

ingly useful. If, however, the connections of the tumor are extensive, and there is a doubt as to whether all can be got away without doing serious damage to the bladder itself, I feel sure that we had better content ourselves with the opening, which may under all circumstances be safely made, and the drainage that this opening with a suitable apparatus will provide. The lesser proceeding has in many instances proved the means of arresting hæmorrhage, and of adding materially to the comfort, as well as to the life, of the patient, even where it has been found impossible either to remove the tumor or with safety to reduce its size.

Of excision of portions of the male bladder I have had no experience; so far as I am aware it has been limited to some experiments on the lower animals, in furtherance of the subject which we have now under discussion.

In conclusion, it cannot be denied that operative surgery has already proved itself to be of considerable service in the treatment of a very distressing class of disorders, and for which little is to be hoped for from medicinal agencies.

If I may be thought to have been too general in some of my remarks, permit me to say that this has been my intention; my object has been to open a discussion, and not to narrow it unnecessarily. The time has not arrived when it would be possible to lay down hard and fast lines of demarcation: much must be left to individual judgment. Where therapeutics are to end and surgery is to commence, experience and the application of those principles which are of general utility, and are not the exclusive property of any one set of organs, will enable us to determine what is best for each case as it presents itself to our notice.

Time will not permit me to illustrate these remarks with cases from my own practice, where I have operated in accordance with the views expressed in this paper; these have already been noticed in a previous communication.¹

I hope that Dr. Stein, of New York, who has contributed importantly to the literature of this subject,² can tell us something to-day as to the general results following operative treatment, drawn from his most recent investigations upon this point.³

And what applies to the male is equally applicable to the female, though with the latter, by reason of the anatomical differences in the parts, both exploration and removal can be more readily affected. My friend, Dr. Alexander, of Liverpool, was, I believe, one of the first in this country to demonstrate the successful removal of growths from the bladder under these circumstances.

SOME OF THE MENTAL ASPECTS OF NERVOUS DISEASE.⁴

BY HENRY R. STEDMAN, M.D., OF BOSTON.

THE object of this paper is, in general, to direct attention to the relationship between physical and mental disease (to make a distinction of terms more convenient than sound), but more particularly to

¹ "On the Surgical Treatment of Hæmaturia," Liverpool, *Medico-Chirurgical Journal*, July, 1884.

² *A Study of the Tumors of the Bladder*. New York, 1881.

³ "Results of Operations on Bladder Tumors," *New York Medical Record*, No. xxvii, 1885.

⁴ Read before the Massachusetts Medical Society, June 9, 1885, and recommended for publication by the Society.

demonstrate the close affinity existing between the nervous and mental forms of disease. For this purpose I have grouped together several of the prominent nervous affections, giving the chief mental manifestations which are found associated with the different forms. I have also pointed out how these mental phenomena differ essentially according as the disease is structural or functional (i. e., due to discovered anatomical lesion or not), and have touched upon some of the pathological and clinical relations of individual nervous disorders to mental change. By this means I hope to suggest a more comprehensive idea of nervous disease than is prevalent. As I have merely attempted to prompt inquiry in the direction indicated by touching upon prominent points of practical and general interest, and as time will not allow more than a superficial treatment of a subject so extended, its consideration is confessedly incomplete.

A distinguishing feature of the numerous nomenclatures of insanity which have been proposed during the last twenty years, has been the tendency to classify mental diseases according to the various bodily disorders or physiological states which have been believed to be the most potent factors in their causation. This has shown increased recognition of the fact, that in the interdependence of the various parts of the organism in disease, development and decay, the cerebral changes underlying insanity play a prominent part.

While it must be admitted that a classification of this kind—by causes—is far from trustworthy as a system of grouping the essential characters of disease, it certainly helps to stimulate inquiry as to the association of mental and bodily disorders, and by thus taking insanity from its isolation as an independent affection, its importance in medicine becomes more generally recognized, and consequently far greater clinical interest is excited. Phthisis pulmonalis, syphilis, rheumatism, cardiac disease, even diabetes are some of the diseases of the body proper which are known to be not infrequently expressed in part by psychical disturbance, amounting in some cases to actual insanity. Indeed, so extended has become the field of observation through the vast accumulation of recorded facts in this direction alone, not to mention those pertaining to nervous diseases in their relation to insanity, that it has truly been said of mental medicine that its axis has become displaced, and that it no longer revolves around psychology.

Disorders of the nervous system are obviously the most nearly allied to insanity of all other portions of the organism. Taking up first the structural diseases of the brain and cord, we find that in the majority of cases some mental impairment is usually present, although it is so slight as to escape the unpractised eye until the destruction or inflammatory process has become extensive. The mental symptoms attending such lesions show a loss rather than a perversion of mental activity.

The absence of insanity from the clinical history of most cases of tumor of the brain, cerebral abscess, etc., is often instanced, but mental change is not so infrequent in this connection as is usually supposed. In an analysis of two hundred and sixty-four collected cases of this kind in the "*Dictionnaire Encyclopédique des Sciences Médicales*," although but six are complicated with actual insanity, eighty-five show intellectual disturbance of some kind.

Cerebral apoplexy shows the connection between

the mind and the brain, in that it frequently has a sequel of mental impairment. This may be nothing more than unusual loquacity, emotional instability, slight lapses of memory, irritability, want of readiness in expressing thoughts, but careful observation will disclose a change. In those rarer cases in which the disturbance exceeds moderate bounds and becomes what is known as paralytic insanity or organic dementia (in which category come also mental disturbances following softenings, tumors, atrophies and chronic degenerations of the brain), the mental symptoms are chiefly those of marked enfeeblement, viz.: decided loss of memory, frequent crying spells without cause, inability to understand what is said, inattention to calls of nature, together with more or less helplessness. Excitement, violence and destructiveness due to hallucinations and delusions, less frequently appear and make asylum care necessary.

Now, the value of a due observance of the mental symptoms following cerebral apoplexies lies in the possibility of assisting the process of repair by measures directed toward mental rest. Visits of solicitous friends soon after an attack or the premature return of the patient to business are surely to be avoided in the light of the above possibilities. At all events it is certainly wise for the physician to inculcate extra consideration on the part of the family toward a patient in these circumstances, even when he has recovered from the immediate effects of the "stroke." If by the employment of electricity we seek to hasten the use of the hemiplegic limb, should we not endeavor at the same time, by a judicious regulation of the patient's immediate surroundings, to meet the requirements of his altered mental state, and to secure to the patient by so doing a more prompt and permanent return of mental capacity and vigor? In other words, is it wise in such diseases to attend solely to motor symptoms, and to allow the mental condition to take care of itself?

Cerebral Syphilis.—The facts concerning the relation of cerebral syphilis to insanity which have the most support are those which find in it the cause of a large number of cases of general paralysis. This disease is thought to be frequently dependent on syphilitic disease, and there is better evidence to support this view than that which traces a connection between it and insanity of any other form. Still, some of the best authorities acknowledge that they cannot distinguish between syphilitic general paralysis and non-syphilitic general paralysis, except by the history of infection; the symptoms, course and pathological changes being the same, and anti-syphilitic treatment often failing to have any effect whatever.

The connection between cerebral syphilis and ordinary non-paretic insanity is still more difficult to trace. Dr. Sankey, one of the foremost English alienists, observes that when mental disease arises in one with syphilitic taint, it obeys the same laws in its evolution as other cases. The mental disease may be either ordinary insanity or general paralysis, and perhaps more frequently the latter. Dr. Hughlings Jackson says, "The syphilitic affections of the nervous system are very indirectly of nervous origin. Such names as syphilitic epilepsy, syphilitic insanity, though convenient, are not scientifically accurate terms. There is nothing in any kind of nervous symptom which enables us to diagnose syphilitic disease of the nervous system. The pathological processes by which syphilis

causes nervous symptoms simply imitate non-syphilitic morbid processes."

These facts are cited to be set against a not uncommon tendency to suppose all insanity syphilitic which occurs in syphilitic subjects, and to suggest a guarded opinion as to such a cause in the light of the preceding observations, not to speak of the extreme rarity of cerebral syphilis, and the comparative infrequency of insanity caused even indirectly by syphilis.

Locomotor Ataxia or Tabes Spinalis.—This, the most prominent structural affection of the spinal cord, has mental complications of various kinds. In the first place, mental enfeeblement, slight change in disposition, general sadness, loss of interest in family and business, emotional changes, and perhaps suicidal ideas, are known to be not uncommon in the initial stage of this disease; and we generally find the mental faculties weakened toward the end. But these symptoms do not amount to actual insanity.

The relation of general paralysis of the insane to true locomotor ataxia is an intimate one, and due, it is thought, to an actual propagation to the brain of the changes of the cord. The cases of this kind which I have seen in asylums had been transferred from general hospitals, and manifested extreme loss of mental power with convulsive seizures and imperfect articulation, symptoms which had supervened during the last stages of tabes. They certainly bore a striking resemblance to cases of advanced general paralysis of the insane. Numerous cases of this sort are recorded. It is true that the sclerosis of the posterior columns of the cord does not, as a rule, extend beyond the bulb; but according to Althaus, although there may be no change whatever in the brain in cases of tabes, when that disease ultimately becomes complicated with epilepsy, general paralysis of the insane and other analogous conditions, diffuse changes of the cortex and the pia mater of the brain have been discovered.

Again, cases are recorded by Savage, in which typical locomotor ataxia preceded; in which it developed with; and, finally, cases in which it appeared throughout the course of, general paralysis.

There is still another class of cases of tabes associated with ordinary non-paretic insanity. These usually take the form of melancholia, with delusions of persecution and various hallucinations, depending probably on lesions of the optic, auditory or other sensory nerves.

Disseminated Spinal Sclerosis.—It is not generally known that besides the dementia or general weakening of the mental faculties commonly supervening in the latter stages of this disorder and of paralysis agitans, these diseases may also be a cause of other forms of insanity, and it has been believed, in the same manner as locomotor ataxia, viz.: by extension of the morbid process from the cord to the brain. This is, however, somewhat a matter of conjecture; at all events, true insanity is occasionally met with in patients suffering from disseminated sclerosis and paralysis agitans. It may present itself in various forms, but mental depression is the most prominent feature. The brain lesions, considered by some authorities to be the origin of this mental disturbance in disseminated spinal sclerosis, are isolated patches of diseased tissue, springing from the same cause as the chief disorder in the cord.

Enough has now been said to show that mental complication in structural disease of the nervous system is a somewhat frequent occurrence, and that it

usually takes the form of dementia or a loss of mental power, limited function in other words, resulting from organic change with incomplete repair.

Functional nervous disorders, i. e., the convulsive and other neuroses without discovered anatomical lesions, are, as will be shown, far more often accompanied by mental symptoms than are the structural nervous affections. Moreover when the mental phenomena of this kind of nervous disorder pass the limits of sanity, they do not follow the same lines as when they are due to coarse lesions. For in the former, instead of mental inaction we find increased but perverted mental activity, and the emotions, the intellect, the will, one or all, may be involved. Witness the delusions of the epileptic, which may follow or precede the convulsions and the instability and impulses of the hysterical patient.

The only exception to this rule is the hebétude arising from and increasing with repeated attacks of epilepsy. But this is not the immediate manifestation of the disease, which is shown in the convulsions and the mental states directly accompanying them, while, on the other hand, the mental dulness referred to is a final result of the excessive functional disturbance in the brain. It is in fact quite probably based upon minute structural degeneration, as the only lesions which can fairly be called peculiar to epilepsy are certain histological ones, which are thought by competent observers to be the effect of the repeated passive congestion to which the brain has been exposed.

Epilepsy.—Of the greater neuroses, epilepsy may be said to lie at the threshold of mental disease, so intimate is its relation to insanity. The different manifestations of this relationship are too well known and too numerous to require more than their mere enumeration. In the first place, the irregularity of the mental state of the non-insane epileptic is noticeable. In many it is a perfectly natural one, but more often the whole disposition is colored by conduct peculiar to the diseased state, and either an unusual irritability or an extreme and obsequious amiability is noticeable. Its remoter alliance to insanity is shown by the fact that many epileptics have insane parents; its close connection by the excitement with delusions or hallucinations which sometimes precede the fit, giving rise to the intellectual aura or oftener following it in various aspects, of which homicidal furor is the most significant one; again, by mental disturbance replacing the convulsions. Its possible mental states comprise mania with or without a continuance of the unconsciousness which is pathognomonic of the fit, melancholia or dementia.

These are the common and best known features of epilepsy in its relation to insanity; but the fact that seizures in no way differing from those of "genuine epilepsy" may and do frequently occur as a symptom of general paralysis of the insane is apt to be overlooked. It is not an uncommon experience with the asylum physician to receive cases of general paralysis which have long passed for epileptics, owing to a more or less accurate resemblance of the "congestive attacks" of general paralysis to the ordinary epileptic convulsions. Moreover, the fact that these attacks frequently occur in the initial stages of general paralysis is a matter which renders an accurate judgment of great importance, owing to the widely different prognosis in the two diseases and the danger to persons and property involved, in stamping an incipient paretic as harmless epileptic.

If, therefore, a patient be found to have had a fit for the first time in mature life, no matter how closely it may resemble that of ordinary epilepsy, one should never neglect to consider the possibility of having to deal with a case of general paralysis of the insane.

Hysteria, also, is generally known to be a not uncommon associate of insanity in neuropathic families, the common bond between the two disorders being enfeeblement of the will. A family I have in mind affords a good example of this association, one member being sane, but manifesting an undue emotional instability, impulsiveness, etc., and another actual hysterical mania, while a third developed melancholia with delusions.

This relationship of insanity to hysteria by heredity, by the way, would seem to favor the views recently advanced as to the probable cerebral origin of many cases classed under the heads of spinal concussion, spinal irritation, railway spine, etc., cases now recognized as hysterical, or, as some prefer to style them, cases of functional nervous disorder. For the most experienced observers claim, with Sir James Paget, that in these cases we shall find some evidence either of mental disorder in the previous history of the patient himself, or that he comes of a stock in which mental or emotional disturbances or peculiarities, not necessarily amounting to insanity, have been recognized as prominent in the family record.

The mental phases of ordinary hysteria, viz.: craving attention and sympathy, alternate outbursts of crying or laughter, the spirit of contradiction, of complaint and tendency to duplicity, as well as impulsiveness, extreme and easily excited anger and enthusiasm, are well known. In these states, which also take on redoubled intensity at the menstrual period, and together with hemianæsthesia, etc., convulsions, etc., make up the disease as ordinarily manifested; the proportion between the mental and the motor symptoms is subject to considerable variation.

These psychological disturbances lie on this side of the line which separates reason from madness. But when the mental symptoms strongly predominate, insanity may appear in the patient subject to hysteria in several ways. First, as attacks of acute mania with noisiness, excitement, loquacity, refusal of food and sexual and uterine symptoms. These may occur in place of, during or after an hysterical convulsion, and may resemble the delirium of acute disease. Another form of mental aberration may show itself as an exaggeration of the impulsiveness born of a weak will. When their impulses become irresistible, these patients may commit purposeless theft, more rarely suicide, or they may make specious accusations of the foulest crimes against innocent people. Still another form of insanity may be developed from hysteria by delusional ideas attended by hallucinations of sight and hearing growing slowly out of the natural eccentricities of the hysterical character. Again, there are cases in young people closely resembling what is known as moral insanity. In the latter, with a family history of insanity and perhaps a previous attack in the patient, there is a perversion of the moral power, utterly incorrigible conduct and constant unreliability, together with entire absence of delusions, all springing from the same childishness, frivolity and lack of self-control which are characteristic of the hysteric. Such cases are to be excluded, however, by the history of convulsive and other sensory, of the latter disease.

Although, as has been shown, a moderate proportion of patients suffering from hysteria may develop insanity, such a result cannot be considered frequent, and a contrary opinion is likely to lead to mistakes in treatment. Cases not infrequently come under the notice of the alienist in which the early symptoms having been considered as "hysterical," the precautions necessary to be taken where insanity is indicated have been neglected. This has perhaps led to the actual detriment of the patient, harm to the family and needless anxiety and expense. When, therefore, an altered disposition appears somewhat suddenly in a patient in the form of waywardness, emotional changes, apparent shamming, lack of control, and disregard of proprieties, a careful inquiry directed to the possibility of our having to deal with the prodromata of insanity should be made. For although such symptoms are prominent in hysteria, it is inaccurate and possibly harmful in the absence of any history of motor or sensory complications, to consider and treat the disorder as hysteria. We do not always bear in mind, that states of defective inhibition are common to both hysteria and insanity.

Hypochondriasis. — Hypochondriacal symptoms are frequent precursors of attacks of melancholia and but seldom of mania. By their occasional prominence among the countless phenomena of hysteria one is sometimes at a loss to know whether he is dealing with that disease or with hypochondriasis, but here the distinction is chiefly one of terms. The *disease* hypochondriasis, however, is to a great extent a distinct one, its essence being morbid sensations. It may properly be regarded in its relation to insanity as a rudimentary melancholia. While hysteria may be greatly relieved or cured, actual hypochondriasis is seldom greatly benefited. Hysteria again is a disease of the relatively young, while hypochondriasis belongs with advanced years as a rule. Hypochondriasis also is very near to insanity by inheritance far more so than hysteria. It has been classed by Dubois, Fenchtersleben, Savage and others as a species of insanity itself, although the usual and best known view is that a distinction should be made between the two conditions, viz., sane hypochondriasis and hypochondriacal melancholia. The former is chiefly confined to absurd fancies by the patient as to various ailments, beliefs which do not influence his conduct, while the latter is characterized by marked depression with actual delusions regarding himself, such as transformation, decay or obstruction, etc., in some organ or organs, all of which are a perpetual source of misery to himself and annoyance to others, and render him greatly out of harmony with his surroundings.

Chorea. — I have stated elsewhere¹ the various conditions influencing the amount of mental disturbance which is present to some extent in all cases of chorea, but I cannot forbear repeating a caution which subsequent experience has emphasized: —

"Although many of the ordinary cases of chorea are attended at some stage by mental phenomena, the motor symptoms so far predominate as to completely mask them. On the other hand, in the most severe cases the mental disturbance, which is often quite pronounced, being intensified by the energetic character of the movements, is apt to mislead the practitioner, who considers the patient simply insane, and sends him to an asylum. Whereas, if the

case had been recognized at the start to be one of chorea he would hesitate to do so. The case just reported is an extreme example of this mistake and more may be found in asylum records."

Within a year following the date of this statement three cases of acute chorea in adults were admitted to the Danvers Lunatic Hospital, under the same circumstances. Should a case of this kind in a patient who could command better facilities at home be committed to an asylum under like circumstances through a mistaken view of his trouble, it might be a serious matter to all concerned.

Delirium Tremens. — Some of the relations of delirium tremens to insanity have a practical value to all practitioners, and will bear restating. I refer to the gradual prolongation of the delirium into acute alcoholic insanity, a result not uncommon in neurotic subjects. In such persons a much smaller amount of liquor is known to prove excessive and to produce delirium tremens. Such patients are also more likely to have an attack of mania engrafted on that of the delirium. When a case of delirium tremens does not recover in the usual time, but the patient remains apprehensive, suspicious, and it may be excited, having also pronounced delusions of persecution, etc., it is by no means necessary to send the patient, if a person of means, to an asylum. The attack of mania is usually short and the prognosis almost wholly favorable. Some of these cases of prolonged delirium tremens are also exceedingly like cases of general paralysis of the insane in the first stage. I have a case in mind where the diagnosis was for weeks impossible, although the patient was under close observation in an asylum. Tremor of the facial muscles and the tongue, unequal pupils and impaired articulation were present, together with exaltation, ideas of grandeur, disconnected talk, etc. As a rule, active maniacal symptoms developing from delirium tremens do not eventuate in the pure insanity ordinarily manifested, nor in maniacal cases of this variety is a repetition of the attack probable unless the same cause be present.

Having considered cases of structural and functional nervous disorder in the relations indicated, I pass now to a form of disease which embraces both of the foregoing, viz., *General Paralysis of the Insane*. The claims of this disease to a place among nervous disorders are acknowledged, but their force is not always appreciated. As its mental phenomena embrace all the usual forms of insanity, so also are its motor and sensory symptoms most comprehensive. This is true, not only as regards similarity in the symptoms, but also in the underlying anatomical lesions of individual nervous disorders. One who is at all familiar with this affection needs only to run over the list of nervous diseases to be satisfied of this. In short, a collection of cases of general paralysis may illustrate pathologically and clinically at some stage, almost any of the disorders of the cerebro-spinal system, structural or functional.

That there is a fundamental difference also between insanity proper and general paralysis seems now to be put beyond question by recent investigations by Professors Ball and Regis, extending over a number of years, and based upon the vital statistics of the families of 318 general paralytics. From these it appears that the disease in question is essentially different from ordinary hereditary insanity, in arising simply from an inherited tendency to cerebral congestion or a

, etc., Boston Med. and Surg. Journal,

predisposition to coarse cerebral disease. Moreover, it is found that general paralysis and ordinary insanity are not two branches of one family, and can never give rise the one to the other.

We can now, therefore, maintain with a great degree of confidence, that children of general paralytics have no predisposition to insanity, although they are particularly liable to organic diseases of the brain,—of childhood for example,—cerebral paralysis, etc. Thus we find that an accurate knowledge of the relationship of general paralysis of the insane to true insanity is of great value to the physician whose advice is asked concerning the marriage of the offspring of such patients.

It will appear, I think, from what has now been said, that a plea for closer consideration of the mental accompaniments of the nervous disorders is justifiable. At the same time I do not overlook the fact that not only are neuroses with serious mental complications few, as compared with the myriad cases of nervous disease without such manifestations, but also that the association may in some instances be one of coincidence, the insanity occurring merely as an intercurrent and independent disease. But giving these facts their full value, it is nevertheless certain that annoying and perhaps disastrous mistakes may frequently be avoided by timely inquiry into the mental condition of many cases of nervous disease. Finally, it is probable that the clinical history of nervous disease in many of its forms will never be complete without a full consideration of its mental aspects.

CREMATION IN ITS SANITARY ASPECTS.¹

BY JOHN O. MARBLE, M.D., OF WORCESTER.

THE TORCH VERSUS THE SPADE.

"Vermibus crepti puro consumimur igni."

WISE sanitation is now universally regarded as essential to the public welfare. The health and safety of the people is believed to depend quite as much upon preventive medicine as upon curative. The subject of this paper is, *par excellence*, one of preventive medicine. Advances in pathology and therapeutics have no more than kept pace during the past ten years with progress in sanitation, equally important and efficacious in the promotion of health and the saving of life.

The proper method of disposal of the dead is, I believe, one of the greatest, if indeed not the greatest sanitary problems of the day.

Mr. Eassie, Hon. Secretary of the Cremation Society of England, to whom I am indebted for many facts relating to this subject, said at a recent sanitary council, "I am in a position to guarantee facts, and having a lively acquaintance with the history of other sanitary reforms, I think it my duty to declare my opinion that the problem what to do with the dead, transcends in importance every other sanitary question."

The limited time at my disposal to-day forbids me to present to you more than a skeleton of this grave subject.

I shall, however, endeavor to demonstrate the

dangers to the living, from the prevalent custom of earth burial, and the hygienic advantages of cremation over the time-honored, but always and everywhere unsafe practice.

It is an unprofitable, as well as an impossible, task to trace back to their origin either cremation or earth burial. Inhumation had certainly not the most honest origin if, as we are told, Cain buried his brother to conceal his crime. It is a disputed point when urn-burial was first adopted even by the Greeks. The Iliad account of the funeral rites of Patroclus and Hector is, I believe, the first mention of incineration in Greek literature. Rome in her earliest history, according to Pliny, practised earth burial, yet at that early period cremation was also a custom, as stated by Ovid. During the Trojan war cremation appears to have been adopted that the remains of dead heroes might be restored to their native land. We are told that Hercules burnt the body of Argius, because thus only could he return the remains of the son to his sorrowing father.

Homer causes his dying hero, fainting at the approach of death, to say:—

"Ah, leave me not for Grecian dogs to tear!
The common rites of sepulture bestow
To soothe a father's and a mother's woe:
Let their large gifts procure an urn at least
And Hector's ashes in his country rest."

Neither is it certainly known whether incineration was originally adopted on sanitary grounds, yet it appears probable from the fact that it was generally resorted to after great battles. It is an undisputed fact, however, that in the fourth century, after Christianity became established, cremation fell into disuse, inhumation becoming thereafter the more general custom throughout Europe. Whether this was due to the fact that Christian people desired thus to distinguish themselves from the so-called heathen or pagan nations, as is claimed, or to the absurd idea that burning the body would interfere with its final resurrection, concerns us little at the present day.

The battle of the torch and spade has been waged in earnest in modern times, since the year 1873 when Professor Brunetti, at the International Exposition in Vienna, exhibited his samples of the results of a scientific cremation. Previous to that date, skirmishes had appeared at intervals with more or less influence ever since good old Sir Thomas Browne, more than two hundred years ago, wrote his excellent paper on Hydriotaphia or Urn Burial. But during the past ten years an immense number of papers upon the subject have been published in every country of Europe, and more recently in this country. With few exceptions the practice of earth burial has received the condemnation of science, the world over, and in its stead cremation has been everywhere recommended as a safe, rational, and unobjectionable custom, one which would annihilate powerful sources of disease, and greatly promote the public health.

The final disposition of the dead concerns only survivors, and its importance to posterity cannot be overestimated. When the population was scarce perhaps it mattered less, but with the increasing tendency of people to congregate, the question before us now increases in importance *pari passu* with increase of population.

The question is, what ought to be done with the dead, by reasoning and intelligent men, in the nine-

¹ Read before the Massachusetts Medical Society, June 10, 1885, and recommended for publication by the Society.