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BENJAMIN RUSH

AND

AMERICAN PSYCHIATRY.

BY

CHARLES K. MILLS, M.D.,

President of the American Neurological Association.



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Army Medical Museum
Washington, D. C.



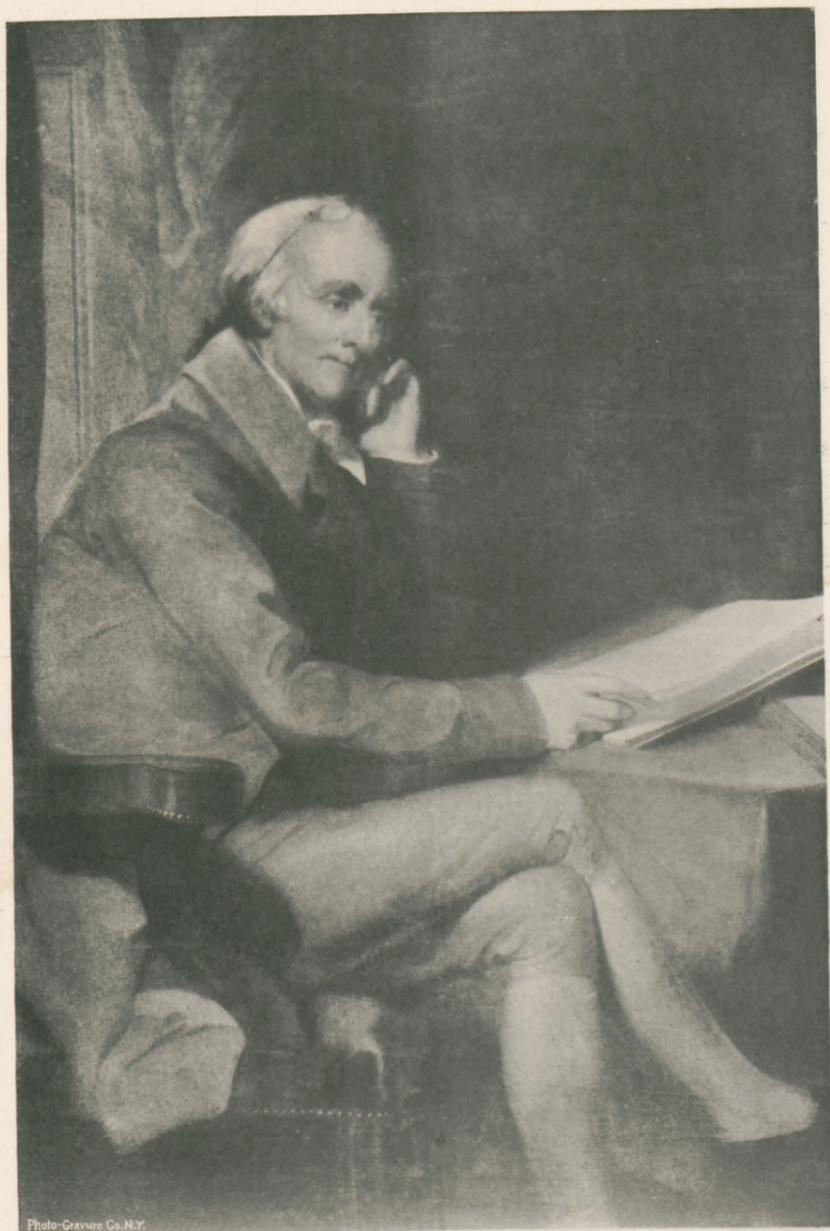


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Benjamin Rush and American Psychiatry.

By CHARLES K. MILLS, M.D.,

PRESIDENT OF THE AMERICAN NEUROLOGICAL ASSOCIATION, ETC.

READ BEFORE THE MEDICO-LEGAL SOCIETY OF NEW
YORK, DEC. 8, 1886.

Benjamin Rush and Isaac Ray are the two Americans, who have done most for Psychiatry, one of the great sciences which come within the scope of this Society. Until the year 1883 the only systematic American treatises on insanity, either in its medical or medico-legal relations, came from the pens of these two remarkable men. In this year, text-books on insanity were published by Dr. William A. Hammond and Dr. E. C. Spitzka, and since a third work has been issued by Dr. Edward C. Mann; but valuable as these works may be, Rush and Ray have not yet been supplanted, and, whatever the future may bring forth, they are not likely soon to be displaced as the two most striking figures in American psychological medicine.

Rush has been called the American Sydenham, first by Lettsom, who said of him that he approached if

* The Asclepiad, Oct. 1885. By Benjamin Ward Richardson.



appointed Professor of Chemistry in the College of Philadelphia. In 1789, twenty years later, he was elected to the Chair of the Theory and Practice of Medicine, which had been vacated by the death of the distinguished Dr. John Morgan. In 1791, when forty-six years of age, the College of Philadelphia having been merged into the University of Pennsylvania, he was elected Professor of the Institutes and Practice of Medicine and Clinical Practice in the latter institution. In 1796, on the resignation of Dr. Adam Kuhn, he received the additional professorship of the Practice of Physic, which he held in connection with both of the other appointments just named. He remained actively engaged in the work of these offices up to the period of his death in 1813. He held also not a few public positions, some of which were medical. In April, 1777, he was elected by the Continental Congress Surgeon-General of the Hospitals in the Middle Department; and, in July of the same year, Physician-General, in place of Dr. Walter Jones, of Virginia. He was one of the signers of the Declaration of Independence; and, in 1787, was a member of the Convention for adopting the Constitution of the United States. He was for a time Port Physician of Philadelphia. For fourteen years before his death he was Treasurer of the United States Mint. He was President of the Society for the Abolition of Slavery; was one of the founders of Dickinson College at Carlisle, Pennsylvania, and in various ways was connected with many literary, religious and charitable institutions. In 1811 the Emperor of Russia sent him a gold ring in appreciation of his medical character.

This sketch of his life is given for the sake of completeness, my chief concern on the present occasion being with his relations to psychiatry of which he was the pioneer in this country. First, in this connection, let us glance at his position as a teacher.

He set an example which unfortunately has not been followed (at least, not in Philadelphia, where my opportunities for observation are best)—that of delivering lectures upon diseases of the mind in the regular medical course of the University of Pennsylvania, the course upon which students are examined for graduation. It is certainly extraordinary that at the present day in nearly all of our great medical insti-

tutions systematic instruction in mental diseases forms no part of the compulsory *curriculum*. Let us hope that this state of affairs will not endure much longer, and let us do our part towards rehabilitating teaching in psychiatry so that it may hold again the position which was accorded to it by the illustrious subject of this Essay.

In Lecture I, of the volume of Sixteen Introductory Lectures to Courses of Lectures upon the Institute and Practice of Medicine, etc., published by Bradford & Inskeep, of Philadelphia, in 1811, Rush gives a Syllabus of his course of lectures upon Physiology, Pathology, Therapeutics and the Practice of Medicine. In the Syllabus of the course on Physiology, under the head of the nervous system and mind, he makes an elaborate enumeration of the subjects treated of in his discussion of the latter, as follows :

Of the faculties and operations of the mind.	Association,
History of the different opinions of the nature of the mind.	Judgment,
Of its faculties. These are,	Reason,
Instinct,	Volition.
Memory,	Of genius, intuition and common sense.
Imagination,	Of attention, reflection, contemplation and wit.
Understanding,	Of consciousness.
Will,	Of the manner in which the faculties of the mind are evolved.
Passions and emotions,	Of the faculties and operations of the human mind which distinguish them from those of brutes.
Faith.	Of the pleasures of the senses and of the mind, and of their proximate cause.
Moral faculties in which are included what is called the moral sense—Conscience and the sense of Deity.	Of the causes of sleep and dreams, and somnambulism.
Of taste.	
Of the operations of the mind. The principal of which after sensations are Perception,	

In the Syllabus of the course on the Practice of Medicine, he makes the following subdivisions of Diseases of the Mind :

The diseases of the mind which include	Fainting.
Seatou mania.	Asphixia.
Alou mania.	Diseases of the passions and the veneral appetite.
General mania in its highly inflammatory state.	From love.
Manicula.	Fear.
Manalgia.	Grief.
Fatuity.	Anger.
Defect and loss of memory.	Malice.
Dreaming.	Envy.
Phantasms.	Lust.
Absence of mind.	Of the absence or torpor of the passions.
Operations of the mind in a trance.	Diseases of the moral faculties.

These Synopses indicate that Rush was in the habit of discussing at length, in his regular medical lectures, the nature, phenomena and diseases of the mind. Doubtless, his work on diseases of the mind, which was first published only a few months before his death, was the ripe fruit, not only of years of study and observation, but also of teaching.

This treatise is the Fifth Volume of his principal works in seven volumes. It is entitled *Medical Inquiries and Observations upon Diseases of the Mind*, and appeared first in 1812, passing through several editions. The edition in my own possession, the fourth, was published in 1830, and a fifth in 1835 ; but I have no knowledge of any later editions. I would that I had time to analyze this book as its merits deserve, but I can scarcely do more than

glance at some of its salient features. I agree, as the result of my recent studies of Rush's works, with what Tuke says of him, namely, that so far as his position in psychiatry is concerned, citations from his writings fail to do him justice.

"I had almost said they do him injustice," says Tuke, "because it requires a study of the whole of his writings to convey a faithful picture of his opinions. It is true that if we take isolated passages from his work on Insanity, he appears to disadvantage; but a perusal of the whole, while it shows that he was not free from some of the strange notions then prevalent in regard to the treatment of the insane, leaves the conviction upon the mind of the reader that he was an original observer, a humanely intentioned, and in many instances a successful physician of the insane."

According to Dr. Thos. D. Mitchell, one of Rush's eulogists, the charge of plagiarism was preferred against him and by some one especially with reference to his book on Diseases of the Mind. Mitchell quotes the remark of a Dr. Francis of New York, who said that during his casual attendance on the lectures of Prof. Brown of Edinburgh, he was highly gratified to hear the successor of Dugald Stewart affirm that Rush's work on Diseases of the Mind was full of instruction and exhibited great originality. It needs no examination of the testimony as to this matter, to convince any one familiar with Rush's treatise, of the injustice of this charge. Even though much of his material, and some of his methods of arrange-

ment, and views as to nomenclature, etc., may have been drawn from the lectures or works of others, on almost every page he gives facts and cases from his daily experience, and even his old facts have been brought together from many sources. In this treatise we see Rush, the doctor, considering the nature and pathology of madness and its causes physical, mental and moral; spreading before us a luxury of illustrations of its manifold forms and phases; naming, defining, and classifying it in a manner striking and original; dwelling carefully upon its diagnosis and prognosis, and, above all, going into elaborate detail as to its management and treatment.

He begins by an analysis of the Mind, whose faculties according to him are understanding, memory, imagination, passions, the principles of faith, will, the moral faculty, conscience, and the sense of the Deity, and whose principal operations, after sensation, are perception, association, judgment, reasoning and volition. All subordinate operations, such as attention, reflection, etc., he regards as nothing but modifications of these five principal operations. Rejecting the abdominal viscera, the nerves, and the mind as the primary seat of madness, he holds that this is in the blood vessels of the brain; although he does not confine the predisposition to it exclusively to them, but believes that it extends to the nerves, and that part of the brain which is the seat of the mind, both of which when preternaturally excited communicate more promptly deranged action to the cerebral vessels.

It will be seen that his analysis of the mind, particularly in its moral relations, was more elaborate than that of his predecessors or of most of those who have followed him. He seems to have held to the doctrine, which long retained its grip upon the profession as well as the people at large, that the mind was seated in some particular portion of the brain, his belief in this view cropping out in many places in his works.

Dividing diseases of the mind into *partial* and *general intellectual derangement*, he defines partial derangement as consisting in error in opinion and conduct upon some one subject only, with soundness of mind upon all or nearly all other subjects. He invents the term *Tristmania*, or the madness of sadness, which I cannot but regard as an expressive term for at least some of the varieties of alienation included under it by Rush. He used it chiefly in the sense in which hypochondria, hypochondriacal melancholia, or melancholia are now used.

Under Anemomania, or the second form of partial intellectual derangement, he includes a form of madness which he regards as a higher grade of hypochondriasis, and often succeeding it. A study of his illustration shows that he places here some of the cases which today would be considered under Monomania or Paranoia. General intellectual derangement he divides into three grades or states: (1.) Mania, the tonic madness of some writers, the mania furibunda of Van Swieten; probably covering both the acute delirious mania and common acute mania of most recent authorities; (2.) Manicula,

or madness in a reduced and most commonly in a chronic state ; this corresponding to chronic mania and some of the secondary insanities ; (3.) Manalgia or that state of general madness in which a universal torpor takes place in mind and body.

Manalgia would seem, from some of the illustrative cases, to correspond in some of its instances to either stuporous melancholia or stuporous dementia. He mentions a patient who sat with his body bent forward for three years without moving except when compelled by force, or the calls of nature ; and another who occupied a spot in a ward, an entry, or in a hospital yard, where he appeared more like a statue than a man. He says, however, of the persons affected with Manalgia that when at liberty they rather seek for than shun human society ; and he brings forward Edgar in King Lear as counterfeiting this state of derangement. In the confusion of the description of Manalgia we see one of the failings of Rush as a teacher of Psychiatry, if we regard him from the standpoint of our present light. He confounds two entirely distinct forms of insanity, one of them not a variety of mania. We must remember, however, that we have made many advances in differentiating, if not in closely classifying, since his day.

One of the forms of intellectual madness he prefers to call *Dissociation*—like *Tristimania*, clinically at least, an exceedingly appropriate name. It is the *démence* or *dimance* of Pinel, its victims ; those whom the Scotch speak of as having “a bee in their bon-

nets;” who in England or in the United States are said to have “a kink in their head,” or to be “flighty,” or “hair-brained,” or “a little cracked.”

“It consists not in false perceptions like the worst grade of madness, but of an association of unrelated perceptions or ideas, from the inability of the mind to perform the operations of judgment and reason. The perceptions are generally excited by sensible subjects; but ideas collected together without order, frequently constitute a paroxysm of the disease. It is always accompanied with great volubility of speech, or with bodily gestures, performed with a kind of convulsive rapidity. We rarely meet with this disease in hospitals, but there is scarcely a city, a village or a country place that does not furnish one or more instances of it.”

He treats of affections of the will, and here he again leads his generation and forecasts the later work of Ribot and others. The will, according to him, is affected by disease in two ways.

(1.) “When it acts without a motive, by a kind of involuntary power. Exactly the same thing takes place in this disease of the will, that occurs when the arm or the foot is moved convulsively without an act of the will, and often in spite of it. The understanding in this convulsed state of the will is in a sound state, and all its operations are performed in a regular manner.

(2.) “It is subject to such a degree of debility and torpor as to lose all sensibility through the stimulus of motives, and to become incapable of acting freely or from necessity. Here Rush places those individuals who have no will of their own.”

Under Derangement in the Principle of Faith, or the Believing Faculty, he considers persons who believe and report everything they hear, who are incapable of comparing dates and circumstances, and tell stories of the most improbable and incongruous nature, sometimes propagating stories that are probable but false, and thus deceiving their friends and the public. His Fatuity corresponds to our secondary dementia.

Dreaming, Incubus, or Nightmare, and Somnambulism, Illusions, Revery or Absence of Mind and Derangement of the Passions are other separate forms of insanity considered by him.

He discusses also, in a separate chapter, the morbid state of the sexual appetite, and in another and final chapter he considers at some length derangement of the moral faculty. Of his views on this subject, I will speak more fully later.

Rush's writings and particularly his treatise on diseases of the mind, abound in classical and poetical illustration. Homer and Shakespeare are not infrequently called upon. In speaking of erroneous perceptions as symptoms of mania he illustrates by the character of Ajax in the tragedy of Sophocles. Ajax becomes mad, in consequence of Ulysses being preferred to him in the competition for the arms of Achilles, and in one of his paroxysms of madness, he runs into the field and slays a number of shepherds and their cattle under a belief that they were Agamemnon, Menelaus, and others, who had been the instruments of his dishonor. Afterwards he brings a number of cattle to his tent, and among them a large ram, which he puts to death for his rival and antagonist Ulysses. In commenting, Rush remarks that Ajax could not have fancied a large ram to be Ulysses, had not his image from a former impression of his person upon his brain pre-existed in his mind. I cite this illustration simply to show Rush's method of using classical illustrations. King Lear is a favorite play with him, and the words of

Lear and of Edgar are used to enforce his views. Mr. Merry, Mr. Cowper, and good old Dr. Burton, are other favorites.

Rush shows a tendency to invent terms descriptive of some minor forms or subdivisions of insanity. When, according to his view, mania is combined with phrenitis, the affection is *Phrenimania*. When it is combined with burning, sweating, cold, chilly intermitting, and even hydrophobic states of fever, "as," he says, "the pulse in this mixture of mania and common fever is generally synochus, I have called it *Synochomania*." In his essay upon the *Influence of Physical Causes upon the Moral Faculty*, he describes the partial or weakened action of the moral faculty as *Micronomia*; and the total absence of this faculty as *Anomia*.

Whether we accord or disagree with Rush's views on the treatment of the insane, many of them have the merit of novelty and great interest. He enters upon his discussion of treatment with a clearly defined method. "Before we proceed to mention the remedies for mania, or the highest grade of general madness," he says, "it will be necessary to mention the means for establishing a complete government over patients afflicted with it, and thus, by securing their obedience, respect, and affections, to enable a physician to apply his remedy with ease, certainty and success." His first recommendation, full of wisdom, is to remove the patient from his family, and from the society of persons he has been accustomed to command,

to a place where he will be prevented from injuring himself and others. He lays great stress upon the use of the eye, voice, and countenance in governing a deranged patient, recommending, among other things, to catch the patient's eye and look him out of countenance. Uniform dignity, acts of justice and a strict regard to truth on the part of the physician; a rendering to patients of respect and all ceremonies due to their former rank and habits; acts of kindness, as small presents of fruit or sweet cake, are among the measures given by him the first place.

Turning to his view upon restraint, we find that he was a believer in mechanical restraint, as was almost everybody in his day; but let him be judged as to this matter with a full recognition of the state of public and professional opinion in his time. When other means have failed, recourse, he says, should be had to coercion.

He was the inventor of a remarkable appliance called "tranquilizer," a form of restraint chair.

I show the members of the Society a picture of this "Tranquilizer." This is found in a medical journal conducted by John Redman Coxe, M. D.—*The Philadelphia Medical Museum*, New Series, Vol. I, 1811, page 169. It is a wonderfully constructed restraint chair, which in our day would be regarded as an instrument of torture, rather than one of humanity; yet it is evident, from the following letter written by Rush to the Journal, in explanation of his appar-

atus, that he was actuated in inventing it by most humane motives.

SEPT. 5th, 1810.

“*Dear Sir.*—In attending the maniacal patients in the Pennsylvania Hospital, I have long seen with pain the evils of confining them, when ungovernable, by means of what is called the mad shirt, or straight waistcoat. It generally reduces them to a recumbent posture, which never fails to increase their disease. In this state they often lie whole days and nights, and sometimes in a situation which delicacy forbids me to mention. The straight waistcoat moreover, renders it impracticable to feel their pulses, or to bleed them, without taking off the greatest part of it. To obviate these evils, and at the same time to retain all the benefits of coercion, I requested by permission of the sitting managers of the hospital, Mr. Benjamin Lindall, an ingenious cabinet-maker in this city, to make for the benefit of the maniacal patients, a strong arm-chair, with several appropriate peculiarities, as noticed in the drawing, which I have herewith sent you for your Museum. From its design and effects I have called it a Tranquilizer.”

Rush then proceeds to show the advantages of his Tranquilizer over the straight waistcoat, and subjoins letters from two of the medical officers of the hospital, Dr. Van Dyke and Mr. Moore, who had faithfully attended to its effects upon a number of maniacal patients. The latter of these two gentlemen, somewhat after the manner of the modern clinical reporter, gives brief his-

tories of several selected cases in which the Tranquilizer was used, with what he regarded as favorable results.

Rush also interested himself in inventing a rotatory machine which he called the "gyrator," for the treatment of insanity. It was a modification of a famous rotatory machine invented by Dr. Coxe.

In discussing the treatment of manalgia, under the head of exercise, he says that this should consist of swinging, see-saw, and an exercise discovered by Dr. Coxe, "which promises more than either of them, and that is, subjecting the patient to a rotary motion, so as to give a centrifugal direction of the blood towards the brain. He tells us he has cured eight persons of torpid madness by this mode of exercise. I have contrived a machine for this purpose in our hospital, which produces the same effects upon the body which are mentioned by Dr. Coxe. These are vertigo and nausea, and a general perspiration. I have called it the Gyrator. It would be more perfect, did it permit the head to be placed at a greater distance from its centre of motion. It produces great changes in the pulse." Certainly we need not wonder that it did this.

Pouring cold water under the coat sleeves, so that it might descend under the armpits and down the trunk of the body; a shower bath continued for fifteen or twenty minutes; and a resort to the fear of death, are other remarkable measures recommended by him, at which we scarcely know whether to smile or to recoil.

For madness as for many other affections blood letting was with him a frequent resort. Is it not possible

that we have recoiled too far in our treatment of active insanity from the lancet methods of Rush ?

In the use of bleeding in mania he gives the following rules : " It should be copious on the first attack of the disease. * * * * It should be continued not only while any of those states of morbid action in the pulse remain which require bleeding in other diseases, but during symptoms which indicate a highly morbid state of the brain. * * * * It should be more copious in phrenomania and synchronomania, than in simple madness. * * * * It should be less copious in madness from drunkenness, than from any other causes. * * * * It is indicated no less in the seventh and eighth form of mania, than in those which preceded them. * * * * The quantity of blood drawn should be greater than in any organic disease."

Other remedies recommended are purges, blisters, cupping, leeches and arteriotomy performed upon the temporal artery ; also solitude, darkness in the first stage of the disease, an erect position of the body, and a low diet consisting wholly of vegetables and those of the least nutritious nature. Of salivation he says, too much cannot be said in its favor in general madness. Peruvian bark is another favorite. Opium he believes to have been always used with bad effects ; and digitalis and camphor are more liable to do harm than good, though he has occasionally administered the former in tonic madness. I cannot forbear quoting some of his remarks with reference to the use of cold in the form of air, water and ice, which contain many sage suggestions as to measures which to-day are beginning again to hold first place in the treatment of some forms of insanity.

" Cold in the form of air, water and ice should be applied both partially and generally. To favor its partial action the hair should be cut off, and shaved from every part of the head. * * * * Cold air, by its action

upon the whole body, has likewise done service in this state of madness. I have heard of two instances in which it was cured by the patients escaping from their keepers in the evening, and passing a night in the open air in the middle of winter. One of them relapsed; in the other the cure was permanent. * * * * Cold water should be applied to the head and the whole body. * * * * The advantage of cold applications to the head will be much increased by placing the feet at the same time in warm water. The circulation is thereby promptly equalized. * * * * In order to derive benefit from the application of cold water to the whole body, it should be immersed in it for several hours, by which means we prevent the reaction of the system, and thus render the sedative effects of the water permanent. Pumping for an hour or two on the patient acts in the same way. * * * * The shower bath acts upon the head by the stimulus arising from the weight and momentum of the water, and by the reaction of the blood vessels after the sedative effects of the water are over."

Remedies for Hypochondriasis, or Tristimania, are arranged under two classes, such as are intended to act directly upon the body, and such as are intended to act indirectly upon the body, through the medium of the mind.

First come, under those intended to act directly upon the body, blood-letting, purges, emetics, a reduced diet. He says: After reducing the action of the blood vessels to a par of debility with the nervous system, or to borrow an illustration from a mechanical art, after plumbing the system, the remedies should consist of the following: Stimulating drinks and medicines; the warm bath, applied in the form of water or vapor, and rendered more stimulating, if necessary, by the addition of saline or aromatic substances; the cold bath, which should not be used until the system is prepared by the previous use of the warm bath; frictions to the trunk of the body and limbs; exercise, labor especially in the open air; the excitement of pain, salivations, blisters and issues.

Of remedies which act on the body through the medium of the mind, some of his recommendations are as foolish as others are wise. Thus he says: "The first thing to be done by a physician is to treat the disease in a serious manner. However erroneous a patient's opinion of his case may be, his disease is a real one;" and, *per contra*, is the following: "Cures of patients who suppose themselves to be made of glass, may be easily performed by pulling a chair upon which they are about to sit from under them, and afterwards showing them a large collection of pieces of glass as the fragments of their bodies."

In discussing these remedies he makes some interesting observations. The first remedy, he tells us, is to divert the ruling passion or subject which occupies the mind, if it be one, and fix it upon some others; and again, he asserts that a sudden sense of the absurdity, folly, or cruelty of certain actions, produced by conversation, has sometimes cured madness; and also that it has been cured by the influence of the place, time and company, on the human mind. The following are some of his recommendations and suggestions:

“Great care should be taken by a physician to suit his conversation to the different and varying states of the minds of his patients. In the furious state they should never be contradicted; in the second grade they should be diverted. When they are upon the recovery, we may use reasoning, contradiction and even ridicule. * * * * The return of regularity and order in the operations of the mind will be much aided by obliging mad people to read in an audible voice, to copy manuscript, and to commit interesting passages from books to memory. * * * * Terror acts powerfully on the body through the medium of the mind, and should be employed in the cure of madness. * * * * Fear accompanied with shame and a sense of pain, has sometimes cured this disease. * * * * Convalescents from derangement should be defended from the terrifying or distrssing noises of patients in a raving state. by removing them to lodges remote from the Hospital. A relapse has often been induced by neglect of this caution.”

This is a wise suggestion for the establishment of convalescent cottages or hospitals, a subject which has been much agitated in recent years.

Total abstinence from food is recommended in the treatment of some cases of insanity, basing this upon the fact that in India, wild elephants when taken, are always tamed by depriving them of food until they are greatly emaciated.

Labor, occupation, amusement, exercise, and all, or

nearly all, of those forms of treatment which are now regarded as of the highest value by the most competent alienists, will be found to have been advocated by Rush in his treatise. At various places in his work he lays great stress upon the moral or the psychical treatment of insanity. Under derangements of the passions, he speaks of the remedies for grief, as physical and moral; and while he says to enumerate the latter would be foreign to the design of his inquiries, as they belong to another profession, he glances at them without separating them from those that are of a physical nature. How wholesome is advice like the following! "The persons afflicted with grief should be carried from the room in which their relations have died, nor should they ever see their bodies afterwards. They should by no means be permitted to follow them to the grave." Among remedies for fear, he mentions just opinions of the Divine government, and of the relations we sustain to the great author of our being. "The fear which is excited by darkness," he says, "may easily be overcome by a proper method of education in early life."

That, in spite of his formidable tranquillizer and gyrator, and his recommendations to douche with cold water and inflict pain, Rush was actuated by humane motives and a progressive spirit is abundantly evidenced by a study of his writings and a knowledge of his labors professional and public. In Chapter VIII of his treatise, in concluding his discussion of General Intellectual madness, he thus eloquently discourses upon

the subject of the improvements which have been made, and the further advances which should be accomplished in the care and treatment of the unfortunate insane :

“ In reviewing the slender and adequate means that have been employed for ameliorating the condition of mad people, we are led further to lament the slower progress of humanity in its efforts to relieve them, than any other class of the afflicted children of men. For many centuries they have been treated like criminals, or shunned like beasts of prey ; or, if visited, it has only been for the purposes of inhuman curiosity and amusement. Even the ties of consanguinity have been dissolved by the walls of a mad house, and sons and brothers have sometimes languished or sauntered away their lives within them without once hearing the accents of a kindred voice. Happily these times of cruelty to this class of our fellow creatures, and insensibility to their sufferings, are now passing away. In Great Britain a humane revolution, dictated by modern improvements in the science of the mind, as well as of medicine, has taken place in the receptacles of mad people, more especially in those that are of a private nature. A similar change has taken place in the Pennsylvania Hospital, under the direction of its present managers, in the condition of the deranged subjects of their care. The clanking of chains, and the noise of the whip, are no longer heard in their cells. They now taste of the blessings of air, and light and motion, in pleasant and shaded walks in summer, and in spacious entries, warmed by stoves, in winter, in both of which the sexes are separated and alike protected from the eye of the visitors of the hospital. In consequence of these advantages, they have recovered the human figure, and, with it, their long forgotten relationship to their friends and the public. Much, however, remains yet to be done for their comfort and relief. To animate us in filling up the measure of kindness which has been solicited for them, let us recollect the greatness of its object. It is not to feed nor clothe the body, not yet to cure one of its common diseases ; it is to restore the disjointed or debilitated faculties of the mind of a fellow creature to their natural order and offices, and to revive in him the knowledge of himself, his family and his God.”

In November, 1789, Rush wrote a letter, to the managers of the Pennsylvania Hospital, which has been exhumed from the archives of that institution, and published by Dr. Thos. G. Morton.* In this letter he pro-

* Reminiscences of Early Hospital Days. Philadelphia Medical Times, Vol. XV, p. 472, December 26, 1885.

The following furnished to me through the courtesy of Dr. Thomas G. Morton, is a

posed certain plans for the amelioration of the condition of the insane, and called attention to the improper manner in which they were provided for at the Pennsylvania Hospital. "These apartments," he says, "are damp in summer and warm in winter. They are, moreover, so constructed as not to admit readily of a change of air, hence the smell of them is both offensive and unwholesome." The appropriating of the cells any longer for the reception of mad people, he continues, will be dishonorable to the science and humanity of the city of Philadelphia.

Rush advocated the founding of institutions for the care and cure of unfortunate dipsomaniacs." He

copy of a certificate for the admission of an Insane patient into the PENNSYLVANIA HOSPITAL, signed by Rush :

PHILADELPHIA, Decemr. 6, 1805.

I have seen A----- C----- and examined his case, and find he is afflicted with mania and that is a proper patient for the PENNSYLVANIA HOSPITAL.

To the Sitting Managers, viz.:	}	Benjn. Rush.
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A----- C----- being admitted a patient into the PENNSYLVANIA HOSPITAL at my request, I do hereby promise to provide him with at least two shirts and other clothing, sufficient and suitable for his use while there; to pay to William Johnson Steward of the said Hospital, or to his successor in office, Three dollars per week for board, during his continuance there; to cause him to be removed when discharged; and to pay the expense of his burial, if he dies there.

Witness my hand, the 6 day Decr., 1805.

ELLIS YARNALL.

Admit A----- C-----, a patient into the PENNSYLVANIA HOSPITAL.
To Wm. JOHNSON, Steward.
Laurence Sichel.

says: "To the account of physical remedies for drunkenness, I shall add one more, and that is the establishment of a hospital in every city and town in the United States, for the exclusive reception of hard drinkers. They are as much objects of public humanity and charity as mad people." He describes the guards and checks which should be placed to prevent abuse in permitting individuals to such institutions, and also says that in the institution he would not allow the use of tobacco or ardent spirits.

The large space which Rush gives in his treatise to the consideration of treatment, helps to throw some light upon his cast of mind. He devotes 38 pages to the treatment of Hypochondriasis or Tristimania; 39 to Mania; 20 to Manalgia; 8 to Derangement of Memory, and in the same proportion to other subjects. Somewhere in the course of my reading in the preparation of this paper, it is remarked that it was difficult for him to look upon any disease as incurable. He had faith in his art, and when diseases were not cured by his own ministrations or the ministrations of others, he was inclined to believe that this was because the proper remedy was not discovered, rather than that the remedy did not exist. To our eyes at the present day, his chapters on Treatment, seem to be a curious commingling of good sense and absurdity; of humanity and inhumanity; of the practical and speculative; but we must remember always the day in which the book was written, and the ideas which then prevailed.

Scattered through Rush's miscellaneous writings will

be found frequent references, allusions, inferences and facts which show that he always kept prominently before him the mental and metaphysical aspects of medicine. I could give many illustrations of this, but a few will suffice.

In Volume I of his *Medical Inquiries and Observations*, in an Essay entitled an *Inquiry into the Natural History of Medicine among the North American Indians*, he remarks, that after much inquiry he has not been able to find a single instance of fatuity among the Indians, and but a few instances of melancholy and madness. In the same paper he tells us that the hysterics and hypochondriac diseases once peculiar to the chambers of the great, are now found in our kitchens and workshops, and that all these diseases have been produced by our having deserted the simple diet and manners of our ancestors. In an account of the *Influence of the Military and Political Events of the American Revolution on the Human Body*, he says: "The political events of the Revolution produced upon its enemies different effects. The hypochondriasis of Dr. Cullen occurred in many instances. In some the terror and distress of the Revolution brought on true melancholia." In *Observations on the Duties of a Physician and the Methods of Improving Medicine*, he discusses the influence of the will. His essay entitled *An Account of the State of the Body and Mind in Old Age; with Observations on its Diseases, Delusions and their Remedies*, is a most valuable paper. Tuke speaks of it as possessing lasting value, and as exhibiting that acute observation of the small as well as the large circumstances of life in health and disease which so strikingly characterize this physician. In it he speaks of the fact that he has not met with a single instance of an octogenarian whose descendants were not also long-lived. In an *Account of the Billious Yellow Fever of 1793*, an essay highly lauded by Richardson, he makes the following statement: "From a hope that I might escape the disease by avoiding everything that might excite it into action, I carefully avoided the heat of the sun, and the coldness of the evening air. I likewise avoided yielding to everything that could raise or depress the passions. But at such times the events which influence the state of the body and mind are no more under our command than the winds or weather."

The titles of many of his papers show their tendency. In his *Essays, Literary, Moral and Philosophical*, are found the following, among other subjects: A Plan for Establishing Public Schools in Pennsylvania, and for Conducting Education Agreeably to a Republican Form of Government. Addressed to the Citizens of Pennsylvania, in the year 1786.—Of the Mode of Education Proper in a Republic.—Observations

Upon the Study of the Latin and Greek Languages, as a Branch of Liberal Education, with Hints of a Plan of Liberal Instruction, without them, Accommodated to the Present State of Society, Manners and Government of the United States.—Thoughts Upon the Amusements and Punishments which are proper for Schools. Addressed to George Clymer, Esq.—Thoughts Upon Female Education, Accommodated to the Present State of Society, Manners, and Government in the United States of America. Addressed to the Visitors of the Young Ladies' Academy of Philadelphia, July 28th, 1787, at the Close of the Quarterly Examination, and afterwards Published at the Request of the Visitors—An Inquiry into the Effects of Public Punishments upon Criminals, and Upon Society, read in the Society for Promoting Political Inquiries, Convened at the House of Benjamin Franklin, Esq., in Philadelphia, March 9th, 1787.—An Inquiry into the Consistency of the Punishment of Murder by Death, with Reason and Revelation.

In his *Sixteen Introductory Lectures*, we have the following subjects discussed: On the Necessary Connection between Observation and Reasoning in Medicine. Delivered November 7th, 1791.—On the Influence of Physical Causes in Promoting an Increase of the Strength and Activity of the Intellectual Faculties. Delivered November 18th, 1799.—The Utility of a Knowledge of the Faculties and Operations of the Human Mind to a Physician. Delivered November 21st, 1805.

He was an advocate of female education in the best sense of the word. He might be said to have been a pioneer in the cause of higher female education. "Let the ladies of a country," he says, "be educated properly, and they will not only make and administer its laws, but form its manners and character."

Dr. Richardson properly describes his *Essay on the Influence of Physical Causes on the Moral Faculty*, read before the American Philosophical Society, in 1886, as a splendid oration.

"Dr. Rush," says one of his biographers, "was among the foremost, if not the very first, to recommend labor and solitary confinement in place of capital punishment, and he ought to be regarded as one of

the earliest reformers of the harsh and cruel system of criminal jurisprudence, which has so long found favor in the country of our ancestors.

“Early aware of the pernicious effects of the use of ardent spirits, Dr. Rush was not backward in pointing them out to his fellow citizens, in a small tract for popular use in the year 1791. In his medical lectures and writings, he also laid great merited stress on the immense mischief done by the common practice of physicians prescribing spirituous tinctures and infusions for so large a tribe of diseases. He showed that these things were often decidedly injurious at the time, and still worse—laid the foundation for a love of spirituous drinks, which degenerated into confirmed habits of drunkenness. The enormity of the practice of physicians prescribing, and of the people so generally using ardent spirits, was first pointed out by Dr. Rush, in language so clear and arguments so forcible, as to leave little to be added in the accumulated testimony of the same nature which every year brings, by those who have come after him.”

In volume one of his *Medical Inquiries and Observations* is found an inquiry into the effects of ardent spirits upon the human body and mind, with an account of the means of preventing and of the remedies for curing them, an able and elaborate essay in three parts, the last of which is concerned with a discussion of the remedies for the evils which are brought on by the excessive use of distilled spirits.

Against the use of tobacco Rush also raised his voice and exerted his pen.

A genuine curiosity of literature is a paper by Rush on the species of Phobia. This brochure I found (in a collection of pamphlets presented by James Rush, M. D.), in the Ridgway branch of the Philadelphia Library. "Dr. Cullen," says Rush, "has divided Hydrophobia into two species. The principal species is that disease which is communicated by the bite of a mad animal, but which is accompanied with a dread of the water. Without detracting from the merit of Dr. Cullen, I cannot help thinking that the genus of the disease which he has named Hydrophobia should have been Phobia, and that the number and names of the species should have been taken from the names of the objects of fear and aversion. In conformity to this idea, I shall define Phobia to be 'a fear of an imaginary evil, or an undue fear of a real one.'"

He then proceeds to enumerate the different species of Phobia, eighteen in all—cat-phobia, rat-phobia, insect-phobia, odor-phobia, dirt-phobia, rum-phobia, water-phobia, solo-phobia, power-phobia, faction-phobia, want-phobia, doctor-phobia, blood-phobia, thunder-phobia, home-phobia, church-phobia, ghost-phobia and death-phobia.

Of cat-phobia, he says: "This distemper is very prevalent. I have known gentlemen of unquestionable courage, who have retreated a thousand times from the sight of a cat. * * * * Rat-phobia is a more common disease than the first mentioned; it is peculiar in some measure to the female sex. * * * * Insect-phobia is a disease peculiar to the female sex. A spider, a flea, or even a mosquito, alighting upon a lady's neck has often produced a hysterical fit. Yet," says the pious Doctor, "certain ladies will dare provoke even Omnipotence to arms" by irreverently taking His name in vain in common conversation.

His remarks on odor-phobia, dirt-phobia, water-phobia, solo-phobia, want-phobia and thunder-phobia seem to forecast the monomanias of Westphal, Beard, Hammond and others. "Odor phobia," he says, "is a

very frequent disease with all classes of people. There are some smells that produce paleness and tremor ; hence, it is not always a figure to say that there are persons who 'die of a rose in aromatic pain.' * * * * Dirt-phobia is a disease peculiar to certain ladies, especially some of Dutch extraction. They make everybody miserable with their excessive cleanliness ; the whole of their lives in one continued warfare with dirt—their houses are constantly obstructed with tubs, buckets and scrubbing brushes. I heard of a woman who sat in her kitchen lest she should dirty her parlor * * * * Water-phobia is not the dread of swallowing but of crossing water. Peter the Great had this disease in early life. A variety of the species of water-phobia is an aversion for drinking water observed in some men, without a similar dislike to artificial liquids. * * * * Solo-phobia is the dread of being alone. This distemper is peculiar to persons with vacant minds and guilty consciences. * * * * Want-phobia is confined to old people, like the father of Tristram Shandy, who wiped the sweat from his face and examined both sides of a guinea before he paid it out. * * * * Thunder-phobia is common to all ages and both sexes ; it has been known to produce the most distressing emotions in many people."

His remarks on some of the Phobias have in them a vein of inimitable humor and sarcasm. Thus he speaks of rum-phobia, doctor-phobia and church-phobia, as follows :

"Rum-phobia is a very rare distemper. I have known but five instances of it in the course of my life. * * * Doctor-phobia is complicated with other diseases. It arises often from the dread of taking physic, or of submitting to the remedies of blistering and bleeding. It might be supposed to be caused by the terror of a long bill, but this excites terror in few minds, for who ever thinks of paying a doctor's bill while he can use his money to advantage another way? Doctor-phobia generally goes off as soon as the patient is sensible of his danger. * * * Church-phobia. This disease has become an epidemic in the city of Philadelphia, hence we see half the city flying in chariots, phaetons, chairs and even stage wagons, as well as on horseback, from the churches in summer as soon as they are opened for Divine worship. In winter they drown their fear of church in plentiful entertainments.

"For these maladies of the mind," he concludes, "There are two infallible remedies, viz., reason and religion. The former is the sure antidote for such of them as originate in folly, while the latter is effectual in the whole species which are derived from vice. 'I fear my God,' said Pascal,

'therefore I have no other fear.' A belief in God's providence, and a constant reliance upon His power and goodness, impart a composure and firmness to the mind which render it incapable of being moved by all the real or imaginary evils of life."

In a similar strain, in a later number of the same magazine, Rush considers the different species of mania which prevail in America.

Of Negro-mania, he says that it prevailed in the Eastern and Middle, but it is now confined to the Southern States ; of land-mania, that it is a frequent disease in every part of America—a room in a gaol instead of a hospital is a cure for this mania ; of horse-mania, that a race, a carriage or a riding horse are often an object of greater attraction to persons afflicted with this mania than a wife or a mistress ; of liberty-mania, that it is a disease which shows itself in visionary ideas of liberty and government. * * * Monarchical-mania is when people believe that a king can do no wrong. * * * Republican-mania is when a man attempts to introduce a Republican form of government when the people are not prepared for it by virtue and knowledge. * * * Donation mania is when people impoverish their families by extravagant contributions to public undertakings * * * He discourses also on military-mania, duelling-mania, hunting-mania and gaming-mania. Machine-mania, he asserts, has ruined people by castle building of all sorts ; while alchemical mania has lessened much during the last thirteen years, and virtuoso-mania includes an extravagant fondness for the monstrous and rare productions of nature and art. Of ecclesiastical-mania, he caustically remarks that it includes bigots of all descriptions ; and of humane-mania, that it is strange that an excess of humanity should often cause a sort of madness. Rambling-mania, national-mania, love-mania, pride-mania, dress-mania, pleasure-mania, rogue-mania, musical-mania, poetical-mania and mathematical-maniacs likewise all receive his attention. "How great," he concludes, "are our obligations to Christianity, which by enlightening, directing and regulating our judgments, wills, and passions in the knowledge, choice and pursuit of duty, truth, and interest restores us to what the Apostle very emphatically calls 'a sound mind.'"

Although the aspects of insanity which most concern the practicing physician received from most attention from Rush, he has not left us without some medico-legal views. Here and there throughout his work on

Diseases of the Mind, and his miscellaneous writings, medico-legal opinions are advanced incidentally, as, for example, in considering derangement of the moral faculties.

He devotes Lecture XVI of his Volume of Introductory Lectures to the Study of Medical Jurisprudence. After enumerating the subjects of medical jurisprudence in general, he selects for particular discussion those states of the mind which should incapacitate a man to dispose of his property, or to bear witness in a Court of Justice; and those which should exempt him from punishment for the commission of what are called crimes by the laws of our Country.

Brief reference to the main points of this Lecture may not prove uninteresting. He attributes intellectual derangement to three causes: To acute inflammation of the brain called phrenitis or phrensy; to chronic inflammation of the brain, called mania or madness; and to delirium, which is a symptom only of general disease of the blood vessels, or of some part of the body connected by sympathy with the brain. His conclusions are, that in no stage of phrensy is a person in a condition to dispose of property or contract legal guilt of any kind; that in madness, when it is general, or in its intervals, when these occur after weekly or even monthly paroxysms of madness, the person is not in a condition to dispose of property or to contract legal guilt; and the same is true where persons depart in their feelings, conversation, and conduct in a great degree from their former habits.

He asserts a curious opinion, and relates an interesting story, with reference to the importance of the pulse. The pulse he holds, with few exceptions, is more frequent in madness than in health. The knowledge of this fact has been applied with success in the administration of the criminal law of the United States. One of the two men who were condemned to die for treason, committed against the General Government in the western counties of Pennsylvania in the year 1794, was said to have lost his reason after sentence of death had been pronounced upon him. A physician was consulted upon his case, who declared his madness to be feigned. General Washington, then President of the United States, directed a consultation of Physicians upon his case. Dr. Shippen, Dr. Samuel P. Griffiths and myself were appointed for that purpose. The man spoke coherently upon several subjects, and for a while the state of his mind appeared doubtful. I suggested the propriety of examining his pulse. It was more frequent by twenty strokes in a minute than in a healthy state of body and mind. Dr. Shippen ascribed this to fear. I then requested that the pulse of his companion, in guilt and in fear, might be felt. It was perfectly natural in frequency and force. This discovery induced us to unite in a certificate, that the man, who was only supposed to be mad, was really so ; in consequence of which his execution, as well as that of his companion, was suspended for two months, in which time the popular clamor for their lives so far subsided, that they were both pardoned by the executive of the United States.

He also considers those morbid states of the mind in which individuals should *not* be considered as incapable of disposing of property or committing crime, which are, according to him—(1.) Where the mind is deranged upon one subject only ; (2.) The state of mind called “*dimance*” in France ; (3.) In general weakness of intellect bordering upon fatuity ; (4.) That state of mind in which there exists a weakness or partial loss of memory.

He gives sage advice as to the making of wills, and advises that a patient should never be suffered to die who has a right and who is in a condition to make a will without informing his friends and sug-

gesting to them the propriety of his performing the act. He advises that physicians should make a note immediately afterward of the state of mind of the patient who has made a will, as it may be months, or even years, before he may be called upon to testify. He expresses his belief that all those states of mind that forbid persons disposing of their property and exempt them from punishment from criminal acts should also preclude them from being witnesses in a Court of Justice. Here he puts habitual drunkenness in addition to deranged states of the mind.

Certainly these are all wise opinions and suggestions.

He differentiates delirium from madness as follows: "Delirium is attended with remissions or intermissions, in which the mind suddenly recovers its natural and healthy state. In delirium there is generally the absence of muscular action. In madness there is often great muscular excitement. In delirium the eyes are generally the channels of false perception to the mind. In madness the ears principally deceive the patient; hence the reason why they so often talk to themselves. The appetite is suspended in delirium. This is rarely the case in madness. Scarcely anything is remembered of what passes in delirium. Nearly everything is remembered of what passes in the second or moderate grades of madness after a recovery from it."

He discusses moral derangement, which, he says, discovers itself in the commission of certain crimes, but under circumstances that should not expose to the punishments usually connected with them. His definition of moral derangement is that state of the mind in which the passions act involuntarily through the instrumentality of the will without any disease of the understanding. He gives the circumstances which have been observed in persons who commit murder, or, rather,

take away life, under the influence of a morbid state of the will.

He believes in Kleptomania as a disease. "I have thus delivered the history of derangement of the will," he says, "when its involuntary exercises tend only to the taking away of life. But it sometimes discovers itself in another way: that is, in acts of theft. We now and then read or hear of persons who cannot go into a house without feeling an inclination to take away something that is not their own, and when an opportunity of secrecy offers, of yielding to it."

In closing this Lecture he enters his protest against the infliction of the punishment of death in all cases whatever.

"There is a sure and infallible method of obviating this objection, and that is, to abolish the punishment of death in all cases whatever, even for the crime of deliberate murder itself. Yes, I say again for the crime of deliberate murder itself. It is to be lamented that the most palpable contradictions exist in the principles and conduct of mankind upon this subject. We bestow much study and great labor in restoring the wandering reason of our fellow creatures, but we neglect their erring hearts. We erect splendid commodious buildings to confine persons, whom intellectual derangement has rendered dangerous to society, and we employ our skill and humanity to relieve them: but with an unmerciful impatience, we consign persons whom moral derangement has rendered mischievous, to the exterminating axe and halter."

Rush had views far in advance of his time on the subject of the so-called Moral Insanity. In his *Inquiry into the Influence of Physicial Causes upon the Moral Faculty*, he speaks of the moral faculty as that which has been regarded by other authors as the moral sense of Dr. Hutchison, the sympathy of Dr. Adam Smith, the moral instinct of Rousseau, and the light that lighteth every man that cometh into the world of St. John. He adopts the term moral faculty from Dr. Beattie. In a very ingenious and interesting manner he

proceeds to show first the effects of physical causes upon the memory, the imagination and the judgment, at the same time pointing out the analogy between their operation upon the intellectual faculties of the mind and the moral faculties. A number of comparisons are given, some of them really more ingenious than forcible; many of them are, however, to the point, and logical.

In treating of the total want of memory, imagination and judgment, either from an original defect in the stamina of the brain, or from the influence of physical causes, and showing that the same unnatural defect is sometimes observed, and probably from the same causes of a moral faculty, he draws from the Memoirs of the Duke of Sully the character of the celebrated Servin who appears to have been an instance of the total absence of the moral faculty while the chasm produced by his defects seems to have been filled up by a more than a common extension of every other power of the mind. He repeats from Sully the history of this prodigy of vice and knowledge.

As this paper is not intended to be simply a eulogy of Rush, I would be unjust to my subject did I not at least briefly refer to some of his faults as a teacher and writer in the field of Psychiatry. Judging him even from the standard of his own time he was not without faults; and these, as discoverable in his medico-psychological writings, are probably the same as are to be found in his writings in general.

He is often discursive and sometimes inconsequential;

his tendency is to expand and multiply rather than to condense and critically classify, although he is inclined to arrange and classify after his own manner. He does not always sift and closely study the facts which he has brought together in such great abundance. He seems sometimes to be led away by opportunities for rhetorical and oratorical display. His love and knowledge of general literature, particularly his acquaintanceship with the poets, lead him sometimes to force a quotation for the sake rather of the literary effects than for scientific exposition.

At the meeting of the American Medical Association held in Washington in 1883 a movement was set on foot to erect a monument to Rush at the National Capital. A committee was appointed to solicit subscriptions and enlist the interest of the medical profession and the public at large. The officers of this committee are Albert L. Gihon, M. D., of Washington, Chairman; George H. Rohe, M. D., Secretary, and Joseph M. Toner, M. D., Treasurer. The last circular issued by this committee states that the project has already met with unqualified approbation from every part of the country. This society and all individuals and associations interested in the elevation of medico-legal science should come to the assistance of the movement to honor the illustrious subject of my address this evening. Few men have deserved better of their country. Certainly no physician is worthy of a higher place in the affections of his countrymen.

“Let it be remembered,” says Staughton, one of

Rush's biographers, "that Professor Rush owed none of his eminence to the diminutiveness of the talents of his associates. He was great in the midst of greatness. In the medical department of a University, where anatomy is made familiar by the promptness of nomenclature, the accuracy of demonstration, and the charms of physiology—where in surgery the lectures exhibit an informing simplicity, and the knife attempts with success everything but miracle—where the *materia medica*, botany, and natural history are presented with the attractions which reading and judgment, genius and eloquence supply—where chemistry and the remaining parts of a medical education are taught with correctness, respectability, and effect—Dr. Rush maintained his elevation. Like a primal fixed star, amid the hosts of Heaven, he shone with a lustre wholly his own."

