THE

NEW-YORK QUARTERLY JOURNAL

OF

MEDICINE AND SURGERY.

FOR JULY, 1839.

Art. 1. *A Summary View of the Progress of Medicine in America.* By John Watson, M.D.

The occasion of presenting to the public a new medical periodical, may not, we trust, be deemed an improper one for offering some remarks on the progress of medical science in this country —for summing up the improvements that have already been effected here—and for fixing limits which may, perhaps, hereafter serve as landmarks between ourselves and our predecessors. There are many reasons which at the present moment invite us to this course. The youth who for the first time is called upon to separate from his friends and home, to depart to distant lands, or engage in scenes and occupations that are new to him; before taking to his journey, turns naturally to his old associates: though flushed with anticipation, he thinks upon the past, and feels, what he may never before have thought about, his weight of obligation to the guiding hands that have thus far led him onward. Such is our condition. Embarked in an enterprise for which we have made but little preparation, in which we acknowledge our deficiency, and to which we have been urged, not so much by our own inclination as by the solicitations of our friends, we feel, before entering upon other duties, the propriety, and even the necessity, of a glance, however short, at the labours of our predecessors.

Whoever has looked with sufficient care into the history of our institutions, is aware that America has never yet been foremost in promoting original research; and that whatever in the field of science has been effected here, is due almost exclusively to individual enterprise. Yet notwithstanding their disadvantages, many of our professional men have been honourably distinguished; and others, if they have not attained the foremost rank, have acquired no inconsiderable reputation.

For more than a century after the first settlement of this country, while the colonies were yet subject to Great Britain, the profession of medicine here, in common with most other liberal pursuits, was in the hands of Europeans. Even so recently as within a few years of the Revolution, the youth of America, in order to prepare themselves for the practice of medicine, were obliged to pursue their studies on the other side of the Atlantic. In the southern and middle provinces, medical investigations and medical education first began to claim attention. Many of the early European physicians who settled in these provinces, as well as others who had prepared themselves in Europe, were distinguished for their erudition, and for their extensive acquaintance with the diseases of this continent; and some of them have left important monographs behind them.

South Carolina was among the first in the field of improvement. "In that early period of American medical history," says Ramsay, "which was before Rush began his brilliant career as an author, there were more experiments made, more observations recorded, and more medical writings ushered into public view by the physicians of Charleston, than any other part of the American continent." He mentions with commendation the writings of Lining, Chalmers, Garden, Bull, and Moultrie. Dr. Bull was a pupil of the celebrated Boerhaave; he took his degree at Leyden, in 1734, and was the first American that ever received that honour. His thesis, "De Colica Pictonum," is quoted and honourably characterized by Van Swieten. Dr. John Moultrie was the first American graduate of Edinburgh, where in 1749 he defended a thesis "De Febre Flava." Dr. John Lining, besides other works, gave us the first accurate history of the yellow fever, in a work published in 1753: and Dr. Alexander Garden, about 1764, published the first account of the bo-

tanical history and medicinal virtues of the Spigelia Marilandica. Dr. Lionel Chalmers, besides an account of opisthotonos, and of the weather and diseases of South Carolina, published a valuable work on fevers, in 1767. In this he is said to have unfolded the outlines of the modern spasmodic theory of fever;—a doctrine first hinted at by Hoffman, and subsequently elucidated and supported by Cullen; and upon which the fame of that great man's name is principally established.

In Virginia, among the earliest contributors to medicine, were Mitchell, Clayton, Catesby the naturalist, Tennent, and Robertson. Dr. John Mitchell was the author of a work on yellow fever, written in 1744. Rush acknowledged that he had received many useful hints from it, in the management of this disease. It was first published many years after the author's death, in the American Medical and Philosophical Register of New-York.

Dr. Clayton was author of the Flora Virginica, printed at Leyden, in 1739, Dr. John Tennent brought to light the virtues of the Polygala senega, in 1736.

In New-England, the earliest physician of whom we have any record was one Dr. Samuel Fuller, who came to America in the first ship. Many of the physicians among the early puritan fathers, like the knight-templars of the middle ages, but with far different spirit, bore the combined honours, and performed the several duties of two professions. They were both clergymen and physicians. The puritan clergymen of England had long been taught at home to look to medicine as a means of subsistence in consequence of the persecutions they had suffered there, and before leaving England, many of them had already become eminent in the medical profession. Among the earliest of these clerical physicians, we find the Rev. Thomas Thatcher, who, in 1777, published a "Brief Guide to the smallpox and Measles." This was the first medical publication that ever appeared in America.

Among the earliest cultivators of medical knowledge in New-England, were Hunter, Walton, Douglass, and above all these, the celebrated Boylston. Dr. Wm. Hunter, a pupil of the elder Monro, lectured on anatomy, at Newport, in the years 1754, 5, and 6. His were the first lectures on subjects connected with

the profession in America. Douglass was a Scotchman of some celebrity, and practised at Boston, where he distinguished himself by his violent opposition to the practice of inoculation. His most valuable work was his "Practical History of a New Eruptive Miliary Fever with Angina Ulcusculosa," published in 1735 or 6. This, says his biographer, may be considered a valuable practical essay on angina maligna, in which are detailed the character of the disease, and the method best adapted for treatment. He was one of the first amongst us to resort to the liberal use of calomel in the treatment of acute disease.

The name of Zabdiel Boylston brings us to one of the most important eras in the history of the science, the introduction of inoculation for the smallpox, which he first attempted at Boston in June, 1721. The earliest intimation of the Turkish practice of inoculating for this disease, appeared in the Philosophical Transactions, for 1714. (*) The communication was from an Italian physician residing at Constantinople. On the appearance of smallpox at Boston, in 1721, this work was pointed out to Dr. Boylston by the Rev. Dr. Cotton Mather. Boylston was forcibly impressed with the value of the suggestion, and resolved to put it to the test: but other physicians to whom Mather had also shown the communication, not only refused their co-operation, but condemned and opposed the proposal of Boylston in the severest terms. Notwithstanding the excitement which was raised against him, during which his house was attacked by an infuriated mob, his life and the lives of his wife and children threatened, and even openly attacked, Boylston remained unshaken in his purpose. On the 27th of June, 1721, while the smallpox was raging in the city, he inoculated his own son, a child of thirteen years, and afterwards two blacks in his family, and all of them with complete success. The smallpox prevailed until May of the following year, during which time he inoc-

(*a*) It appears that long before the inoculation for smallpox, as practised in Europe and this country, the Chinese were in the habit of propagating the disease artificially. The plan they adopted was to apply the virus by means of a piece of cotton or other substance, to the nostrils. Dr. Cadwallader Colden, in some remarks, on the subject of inoculation, has given us reason to believe that inoculation for smallpox was practised by the savages of Africa, long before its introduction into Europe.

ulated with his own hand 247 persons; and after the excitement had in a measure subsided, 39 others were inoculated by other physicians, making in all 286 cases, of whom only six died, and even three of these fatal cases were supposed to have taken the disease in the natural way, prior to their inoculation. Thus the utility of the new practice was fairly established beyond dispute, and it soon became general both in America and in Europe. About the same period Lady Mary Wortley Montague, who had herself seen the benefits of the practice at Constantinople, introduced it into England, by having her own daughter inoculated there in April, 1721. This was the only case in which it had been employed in Western Europe prior to Boylston's experiment, and was unknown to him at the time; so that he has fairly the honour of establishing the practice by an extensive series of experiments in America, and of proving its merits before the profession in Great Britain could be said to have tested it at all.

Sir Hans Sloane, apprized of the eminent services of Boylston, and as is said, at the instance of the king, honoured him with an invitation to London. On his arrival at that city, besides numerous other marks of respect, he was elected a member of the Royal Society, and at the request of that honourable body, before quitting England, he published, in 1726, an account of his practice, which was published at Boston the year following.

Before closing the early history of the profession in New-England, it is but fair to notice the once popular, but now almost forgotten *tractors* of Dr. Perkins. The science of *Perkinism*, as the imagined influence of the metallic tractors was gravely called, was of later date than the period within which we are now limited, namely that which preceded the Revolution: but it belongs to New-England, and more especially to Connecticut, where in 1798, it was first promulgated. It is needless to enter into the minute details of the tractors, and of their wonderful cures in all parts of the old and new world. Suffice it to say, that this fantasy of Perkinism furnishes one of the severest comments ever recorded against the fallacy of human logic and the obliquities of scientific observation, even when exercised by men considering themselves competent and impartial judges, and who under other circumstances might have deserved and claimed the confidence and respect of the profession.

In Pennsylvania, prior to the Revolution, the principal contributors to medicine were Kearsley, Cadwallader, Bond, Thompson, Bertram the naturalist, and others to be mentioned among the founders of the first school of medicine in Philadelphia.

Dr. John Kearsley published in the Gentlemen's Magazine for 1769, a paper on the angina maligna of 1746 and 1760. Dr. Cadwallader, an essay on the iliac passion. Dr. Thomas Bond wrote an essay on the use of Peruvian bark in the treatment of scrofula, which was addressed to Dr. Fothergill, (who has himself written on the same subject,) and published in the London Medical Observations and Inquiries. He was a practical surgeon, and distinguished as a successful lithotomist. In the latter part of his life, after the establishment of the school of medicine, he aided the undertaking by his clinical instructions at the Pennsylvania hospital.

Dr. Adam Thomson was the author of a discourse on the most proper treatment preparatory to inoculation for the small-pox. He states, that inoculation had been so unsuccessful in Philadelphia that many were disposed to abandon it. Whereas by preparing his patients by means of antimonial and mercurial medicine before inoculating them, he had for twelve years met with uninterrupted success.

In New-York, among the earliest contributors to medical knowledge, were Colden, Middleton, Jones, Samuel Bard, and Bayley.

Cadwallader Colden, formerly lieutenant-governor of this state, was a man of the most profound and varied acquirements. His fame rests more upon his writings in natural history and philosophy, than on any of his strictly professional productions; the principal of which were the history of the prevalent diseases of this climate, and his account of the fever of 1741 and 2, of which he pointed out the causes, for which also he showed the means of prevention so clearly, that the corporation of the city returned him their vote of thanks. Dr. Jacob Ogden is principally known by his letters on the malignant sore throat distemper, dated 1769 and 1774. He was among the first, if not the very first, to introduce the liberal use of calomel in the treatment of acute inflammatory diseases.

Dr. P. Middleton was the author of a letter on croup, address-

ed to Richard Bayley. He and Dr. John Bard, in 1750, conducted the first dissection that ever was performed in America. Their subject was a convict. They injected the vessels for the instruction of their pupils. Middleton was also one of the most active in founding our first school of medicine; and in advocating the establishment of the New-York Hospital.

Dr. John Jones was an accomplished surgeon of great experience. He was the author of "Plain Remarks upon Wounds and Fractures," published in 1775, for the benefit of young men about to enter the American service. This work was imperiously called for at the time, it was constantly referred to during and after the war, it underwent several editions, and was of invaluable service in preparing for active duty a number of badly educated men, who had had few or no previous opportunities, and who had access to no other work than this for guiding them in the exercise of their profession. Jones was also professor of surgery in our first college.

The principal literary production of Samuel Bard, previous to the Revolution, was an essay on angina suffocativa; the views advocated in which he afterwards honourably relinquished in favour of those of his friend Bayley. Long after the time now referred to, he published a useful compend of midwifery. He ranked for many years at the head of the profession in this city. Bard, in general practice, was disposed to trust much to nature, to abstinence, and good nursing; and was no friend to systematizing. "New names," says he, "are always deceiving; new theories are mostly false or useless; and new remedies, for a time, are dangerous. This rage for novelty pervades our profession, especially in this country. Hence our extended catalogue of new fevers, and hasty adoption of new remedies; hence the unlimited and unwarranted application of mercury without weight, brandy without measure, and the lancet without discrimination; and hence, I am afraid I may say, the sacrifice of many lives which might have been preserved, had they been left to water gruel and good nursing." In his public address at the college commencement, May, 1769, he advocated the necessity of a public infirmary in this city; and to his exertions, aided by those of Middleton, Jones, Colden, and the Earl of Dunmore, then governor of the province, we owe the establishment of the New-York Hospital.

Richard Bayley, the last to be enumerated, but not the least worthy among the cultivators of medicine in this province, was the author of a letter on croup, addressed to his instructor, Dr. Wm. Hunter of London. It was not in fact published until 1781; but the views contained in it had already been made known to many, and they were first published by his friend, the celebrated Michælis, in Richter's Surgical Repository. He was the first to establish the inflammatory nature of this disease, and to distinguish it, by a comparison of pathological appearances, from angina maligna; with which, up to his time, it had been commonly confounded. His views were of the utmost value, and led to a happy and complete revolution in the treatment of this disorder.

The only schools established for medical instruction in this country before the Revolution, were those of Philadelphia and New-York.

As early as 1762, Dr. Wm. Shippen of Philadelphia, after having completed his education in Europe, commenced a private course of lectures on anatomy and midwifery, to a class of ten pupils, one of whom was the celebrated Rush. In 1765, Dr. Morgan commenced a similar course on the theory of medicine, including materia medica and pharmacy. This last gentleman soon afterwards addressed a letter to the trustees of the Philadelphia college, recommending the establishment of a medical school under their auspices: whereupon he was appointed professor of the institutes of medicine, and Dr. Shippen of anatomy and surgery. In 1768, Dr. Adam Kuhn, a pupil of Linnæus, returning home, was chosen professor of materia medica; and in the following year, Dr. Benjamin Rush, having completed his studies in Europe, was called to the chair of chemistry. Thus in 1769, the first faculty of the Philadelphia medical school was organized, the venerable Dr. Thomas Bond officiating as clinical instructer in the hospital of that city. In the establishment of that school, no man deserves greater credit than Dr. Morgan; and, says his biographer, "the historian who shall hereafter relate the progress of medical science in America, will be deficient in candour and justice, if he does not connect the name of Morgan with that auspicious era in which medicine was first taught and studied as a science in America."

The establishment of the first medical school in New-York, was principally effected by the exertions of Drs. Peter Middleton and Samuel Bard. While pursuing his studies in Europe, Dr. Bard had formed the plan of a medical school in his native place; and on returning home, had the credit of finding himself associated in the project with a number of distinguished practitioners. Dr. Middleton addressed a letter on the subject to the trustees of Kings, now Columbia college, and in 1768, the medical school of New-York was organized, with the following faculty: — Dr. Peter Middleton, professor of physiology and pathology; Dr. Samuel Clossy, professor of anatomy; Dr. Samuel Bard, professor of theory and practice of medicine; Dr. John Jones, professor of surgery; Dr. James Smith, professor of chemistry and materia medica; Dr. John B. V. Tennent, professor of midwifery.

These two institutions gave promise of great benefit to the community; but the Revolution commencing soon after their establishment, many of their professors were called to more urgent duties; and the agitated state of public affairs for several years afterwards, in a great measure deprived the public of the benefits they might otherwise have experienced from them.

Such, then, is a brief account of the progress of medicine in America up to the time at which the colonies declared themselves independent of the mother country. From this period until after the war, little else was effected than the introduction into use of a few of our indigenous plants; as the Lyriodendron tulipifera, the Cornus Florida and Quercus alba, which in combination were used successfully as a substitute for the Peruvian bark, at that time scarcely to be procured.

To recapitulate the labours of our physicians in the cultivation of their profession up to 1776, they were as follows:

1st. In furnishing statistical accounts of the climate and diseases prevalent in different sections of the country:

2d. In furnishing accounts of most of our vegetable productions, and in introducing some of the most useful of them into the materia medica:

3d. In recording the history of the principal epidemics, and some of the endemic diseases: as the influenza, which had prevailed extensively at different periods from the earliest settlement

of the country; the smallpox, measles, and the angina maligna of later date; the colica pictonum, which appears to have been very frequent in the southern provinces; the yellow fever; the fevers of the middle and southern states; and, finally, the croup:

4th. In the introduction of new practice: namely, inoculation for the smallpox; the liberal use of calomel in inflammatory diseases; the depleting and the depressing practice in the treatment of angina trachealis:

5th. In the publication of a useful surgical guide for the instruction of our army and navy surgeons:

6th. In the establishment of hospitals and medical colleges for the benefit of the sick poor, and the competent instruction of youth about to enter upon the duties of the profession.

Soon after the return of peace, those who had been most active in the cultivation of the profession before the war, began again to direct their attention to the same object. The colleges of Philadelphia and New-York were in due time re-organized, and new schools were opened in other places. State and county medical societies were established; medical literature again revived; medical and philosophical transactions were encouraged; and, finally, medical periodicals appeared. So that at the commencement of the present century, the country in proportion to its population, contained almost as great a number of scientific and well educated practitioners, as at any period since. Four well regulated medical colleges were in operation: the pupils of these had already added to our stock of knowledge by their original dissertations on our climate, our prevalent diseases, and the virtues of many of our indigenous plants; our state and county societies were holding out inducements, by rewards and other means, for urging our practitioners to useful and original research; Rush, and Miller, and Benjamin S. Barton, and Mitchell, and Elihu H. Smith, had commenced their career of authorship; the interest felt by the community in their labours had induced others out of the profession to assist in their researches; Webster's well known work on pestilential diseases had appeared; and the Medical Repository had been three years before the public.

These, then, were the starting points for all that the profession in America has since accomplished.

Their efforts at improvement have been both numerous and important; and the high esteem in which these have been held in all quarters of the globe, should be deemed an inducement sufficient for urging us to new exertions.

It is not our intention, on the present occasion, to enter minutely into the history of our individual institutions. Our *medical colleges*, which at the commencement of the present century were limited to four, have since increased to nearly thirty: an increase altogether uncalled for, and the effect of which has been rather injurious than beneficial. The free trade and no monopoly principles of Adam Smith, how beneficial soever in commerce, in those branches of industry to which he himself would have applied them, or in those occupations in which men may look directly to a full return of remuneration for his enterprise or labour, have a chilling and unkindly influence upon science: they should never have been extended to our halls of learning; and least of all, to a class of institutions, which in this, as in all other countries, require protection and encouragement rather than opposition.

The facility with which charters can be obtained for medical schools in this country, and especially in this state, has had no good influence upon the profession. And the establishment of these in unknown villages, and in remote settlements scarcely yet reclaimed from the wilderness, where no infirmaries exist, and where students have no opportunities for practical instruction, serves but to diminish the usefulness of older and better institutions.

The efforts made by these woodland schools have another evil tendency. The inducements held out by them for individual patronage, are, diminution in the expenses and in the period of study. Their requirements for graduation are consequently not sufficiently elevated; and in this way numbers of badly educated men are thrown upon the public. In our larger cities, however, where men of experience and varied professional acquirements can be obtained as professors; and where hospitals, infirmaries, and dispensaries, are at hand for clinical instruction, our colleges have always merited the respect and confidence of the profession.

In periodical literature, the practitioners of this country are

behind those of no other nation. In New-York was published and supported for some twenty-three years, one of the earliest and ablest medical and philosophical journals that ever appeared in any country.

In the autumn of 1796, Dr. Elihu H. Smith, a man of much refinement and rare acquirements in the profession, conceived the project of a medical periodical. He communicated his plan to his friend Dr. Edward Miller, and they together laid the design before Dr. Samuel L. Mitchell, who had just returned from Europe. They all three united in the enterprise, and pursued it with so much vigour, that in August, 1797, the first number of the New-York Medical Repository made its appearance. This work, the first of its kind, was warmly received and ably supported. In its pages are to be found valuable records of our epidemics, and the other diseases of this country. Beginning with the yellow fever of 1793, it contains the complete history of that disease up almost to its last appearance here. It contains the most ample records of the spotted fever, a very fatal disorder that prevailed in the northern and eastern parts of the United States, from about 1807 until after the late war. It contains valuable memoirs on the typhoid pneumonia that committed such havoc among our soldiers, and spread to different parts of the country during the years 1813 and '14, and for a short time afterwards. It is rich in medical topography, and in the chemistry of the day, on which latter subject the celebrated Priestley was one of its diligent contributors.

From this as a parent stock, says the Rev. Dr. Miller, have sprung a number of similar works in Europe and America. "The Medical and Philosophical Journal of London was commenced soon after the appearance of the Medical Repository, with the avowal of its editor that he took the hint from New-York. Other editors in London, Paris, Edinburgh, and Bremen, in a short time started similar journals," and in this country they have multiplied even more rapidly than our medical colleges, and with much the same effect. At present they are not so numerous as formerly, but the interests of the profession have not suffered on this score. With the addition of a well conducted medical quarterly in this city, we would have as many as are needed. And, no doubt, now that New-York is awakening to a sense of shame

for having allowed her own former and well conducted journals to be discontinued, and for supporting, to the detriment of her own citizens, a foreign review, (able enough in itself, but of no great use to the practitioners of America,) she will soon blush at the lethargy for which of late years she has been characterized on this point; and once more bestir herself to regain her former stand.

The medical literature of America, within the last forty years, has been enriched by a number of well digested compends on anatomy, chemistry, botany, materia medica, pharmacy, therapeutics, physiology, hygiene, pathology, midwifery, practical medicine, and surgery; by original works on several of these subjects: by some few works of higher rank, embracing original researches, especially in medical jurisprudence, in the theory of disease, and the philosophy of epidemics: not to mention an immense number of valuable monographs and detached essays, in almost every branch of the profession. To enter into an account even of the most valuable of these, would occupy more space than we can properly devote to them at present; suffice it therefore to say, that though our offices and libraries are crowded with foreign text books to the exclusion of our own works, (a state of things owing for the most part to the rivalries between our different schools) yet the writings of American authors, especially on all practical subjects, are sufficient of themselves to place our practitioners on a rank, equal to that of the practical men of the profession of any other nation; and furthermore, that in this country they are our best and safest guides. Many of our authors too, under estimated at home, are held in high and deserved repute in Europe. In support of this we may state that Wistar's Anatomy was at one time the text book in the University of Edinburgh; and that for some years back, and even at the present time, Beck's Medical Jurisprudence is the most popular work on the subject in Great Britain and Ireland. The writings of Godman and Anderson are occasionally quoted by the French; and those of Dr. Edward Miller, the former president of our college, gave the first suggestions towards what, by Broussais, has since been called the physiological doctrine of disease.

We have mentioned Edward Miller; and, could time permit,

would fondly dwell on the merits of a physician, concerning whom, those amongst us who have been some five-and-twenty years in the profession, may have a distant recollection. To many of the rest of us, the name is, doubtless, new. Rush has declared of him, "that he was inferior to none;" and those of us who have compared the writings of these two great masters of the profession, have sufficient reason to know, that this acknowledgement of Rush was as true as it was honourable.

Miller was a close and constant observer; and so ably has he investigated the pathology of fevers, that Broussais has since awarded him the honour of having been the first to arrive at a knowledge of their true nature. "He was the first," says Broussais, "to consider the stomach in its true physiological relations. Under his pen, the phenomena of fever and the modus operandi of medicines, have acquired an interest which they had never had in our systematic works, even the most celebrated. How is it, therefore, possible," exclaims Broussais, "that having so happily commenced, he should have rested here, without discovering the whole of the physiological doctrine which we now-a-days profess!" But the pupils of this celebrated theorist, who have already forsaken him, can best give the true response to this apostrophy. Miller was too much the admirer of truth, and too close an observer of nature, to be carried away by any theory, even by his own, to the extravagant extent of Broussais. "Whatever advantages," says he, in the prospectus to the Medical Repository, "whatever advantages may have been temporarily derived from certain elaborate theories, it is chiefly by the new spring which they have given to the mind, and by the more accurate investigation of natural phenomena, to which they have excited others, that they have been permanently useful. Our knowledge of nature is too limited, our collection of materials too scanty, to enable even the most diligent and industrious to frame a correct theory."

In the exposition of his views of fever, Miller gave but a digest of his own observations, and, as before remarked, we can clearly discover in them the dawnings of Broussais's doctrine: and notwithstanding the pains taken by this distinguished master to shield the originality of his own system, I am well convinced, even by his own acknowledgements, and without charging

him with plagiarism, that he might have found in the writings of American authors, (I mean more especially in the collected labours of Rush and Miller,) the elements of every thing that is useful, and of almost every thing that is true in his own doctrine.

He has acknowledged that Rush should be classed amongst those who have contributed to the overthrow of the Brunonian system; and to the introduction of what all the efforts of Sydenham had failed to introduce: the antiphlogistic treatment. The philosophic spirit of Rush, he admits, is also manifest in the entire proscription of the nosologists. "But," says he, "notwithstanding the services thus rendered by him, 1st, in pleading for the antiphlogistic practice; 2d, in proscribing the systems of nosology; 3d, in labouring to overthrow the doctrine of specific diseases; Rush has not given much importance to the irritability of the stomach and bowels in the production of diseases, although he has ably contributed to the treatment of such of them as are acute."

Now we have already seen from Broussais's own acknowledgement, that Miller had actually accomplished what Rush had left undone. With facts like these before us, to whom belongs the glory, if any be attached to it, of first suggesting the principles upon which has since been founded the whole system of physiological medicine?

Benjamin Rush, to whose doctrine we have just alluded, was the promulgator of what has scarcely with propriety been called "the American System of Medicine," a system that was never taught, so far as we know, in any other than the University of Pennsylvania. At the time of commencing his career as a teacher, the doctrines of Cullen were in the height of their popularity; for although Brown had already reared his well known system against them, his influence had not yet been sufficient to subvert them or drive them from the schools. Rush, however, in his opposition, both to them and to those of Brown, met with more success.

The burthen of Rush's doctrine was to establish the unity of disease. "I use the term diseases," says he, "in conformity to custom: for, properly speaking, disease is as much a unit as fever. It consists simply in morbid action or excitement in some part of

the body. Its different seats and degrees should no more be multiplied into different diseases, than the numerous and different effects of heat and light upon our globe should be multiplied into a plurality of suns." In defence of this doctrine he made bold attacks upon those of his predecessors, especially the nosologists. "By the rejection of the artificial arrangement of diseases," says he, "a revolution must follow in medicine. Observation and judgement will take the place of reading and memory, and prescriptions will be conformed to existing circumstances. The road to knowledge in medicine, by this means, will likewise be shortened: so that a young man will be able to qualify himself to practise physic, at a much less expense of time and labour than formerly; as a child would learn to read and write by the help of the Roman alphabet, instead of the Chinese characters."

With promises such as these in favour of our natural indolence, no wonder the doctrines of Rush spread throughout the nation like meteor lights; but like these also to be almost as evanescent. A revolution indeed has followed in the profession; but in the overthrow of older doctrines, it has involved his own; observation and judgement are indeed more relied upon than formerly, but reading and memory are as necessary as ever; prescriptions, too, are made conformable to circumstances; but they consist not merely in unlimited depletion. The road to knowledge!—has it been shortened?—or is the road, by observation and judgement in connexion with that of reading and memory, shorter than that by reading and memory only? Rush himself lived long enough to see the fallacy of this. False, however, as were his views at the commencement, supported by his eloquence, his urbanity, his honesty, and profound acquirements, thousands of pupils were attracted to listen to him. He gave an impetus of popularity to the school of Philadelphia, which has continued to support it to the present day.

Rush's theory of fever has long since been exploded: we shall not, therefore, enter into the details of it. In his own practice, more especially in his riper years, theory was subservient to judgement. He has left us descriptions of epidemics, and of many individual diseases, in which, for fidelity to nature, and just therapeutical indications, he cannot be too closely imitated. By his

immense amount of useful observations he has been a benefactor to the profession. But in the hands of his early followers, the simplicity of his theory too often has been everything, and the practice that resulted from it has led to many a fatal issue.

In the philosophy of epidemic and endemic diseases, the literature of America is peculiarly worthy of notice. In no country has the subject been so thoroughly investigated as here; and in no other place so thoroughly as in our own city. The writings of Bayley, Rush, Miller, Elihu H. Smith, Seaman, Pascalis and others, furnish a rich fund of original information on this subject; and constitute what Miller has emphatically characterized as "the American doctrine concerning the origin and propagation of endemic and pestilential diseases."*

Richard Bayley, of whom we have before spoken, in 1795 published a work on the yellow fever of that year, in which he proposed a distinction between contagious and infectious disorders. "This distinction," says the late Dr. Hosack, (himself in some degree opposed to Bayley's views,) "is in my opinion an approach nearer to the truth than any of his predecessors have advanced, but it does not present us with a view of the whole truth upon the subject." † Dr. Miller, following up this distinction, has carried the investigation farther, and pointed out divisions among the infectious classes. The views of Dr. Hosack were not in accordance with either of these writers, nor with those of the great body of the profession here. They are, however, worthy of consideration; but as we cannot enter at present upon this once fruitful source of disputation, we must refer to his own exposition of them, in the 2d vol. of the American Medical and Philosophical Register. The subject was finally taken up by one who has proved himself competent to unravel it; and to the classical production of Dr. Joseph M. Smith, we must refer for the most beautiful, if not also the most thorough exposition of the laws regulating the rise and prevalence of epidemic diseases, that has ever yet appeared.

In the pathology and treatment of several diseases, the physicians of this country have introduced important improvements.

* Preface of the 9th vol. of the Med. Repos.

† Amer. Med. and Philosoph. Register, vol. ii. p. 15.

We need not again refer to those already mentioned. The management of our pestilential diseases; the pathology and treatment of dropsies, especially dropsy of the head, first instituted by Rush, and since adopted in Europe; the treatment of cholera infantum, as suggested by Miller; of dysmenarrhœa, as suggested by Dewees; of delirium tremens, as suggested by Knapp; of hysteria, as suggested by Dr. J. M. Smith; and of lunacy, as practised in our asylums: are all important landmarks in the history of American medicine.

But to surgery, more than any other practical branch, are we to look for our trophies in the profession. The reckless and unnecessary resort to operations, by men whose principal qualification is a daring disregard to human suffering, we are as much disposed to deprecate as any one; and hail that auspicious era, in which praise can be more willingly awarded to him that saves his patient from the knife, than to him that operates. Yet when other measures fail, and the bistoury or scalpel is the last, or least deplorable alternative, the surgeon, who by his knowledge of the human structure, and the principles of his art, has the head to devise and the hand to perform original and successful operation, should be deemed an honour to his profession, and a benefactor to his species. Among the men of this class, America has many to be proud of.

To enumerate the original and important operations; the introduction of new ones from precedents elsewhere; to cite the improved modes of practice, by which severe operations have been avoided; the advances in surgical pathology; the additions to our armamenta chirurgica, and the improvement in instruments already long in use; must be to prove that in no place has surgery been more successfully cultivated than in this country. The names of Bayley, Jones, Physick, Post, McKnight, Dorsey, Nathan Smith, and Hosack, among the dead; of Mott, Stevens, McClellan, J. Rhea Barton, Rodgers, Warren, Dudley, White, Gibson, Muzzy, and a host of others among the living, are worthy of the highest rank among the surgeons of their day, for their share in these improvements.

In the excision of bones, Dr. Mott's removal of the clavicle, in 1828, his operation for extirpating a greater part of the lower

jaw, in 1821; Dr. Stevens's operation on the upper jaw, in 1823,* his extirpation of the astragalus, in 1826; Muzzy's removal of the scapula and clavicle together, in 1837; and Dr. R. Butts's removal of the ulna, published in 1825; are, so far as we know, all original and successful innovations. Besides which, Drs. Brown and Hunt's operation for dissecting out the head of the humerus and fractured portions of the scapula, on a soldier injured at the battle of Plattsburgh, in 1814, with the effect of saving both the limb and the use of the joint, is worthy of special observation.

In operations for diseased joints, Dr. John Rhea Barton has rendered himself conspicuous. His operation for artificial hip joint, in 1826, and that for straightening an anchylased and contracted knee, in 1835, were peculiarly original and successful. In the first of these he has been followed by Dr. John Kearny Rodgers, of this city, also with success:—and these two are the only operations of the kind that have ever been performed.

In the treatment of diseased bursæ and of hydrops articuli, as practised by the late Dr. Hubbard of Yale College, the surgery of the joints has been improved. In the treatment of morbus coxarius, Dr. Physick's apparatus is worthy of praise. It has been applied successfully by other surgeons, especially by Dr. A. H. Stevens, in treating the diseases of other joints. Dr. Physick's operation for ununited fracture, too, is known, appreciated, and successfully employed both at home and abroad.

The mode of arresting capillary hemorrhage by exposing wounds for a time to the air, so as to expedite the adhesive process after capital operations, first adopted by Dr. David Hosack, in 1813, (who, at that period, devoted much attention to surgery,) is worthy of special notice here; inasmuch as it has since been

* In the 20th vol. of the Medico-Chirurg. Transactions, the credit of first having removed the upper jaw, is attributed by Mr. Liston to Mr. Lizars of Edinburgh. The operation of Dr. Stevens, and subsequently that of Dr. David L. Rogers, then of this city, were both antecedent to that of the Scotch surgeon, and were completely successful. An account of Dr. Stevens's operation, which was performed on the 13th of August, 1823, may be found in the appendix to Sterling's Translation of Velpeau's Surgical Anatomy, N. Y. 1830. Dr. David L. Rogers's operation was performed in May, 1824, and was published in the 3d vol. of the N. Y. Med. and Phys. Journal. Mr. Liston, in his historical notice of operations on the upper jaw, makes no mention of either of these.

recommended by the surgeons of Edinburgh, who, doubtless unaware of Dr. Hosack's claims, have taken to themselves much credit for the practice.*

In the operation for artificial anus, Dr. Physick, in 1809, successfully instituted a practice which has been imitated in other countries, and is claimed by the French as one of the inventions of Baron Dupuytren.

In the operation on spina bifida, by excision, Dr. Sherwood, of Rutland, in 1811, was completely successful; and about a year since, Dr. A. H. Stevens succeeded in curing an aggravated case by a modification of Sir A. Cooper's practice by puncture.

In amputation of the joints, our surgeons, it is true, have no right to claim the precedence; nevertheless, we may refer to Dr. Bayley's amputation at the shoulder joint, in 1782, as among the first successful operations of the kind; Dr. Mott's amputation at the hip joint, in 1824; and Dr. J. Kearny Rodgers's amputation at the elbow joint, in 1825, all successful.

Besides these might also be mentioned extirpation of the parotid gland; orthoplastic operations of various kinds; extirpation of the uterus, and of ovarian tumours; lithotrity, lithotripsy, improved modes of lithotomy, and the removal of calculi from the bladder without cutting; the treatment of aneurism by cold; and the diseases of the anus by dilatation; the Cæsarian section for the removal of the extra-uterine fœtus, and an analogous operation for the removal of metallic bodies lodged in the small intestines; all performed with success, and all illustrative of the rank of this art amongst us.

In operations upon the arteries, the principles laid down by Hunter, and the application of them by himself, Abernethy, and Cooper, have been successfully carried out here; and have led to a number of bold and important precedents, determining what should be, as well as what should not be again attempted in this department of surgery. In these achievements, the name of Post, Mott, Muzzy, Gibson, White, and others, are peculiarly worthy of distinction.

Such, then, is an outline, and but a brief and imperfect one, of some of the most important and memorable points in the his-

* See the Amer. Medical and Philosophical Register, vol. 4, p. 63.

tory of medicine in America. Before drawing to a close, let us dwell for a moment on the state of the profession in this city.

The time was once, and that not half a century ago, when almost all that was known of American medical literature, and almost every thing that characterized it in Europe, resulted from the enterprise and talent of New-York. The face of the profession generally, as well as of the different branches, has materially altered since that period: but though we occupy a more favourable position, and enjoy more extensive views than our professional forefathers, we are nevertheless bound to look with admiration on their labours, and to acknowledge with gratitude the share they have had in our advancement. But these fathers! where are they? Our Bayley, and Bard, and Jones, and Miller, and Middleton; our Elihu H. Smith, our McKnight, Romayne, and Mitchell,—names once familiar as household things,—are now scarcely ever heard of; for the fire of their enthusiasm is extinguished, and the gratitude and fame that should have been awarded them, are smouldering in its ashes.

We would not be understood to say, that since the days of these once distinguished men, the spirit of inquiry, has departed from us: far otherwise. Yet with humiliation be it acknowledged, that ever since their day, the bonds of fellowship which should have held us in unity to the support of one another, and to noble emulation in the promotion of a common interest, have been continually slackening. The spirit of discord has been awake, and the poison of its breath has hung upon us, until it has withered our institutions almost to extermination. Talent and ability have been exerted single-handed; and often, too, opposed by those who should have fostered them. There has been no commanding, and, at the same time, conciliating voice amongst us, to emulate our youth, to urge on our middle-aged to labour, to call upon our advanced in life for the result of their experience, to unite the whole in unison, and to direct the current of popular feeling, as well as of popular interest, towards the advancement of the profession.

Yet our city has advantages for the cultivation of medical science that are not to be surpassed; and though some of these of late years have been unaccountably overlooked, and though for want of well-directed efforts on our own part, other places have

been allowed to take the lead of us in the work of medical instruction; yet no one can deny that while distant schools have drawn together their hundreds of pupils annually, their teachers have had an eye for precedent and practical instruction, to the profession in New-York. We need not again enumerate the splendid achievements in surgery that have been effected here, the improvements in the practice of medicine, the original researches in anatomy, the investigations into the laws of epidemics, or the additions to our materia medica, to bear us out in this remark. Let it then be no longer said, that New-York must forever hold an humble rank as a school for medical instruction: for so long as we have our hospitals and infirmaries to resort to, so long as the name of Romayne, of Post, of Godman, of Hosack, and of Mott, shall be remembered and respected, we have the earnest of better things. Nor are these the only names we should be proud of; we have still,—and long may they continue in their usefulness, to enjoy the blessings of life, and to receive the honours and esteem so justly due to them,—we have still amongst us men whom the medical profession in any country might be proud to claim.

Where, then, lies the bar to the cultivation of medical science, and to the growth of medical institutions in this city? We have the material, and the ability, and the will: let us, therefore, hope for emulation and concert of action, sufficient for investigating the one, and for supporting the other. And when jealousies, and prejudice, and party feeling, shall have been, as we trust they sometime hereafter shall be, if not eradicated, at least restricted in their influence, New-York may again regain that stand which her advantages have ever claimed for her; and from which, had she always been alive to her own true interests, she would never have departed.