reflex muscular contraction, and to relieve pain. The treatment which he advocated, was the best possible one, no matter what the etiology of the disease.

Dr. John Ridlon exhibited a convenient pocket knife with blades especially designed to facilitate the removal of plaster of Paris bandages.

For a case of exophthalmic goitre in a man, Prof. Da Costa prescribed tinctura aconiti, gtt. j, every three or four hours, the dose to be increased to gtt. v. His diet should be bland and unstimulating, and he should rest in the recumbent position as much as possible. Prof. Da Costa said that it is very rare to have exophthalmic goitre in a man; while he has seen hundreds of cases in women, he could count on his fingers all the cases he had seen in men.

DOMESTIC CORRESPONDENCE.

The Inebriate Diathesis.

To the Editor of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION:

An incident in the history of the workings of the inebriate diathesis and its origin and treatment, has come to my knowledge, which seems to me both interesting and instructive. To fully appreciate its significance, I will, with your permission, introduce my account, with some prefatory observations bearing upon the principles to be derived from it, and the lessons to be taught by it.

Neuro-pathologists agree that constitutional diseases of the nervous system, are prone to change their forms. Their aspects, symptoms, their physical manifestations, are indeed liable to such radical variations in appearance, that they are known as distinct diseases and bear different names. And these changes in form occur, not through force of heredity alone, but sometimes they take place even in the life and experiences of a single individual. I have witnessed striking instances of this latter fact in several different persons. Blandford, Maudsley, C. H. Hughes and in fact all the best authorities bear testimony in the same direction.

But in contemplating this great truth, the inquiry will instinctively arise in the mind: What are, after all, the true, the *original* sources of the several recognized forms of constitutional nervous disease? If any one of these morbid affections can readily be transmuted into some other, and different one, may it not be true that there was a time when a very limited number of these forms of disease were in existence? Might not the larger portion of the separate and determinate forms of nervous disease, have been produced by the simple laws of the transformation of the neurotic features?

There are persons who profess to doubt whether dipsomania is a neurotic form of disease, interchanging with insanity, epilepsy, chorea, and with latency of the moral faculties. But the best authorities hold that dipsomania is a form of unstable constitution, and convertible into other well known neurotic diseases. What is there then, to controvert the assumption that, in all probability, dipsomania is itself, the oldest and most powerful neurosis in the whole catalogue of nervous affections? What is there unreasonable in the idea that dipsomania, not only is *not* a feeble and doubtful member of the neurotic family, but that alcohol is in fact the chief and most active parent of that family? Alcoholic excess is as old as any written records of the personal habits of mankind. The chief actor in the second start of the human family in the race of life, seized the first possible opportunity to achieve intoxication in his own person, and he went at the business as though it was not new to him. And the practice and spectacle of senseless drunkenness has continued without material abatement until the present time.

Is there anything strange or improbable in the supposition, that alcohol, through the physical degenerations wrought by it upon the human organism, is the most potent agent in the production of the hosts of neurotic diseases, that to-day are scourging the family of man? Here may be seen, possibly, the explanation of a great deal of insanity and crime—of kleptomania and pyromania—as well as of the development of many diseases; as forms of heart disease, neuralgias, asthmas, and an endless variety of analogous affections.

Of course, there are episodes in life, that aid the great central power of alcohol in the production of constitutional neurotic diseases. Yet these are, after all, of secondary and inferior force. Chief amongst them may be noted physical injuries, and profound and lasting maladies—especially such

as originate from the influence of some constitutional poison—as for example, malaria or contagion.

But these considerations, although plausible, necessarily lack the element of demonstration. The mind of man has not been directed towards the subject in the light of experiment; and human life is too short to collect satisfactory data upon which to base very definite conclusions.

There are other elements, however, which enter legitimately into an inquiry respecting the nature of inebriety, and which are too important to ignore. They go a great way in explaining inebriety as a disease; and, in fact, in many instances, they clearly define the nature and boundaries of the alcoholic malady.

There are several distinct heads under which inebriety may be considered as a form of disease. These may be grouped, however, into one or the other of two great divisions:

1. Inebriety may be viewed as the offspring of some severe physical injury; or of such profound morbid condition as will leave the organism impaired and degenerated.

2. Or inebriety may be considered as a disease *sui generis*—one which must find its root in the human constitution through force of heredity, or through imperceptible changes as life progresses—as through steady and heedless drinking.

The distinctions implied in these several groupings exist, however, more in appearance than in reality—as will be perceived upon further investigation.

It is well known that wounds, particularly of the head, are often followed by a violent crave, usually periodical, for intoxication. It is true also that serious disorders arising from some subtle but effective poison—are sometimes followed by persistent dipsomaniacal excesses.

Again, it is admitted that long continued mental strain and anxiety, may so lower the tone of the constitution, that inebriety is very liable to become developed. This is perceived in innumerable instances, where old soldiers, who have passed through the civil war unscathed, nevertheless fall into habits of drunkenness.

Of course, the alcoholic constitutions may become hereditary through the physical degeneracy it brings upon the organism.

These facts open wide a door that leads to useful knowledge.

Possibly a person who has been wounded, may be cured of inebriety by a surgical operation—and again, where an operation may be impracticable, the inebriety may prove insensible to other measures of relief. Sometimes, too, the depressed constitution of the drunkard may be improved by medical treatment and hygiene, and the drinking habit may thus be overcome.

The *habit* of dipsomaniacal excess, may be weakened by a series of carefully conducted measures, adopted with a view to break in upon the *periodicity* of the disease. This may be done by watching the stage of restlessness and fretfulness, and, before the judgment and moral principles are overwhelmed by the violence of the neurotic crave, withdrawing the patient from the reach and influence of alcohol—until the urgency of the desire is abated. The nervous organism is full of systems and sub-systems of periodical habits. Break them up by persistent interference and interruption, and distempers associated with them will disappear.

Here is clearly implied, or rather displayed in one general group of sufferers, the chief, if not the only cause of inebriety. That cause is, a depressed, degenerate, inadequate nervous system. Still the causes which underlie the depraved condition of the nervous functions, may be, and truly are widely different in their nature.

If, then, inebriety springs so readily from depressed nervous energies when it is brought on through physical injur-

ies, why may we not conclude that inebriety in other instances, may be a symptom of defective powers? There are innumerable sources whence the nervous functions suffer impairment, other than wounds. Hereditary defects, mental troubles arising from the vicissitudes of life, various organic maladies—all may be assumed to have a tendency towards the development of inebriety; while many constitutional proclivities and deficiencies, of which the individual is unconscious, likewise may lead to the establishment of the alcoholic crave. Certain persons do not feel this morbid longing till late in life: while in others, it abates as age advances. These facts point to peculiar constitutional modifications, occurring at stated periods, in particular family strains.

Inebriety, therefore, even though attended by a disposition seemingly callous to every sentiment of honor and morality, is probably evidence, at least to some extent, of a depressed, unstable, and inefficient constitution. Facts as they appear upon the surface, are often exasperating to the last degree. But in every instance of persistent inebriety, there is quite likely—hidden away in an unsuspected part of the organism, some nagging, physical degeneracy.

If there are any exceptions to the rule that inebriety is either a disease in itself, or represents the establishment and activity of some other disease, they are few and indefinite.

But as a variety of causes may be operative in breaking down the powers of the constitution, and many others may conspire to keep these powers impaired, it is evident that the treatment of inebriety must consist in the application of many remedies—and often indeed, of the most dissimilar and even opposite characters. There is no royal road to the cure of inebriety. It is a way difficult, often obscure, and tedious.

An example or two will suffice to indicate the dubious and hidden paths that it is necessary to traverse, in treating the alcoholic besetment.

Heart diseases are common in habitual drunkards. They are frequently developed from the effects of alcohol upon the mechanism of the circulation. But *hereditary* heart affections also, are by no means of rare occurrence; and who knows how much a congenitally defective heart has had to do in driving its possessor to drink? Instability and inquietude of mind and disposition are the often accompaniments of heart trouble. Alcohol (taken either designedly or by chance) will, perhaps, alleviate and steady the disturbed feelings in cases of heart irregularity—and without clearly knowing why, an individual may thus acquire the alcoholic habit. The mental despondencies of heart disease and of dipsomania are much of the same order; and they come very often, no doubt, from one and the same cause, namely, heart disease.

Affections of the lungs, or of the brain, may lead their victims unconsciously into inebriate habits, by reason of the anæsthetic and pleasing effects of alcohol. The so-called alcoholic heredity is, in such cases as these, simply the counterpart of the physical heredity of heart, lung and brain diseases. The inebriate heredity, associated with physical defects, may not always be easily distinguished from the purely alcoholic. But there is a wide distinction to be made between them, both in origin and treatment.

In the light of the foregoing facts and principles, the subjoined notices, taken from copies of the *Cleveland Leader*, of 1886, appear to me of peculiar interest. The exact date of the first excerpt is not remembered. Here it is:

THE BLUE RIBBON TEMPERANCE UNION.—A good-sized audience attended the regular meeting of the Blue Ribbon Temperance Union at Doan's Armory in the East End, last evening. Professor Wood occupied the chair. Rev. B. F. Bowen was present, having just returned from a campaign

of two months in Western Pennsylvania, and he delivered an interesting address upon the development of the temperance movement.

This struck me as meaning something more than what appeared upon the surface. It looked, as read "between the lines," like a cordial endorsement of a man just entering upon a new and improved career.

A short time afterwards, that is, in the issue of the *Leader* of the date October 13, 1886, appeared the following particulars:

INTO THE GUTTER AGAIN.—*Benjamin F. Bowen Stinted to the Workhouse—A Pastoral Letter.*—Rev. Benjamin F. Bowen's fall from grace is complete. The efforts made by kindly disposed persons to lift him from the depths to which he had fallen through drink have been disregarded, and he is now an inmate of the Workhouse. On Monday night Bowen reached home in an intoxicated condition, and immediately proceeded to create a disturbance. The members of his family were subjected to abuse and finally driven into the street. At that stage of the performance his son-in-law interfered, and delivered him over to the police. Judge Hutchins put an effectual quietus on Bowen in the Police Court yesterday by fining him \$10 and costs, and sentencing him to serve thirty days in the Workhouse. Bowen was formerly a Baptist minister, but was removed from the pulpit for misconduct. After some years of dissipation, he apparently reformed during the great Murphy temperance revival in this city a year ago. He conducted himself in a proper manner for several months, and then gave way again to his old craving for drink.

The following letter will be of interest to the many persons from whom Bowen has solicited aid:

CLEVELAND, O., October 11, 1886.

Having learned that B. F. Bowen, a former Baptist minister, is representing himself as an accredited clergyman of our denomination, and by erroneous statements is enlisting sympathy and securing money, we, the members of the Northern Ohio Baptist Ministers' Conference, feel called upon, with the deepest sorrow, publicly to announce, after a careful investigation of Mr. Bowen's past and present life, that on account of gross intemperance and other vices, he, in our judgment, has forfeited all right to ministerial standing.

[Signed]

GEORGE THOMAS DOWLING,

Pastor Euclid Avenue Church.

GEORGE G. CRAFT,

Pastor Willson Avenue Baptist Church.

DEACON EZRA THOMAS,

Com. for Northern Ohio Baptist Ministers' Conference.

And now, after five years, the mystery is solved. In the same paper—the *Cleveland Leader*—of the date October 6, 1891, this paragraph may be found, to wit:

CARRIED A BULLET TWENTY-SIX YEARS.—At the request of the late Rev. Benjamin F. Bowen, after his death, which recently occurred at the Cleveland Hospital for the Insane, a post-mortem examination of his remains was made. In the left lung the surgeons found a minie ball weighing $1\frac{3}{4}$ oz. Mr. Bowen was a brave Union soldier in the war of the Rebellion, and was wounded in battle. A Rebel bullet entered his left cheek, and ploughed its way through his body until it found a lodgment in the lung. He carried the ball for twenty-six years. After the wound healed Mr. Bowen became subject to temporary fits of insanity. Prior to his death he said that he could feel the spells of insanity coming upon him, and in the hope of keeping his condition from the public, he sometimes drank liquor. Rev. Dr. J. H. Hartman is preparing a sketch of Mr. Bowen's life, for publication in the Baptist denominational papers. The sketch will be largely a vindication of the unfortunate clergyman.

Whether this man Bowen was an inebriate before he was shot in battle, I do not know. The injury was sufficient to shatter the best constitution, and beget a craving for intoxication. If, perchance, there was a wavering tendency to drink in earlier life, the wound would infallibly confirm that tendency.

This case carries with it, I think, its own commentary. Very respectfully, etc., T. L. WRIGHT, M.D.

Bellevue, O., October 15, 1891.

Analyses of Food Preparation.

To the Editor of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION:

Figures do not lie, but it is said that false inferences are occasionally drawn from skilful combinations of the cardinal numbers. Otherwise we would be unable to under-

stand why it is that manufacturers of pepsin and other proprietary articles can prove so much in their own favor by means of expert analyses. For instance, we may cite a table containing an alleged analysis of various food preparations appearing in the *Philadelphia Medical and Surgical Reporter*, Vol. lxxv, page 612, issue of October 17, 1891, which has been extensively copied.

The skilful compiler of the table did not exhaust the possibilities in the way of calculations. For instance:

The relative food value of bovine and beef meal, taking fresh lean beef as the standard, which contains 70 per cent. of water, and taking into account the difference in the quantity of moisture, would be

Bovine	contains	83.1	of water	(according to table)
Beef-Meal	"	8.84	"	"
Beef-Steak	"	70.	"	"

Reducing the above to a uniform standard of water, we have

Bovine	70	Total albumen equals	17.81
Beef-Meal	70	"	9.83

But Professor Chittenden has shown in a recent analysis (*Proceedings Philadelphia County Medical Society*, Vol. xii, p. 130), that the proteid constituents of Beef-Meal are $\frac{1}{3}$ soluble and $\frac{2}{3}$ insoluble, which makes a still greater contrast:

	Total Albumen.	Soluble Proteids.
Bovine	17.81	17.81
Beef-Meal	9.83	3.28

when both are brought to the standard of fresh beef. On the other hand, by removing the superfluous moisture from bovine, we obtain a similar result:

Water.	Total Albumen.	Soluble Proteids.
Bovine, 8.84	54.12	54.12
Beef-Meal 8.84	78.12	26.04

A more satisfactory way would be to compare the food-value by the usual dose, instead of by the ounce or pound. Thus:

Dose.	Total Albumen.	Soluble Proteids.
Bovine 4 drachms	36 grains	36 grains
Beef-Meal 1 drachm	46.87 "	15.62 "

The absurdity of this style of argument, by which a liquid ready for administration to the sick, is compared with a dry powder, which requires preparation and is largely insoluble, must be manifest to everyone who will give the subject a moment's thought. In the table referred to, the very important fact is entirely overlooked, that all the proteid materials in bovine are not only soluble but in solution and ready for absorption and assimilation. What other food in the table can be used without preparation, by hypodermic injection?

After all, the value of an article of diet for the sick is not to be estimated by its cheapness in price but by its usefulness and availability in the particular case under consideration. In theory beef-steak might be the strongest and cheapest food for the convalescent and the invalid, but when digestion is feeble, or possibly entirely superseded for the time, the value of an article of food will be measured by its acceptability to the patient, the rapidity or slowness of absorption and its restorative qualities, rather than by its chemical formula or its cost per dose, in cents and fractions of a cent.

One other illustration of the worthlessness of the deductions is sought to be drawn from a table constructed like the one under consideration. It is well known that bovine contains ten per cent. of old Bourbon whisky, which adds materially to its value as a general restorative and cardiac stimulant. This appears to have been, intentionally or unintentionally, overlooked and omitted from the anonymous analysis quoted by the author of the article in question, which leads to the conclusion that the doctor has been engaged in advertising a proprietary article, instead of promulgating scientific facts, which he apparently labored under the impression that he was doing when he wrote the article to which we have called attention.

Is it at all surprising that medical readers view with suspicion the results of analyses by experts employed by the manufacturers? Why can we not have an analytical board under the auspices or direct control of the American Medical Association, so that we may have all proprietary articles examined and the results published in THE JOURNAL, without fear or favor?

MEMBER A. M. A.