A CYCLOPEDIA

OF

AMERICAN MEDICAL BIOGRAPHY

COMPRISING THE LIVES OF EMINENT
DECEASED PHYSICIANS AND SURGEONS

FROM

1610 to 1910

BY

HOWARD A. KELLY, M. D.

ILLUSTRATED WITH PORTRAITS

VOLUME I

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TO

SIR WILLIAM OSLER Bart.

PHYSICIAN—MEDICAL HISTORIAN—FRIEND

THESE VOLUMES ARE AFFECTIONATELY DEDICATED

BY

HOWARD A. KELLY

"From the experience thus obtained, from the happiness that has arisen from it, and from the use I know it has been to many others, I would urge every student, whether medical or general, to start life with a good biographical training. Sometimes it seems to me as if the whole field of knowledge were open to a man if he first become conversant with the lives, characters and works of his predecessors who have cultivated the world and its literature."—*Vita Medica.*

SIR BENJAMIN WARD RICHARDSON, M. D.
(after finishing his *Disciples of Æsculapius*).

PREFACE.

I found while writing the life of Walter Reed, that there was need for a new biographical cyclopedia, giving a brief outline of the lives of our departed medical worthies, with references to sources for further data.

This need had not been fully met in the biographical works of Thacher, Williams, Gross, Atkinson, Watson or Stone, as in some only a few lives were taken up while in others many of the living were included. I have now been engaged in compiling such a work for five years, with the constant valuable assistance and sub-editorship of Davina Waterson, without whose fostering care I could not have carried it on.

It is my purpose in these volumes to give a brief outline of the life of every medical worthy who has lived in the United States and in Canada. I mean by worthy, a man who has been distinguished, either as an original thinker, or writer, or as a teacher or great leader in medicine in any part of the country. I have also included a number of the hardy pioneers who did great work with insufficient means and assistance in the border countries in the early days.

It has also been my aim to gather within these volumes those of our craft who after taking a degree have not practised medicine but have become eminent in some other branch of science, and I have from time to time admitted a few brief biographies of men who have done no special original work but who attained great *local* prominence and widely influenced their fellows by a strong personality.

I organized the work by sub-dividing so as to secure biographies from three classes of colaborers: First: Those who agreed to take charge of sections of the country, as a rule, one or more states:

New York	H. A. Kelly
Pennsylvania	F. R. Packard and H. A. Kelly
Maine	J. A. Spalding
Vermont	C. S. Caverly
New Hampshire	I. J. Prouty
Massachusetts	W. L. Burrage
Connecticut and Rhode Island	W. R. Steiner
Maryland	E. F. Cordell
Delaware	A. Robin
Virginia and West Virginia	R. M. Slaughter
North Carolina	H. A. Royster
South Carolina	R. Wilson, Jr.

Georgia	J. B. Baird
Florida	J. S. Helms
Washington, D. C	S. D. Lamb
Minnesota	B. Foster
Wisconsin	C. S. Sheldon
Michigan	L. Connor
Illinois	E. W. Andrews
Ohio	H. E. Handerson and A. G. Drury
Kentucky	A. Schachner
Kansas	A. H. Cordier
Nebraska	H. W. Orr
Manitoba and Northwest Territory	J. Halpenny
New Brunswick	A. B. Atherton
Quebec	A. McPhail
Prince Edward Island	S. R. Jenkins
Nova Scotia	Donald A. Campbell
British Columbia	Oswald M. Jones
Louisiana	L. G. Le Boeuf and Rudolph Matas
Texas	G. M. Decherd
Washington and Oregon	G. M. Kober and P. C. Coffey
Idaho	J. M. Taylor
New Mexico	W. R. Tipton
Utah	W. B. Ewing
California	G. H. Kress
Ontario	N. A. Powell

Second: Those who agreed to take charge of the various specialties:

Anatomy	C. R. Bardeen
Surgery	M. B. Tinker
Gynecology, Obstetrics	H. A. Kelly
Ophthalmology	H. Friedenwald
Laryngology	D. B. Delavan
Medical Jurisprudence	T. H. Shastid
Army and Navy	A. Alleman
Women in Medicine	Alfreda Withington

Lastly: those who wrote individual biographies. All of these names can be identified by comparing the initials at the end of each article with the list where the name is given in full.

Aside from these acknowledgments, I have also to thank Henry M. Hurd for valuable criticism and the ready aid he has given from time to time.

F. R. Packard has also been a good friend and adviser from the outset.

Sir Wm. Osler has kindly allowed me to condense one or two of his biographical addresses.

Prof. J. Uri Lloyd has been one of my most invaluable coadjutors in securing the data about our medical botanists.

Dr. S. Weir Mitchell has given permission to use the lives he has written, sanctioning the condensations; Miss J. G. Rogers helped in getting the Louisiana data, and Dr. Robert Fletcher has shown that customary kindness which has endeared him to the entire profession of the United States, in aiding me with all the resources of the Surgeon-general's Library at Washington, and in loaning several portraits. Mr. A. T. Huntington kindly marked and gave me over a hundred volumes of the transactions of medical societies containing biographies, these proving of great value in my research work.

One of the interesting facts which developed was that several men had already begun to accumulate data for local histories: R. M. Slaughter had already done a large work in writing up the biographies of the Virginia worthies. The late Leartus Connor had also written an extensive biography of Michigan upon which he permitted me to draw freely.

So, by conjoint labor, upwards of twelve hundred worthies have been gathered into this modest Hall of Fame, which will, I permit myself to hope, prove a handy reference work for medical generations yet unborn.

Owing to the many writers engaged in the work the biographies as a whole will be found lacking in uniformity of style and treatment. I have considered this rather an advantage than otherwise except in the instances in which relatively unimportant men receive a more extended notice than their worthier compeers. This difficulty was unsurmountable without a large amount of paring down and rearranging for which I had neither time nor inclination.

The Cyclopedia closes with the thirty-first of December, 1910.

HOWARD A. KELLY.

BALTIMORE, 1912.

THE FOLLOWING HISTORIES OF MEDICINE HAVE BEEN FREQUENTLY CONSULTED AND DRAWN UPON.

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NOTE: The biographies unsigned were either compiled by the Editor or gathered rom old books where the name of the writer could not be found.

INTRODUCTION.

Anatomy.

Two predominating influences may be recognized in anatomy in American medical schools, the British and the German. The British influence began with the introduction of anatomical teaching into the United States in the eighteenth century by Americans trained in English and Scotch schools. The German influence was introduced in the latter part of the nineteenth century by Americans trained in the German schools. To the former we are indebted for courses in practical dissection and for anatomical demonstrations as a basis for surgical practice. To the latter we are indebted for the scientific attitude which aims at fundamental knowledge, and takes into account the microscopic structure and the development as well as the gross anatomy of the body.

The French School of medicine, which exerted a marked effect on medical practice during the first half of the nineteenth century in this country, led to the translation of Bichat's "General Anatomy"; to the production of a few text-books on histology, and to the use of microscopes for the purpose of demonstrations in a few schools, but anatomical teaching was not essentially influenced by it. W. E. Horner stood decidedly ahead of most teachers of his time in his appreciation of the value of histology.

Although the most prominent of the English and Scotch anatomists of the eighteenth century had scientific as well as immediately practical aims, and delighted in the study of organic structure from love of knowledge as well as from love of its practical application, most of their American pupils found little opportunity or stimulus to develop the scientific side, and great need of the development of the immediately practical. The pupils of these pioneer teachers were thus not brought much into touch with active scientific production and were led to attempt to make short cuts to the practical. The pupils of the third and fourth generations, for the most part, wandered still further from original ideals. Thus for over a century, anatomy in America failed to progress as in Europe. Exercises in dissection even in the best schools were rudimentary. Memorizing from the text-books, stimulated by quizzes, constituted the chief part of the course. Practical dissection merely

helped in a way to make some of the memorizing easier. The most popular teachers were those who could render a "dry subject" interesting by wit and anecdote. Forensic ability came to be, as a rule, the chief requirement of the teacher. Thus, for instance, in 1847, when a new chair of anatomy was created at Harvard, so that there were two professorships, one for the academic department at Cambridge, and one for the medical school in Boston, the scientist, Jeffries Wyman, was given charge of the work at Cambridge, while the gifted speaker, Oliver Wendell Holmes, was placed in charge at Boston.

The introduction of the German scientific attitude into the anatomical departments of our leading schools has served to revolutionize the study of anatomy. Careful dissection in these schools now constitutes the chief part of the work in gross human anatomy. The text-book serves as a guide-book to nature.

Those who have introduced the German scientific spirit into the anatomical departments of our medical schools are almost all still actively at work. They have much yet to accomplish, for it is to be trusted that anatomy in America may develop, not with the slavish adoption of German methods, but along original lines. Since the present cyclopedia is confined to the lives and labors of men no longer with us, I do not here attempt a description of the development of the newer aspects of anatomy in America, but shall give a brief summary of the work of those who introduced the English anatomy of the eighteenth century into America and of those who did the most to maintain its ideals.

Philadelphia was the seat of the origin and of the highest development in America of anatomy under British influence. Many men of sterling worth there taught anatomy with intelligent enthusiasm. Several among them had some of that love of science which distinguished the English teachers of those who introduced the subject into this country, although lack of a favorable environment prevented many important contributions. All were intense believers in the practical value of anatomy to medicine and for the most part had the power of stimulating their pupils. A large proportion of the leading teachers of anatomy in other parts of the country got their training in Philadelphia, but nowhere else was there so serious an attempt to maintain a scientific attitude toward the subject in the medical schools, nor for the most part, was the work in practical dissecting maintained at so high a level.

The first teacher of practical anatomy in this country, so far as we at present have any record,* was Thomas Calwalader, a Philadelphian, who had studied under William Cheselden in England, and who, in 1730 or

*With one possible exception: In 1647 Apostle John Eliot wrote, "We never had but one anatomy in the country, which Mr. Giles Firmin did make and read upon very well." (Lee, In "A History of Columbia University," 1794–1904.)

1731, after his return to America, "made dissections and demonstrations for the instruction of the elder Dr. Shippen and some others" (Quoted by C. W. Dulles, from an address by Caspar Wistar). It is not impossible that similar instruction was given after this time by other young men fresh from the English and Scotch schools, but the next account of anatomical teaching in Philadelphia, of which we have a record, is that of Dr. William Shippen, Jr., son of the Dr. Shippen spoken of above. Dr. Shippen was a pupil of the Hunters in London, and in 1762, soon after his return to America, advertised in the "Pennsylvania Gazette" as follows:

"Dr. Shippen's anatomical lectures will begin tomorrow evening at 6 o'clock at his father's house in Fourth Street. Tickets for the course are to be had of the Doctor at five pistoles each, and any gentleman inclined to see the subject prepared for the lectures and to learn the art of dissection, injection, etc., is to pay five pistoles more."

About this period, in 1774, Dr. Abraham Chovet, a picturesque character, who had been a demonstrator of anatomy in the worshipful company of Barber-Surgeons at London and, after living in Barbadoes and Jamaica, had come to Philadelphia, established in the latter city a course of lectures on anatomy. Later he built an amphitheatre in which he continued for some years to give lectures and demonstrations. He built up a fine museum of anatomical specimens and models, considered one of the places to visit by strangers in Philadelphia. He died in 1790. (For an interesting biographical sketch of Chovet's life see W. S. Miller, Anatomical Record vol. v.1911.)

William Shippen, Jr., and John Morgan—likewise a pupil of the Hunters, a gifted man, whose publication on "The Art of Making Anatomical Preparations," led to his election to membership in the Royal Society of London—were active in the establishment in 1765 of a school of medicine as a department of Pennsylvania College, afterwards the University of Pennsylvania. Shippen was professor of anatomy, surgery and midwifery in this school for forty-three years and was an inspiring teacher, although he made no important contributions to the science of anatomy. In 1808 the professorship of anatomy was given to Caspar Wistar, who held the chair for ten years with distinguished success. Wistar wrote a good text-book of human anatomy and made a contribution to the knowledge of the structure of the ethmoid bone. He established the collection, afterwards greatly developed by Horner, which formed the nucleus of the collection now housed in the Museum of the Wistar Institute of Anatomy, erected in 1892, through the generosity of the grandson of Caspar Wistar, Gen. Wistar. Caspar Wistar was followed at the University of Pennsylvania by Philip S. Physick, who did little to distinguish himself in anatomy, although a surgeon of great worth and ability.

Physick was followed by W. E. Horner, who held the chair from 1831 to 1853, and attained some scientific as well as scholastic reputation. Horner wrote text-books, "A Treatise on Pathological Anatomy" (1829), and "Lessons in Practical Anatomy for the Use of Dissections" (1823); discovered or re-discovered the "tensor tarsi" muscle, and among other papers contributed one on the "Odoriferous Glands of the Negro." Horner was followed by J. Leidy, who held the chair of anatomy from 1853 to1891. Leidy, one of the most distinguished of American scientific investigators, a man whose interests ranged over wide fields, contributed chiefly to the subjects of helminthology and vertebrate paleontology. He wrote a text-book on human anatomy.

In 1825 the Jefferson Medical College was established and long rivalled the Medical School of the University in popularity. In 1832 G. S. Pattison, formerly professor of anatomy and surgery in the University of London, was made professor of anatomy.

Other well known professors at the Jefferson Medical College were J. Pancoast, W. H. Pancoast, and W. S. Forbes.

W. S. Forbes, demonstrator of anatomy from 1879–86, and professor of anatomy from 1886–1905, while a much admired teacher, was distinguished chiefly for the admirable state law concerning anatomical material, which he drew up and was instrumental in getting passed in Pennsylvania in 1868, and revised in 1883. Previous to the latter half of the nineteenth century, anatomical material in this country, as in England, was scarce. Grave robbery was a necessary adjunct to courses in practical anatomy, and led to repeated outrages of public feeling and sometimes to crime.

In 1830 Massachusetts passed a law giving the bodies of paupers dying in state charge, and in 1833, one giving those of county paupers, unclaimed by friends, to the recognized medical institutions of the state. Other states passed similar laws, but of these the most effective were those of Pennsylvania, mentioned above. The laws of Pennsylvania on this subject served as a model for the better of the state laws since passed in other states. (H. A. Kelly, "Johns Hopkins Bulletin," 1908; W. W. Keen, Philadelphia School of Anatomy, 1875; E. M. Hartwell, "The Study of Human Anatomy," "Studies from Biological Laboratory of the Johns Hopkins University," Baltimore, 1881; "Hindrances to Anatomical Study in the United States," "Annals of Anatomy and Surgery," Brooklyn, 1881.)

To accommodate private pupils, a number of Philadelphia physicians, during the first half of the nineteenth century, established private dissecting rooms. Among the earlier of these were those of Joseph Parrish and Richard Harlan (established in 1818), T. Hewson (1822), and G. McClellan (1829). In 1820 Dr. J. V. O. Lawrence organized a dissecting

room on a somewhat broader scope than those just mentioned. From this arose a school of anatomy similar in many respects to the Great Windmill Street School in London.

W. W. Keen has given in his "History of the Philadelphia School of Anatomy," 1875, a most interesting account of it. It accomplished a great mission. "Within its walls, earnest, intelligent, laborious men of science taught, experimented and investigated, and published the results of their work in many a book and pamphlet."

At the time of the opening of the school, "the University (then the only medical school in Philadelphia) closed its doors in April and they remained unopened till November. To fill out this long hiatus, Lawrence, a graduate of the University of Pennsylvania, opened his school and gave a course in anatomy and surgery, which began in March, had a recess in August, and ended in November. He gave six lectures a week. In 1822 he was made assistant to Dr. Horner, then adjunct professor of anatomy at the University of Pennsylvania." "Like most of his followers in the school, not satisfied with teaching, he was also a frequent writer as well as active in original investigations and experiments." In 1822, assisted by Drs. Harlan and Coates, he performed over ninety experiments on animals to test the absorbent action of the veins and in the following year over one hundred.

The second head of the school was Dr. John. D. Godman, who previously had been professor in the Medical College of Ohio. Dr. Godman retired from practice in 1823, when he began teaching in the school. In 1824 Godman established, in connection with the school, a reading-room and library. Dr. Godman was one of the founders of the "American Journal of Medical Sciences," and published in three volumes a "Natural History of American Quadrupeds" (1826), and among many other works a book on the fasciæ ("Anatomical Investigations," 1824), one on "Physiological and Pathological Anatomy" (1825), and a paper on "Arterial and Other Irregularities." Dr. Godman was called to Rutgers College in 1826, and was succeeded by Dr. James Webster, who was subsequently called to the Geneva Medical College.

In 1831 Dr. Joseph Pancoast re-opened the rooms and taught there for seven years. In 1838 he became a professor of anatomy in the Jefferson Medical College. He translated and edited several foreign books and prepared a new edition of "Horner's Anatomy" while at the Philadelphia School. Dr. Pancoast was succeeded by J. Dunott.

In 1839 Dr. James McClintock started a school in the western part of the building occupied by Dunott's school. McClintock called his school the Philadelphia School of Anatomy, the first use of the term. McClintock had large classes. In 1841 he was elected professor of anatomy in the Vermont Academy of Medicine, and afterwards in the

Castleton Medical College. McClintock was succeeded by an office pupil, Dr. J. M. Allen. Allen united forces with Dunott of the original school, and they occupied the two sets of rooms under the title of The Philadelphia School of Anatomy. Later Allen was left in sole charge. In 1842 W. R. Grant held the west building for a year, and then accepted the professorship of anatomy in the Pennsylvania Medical College. McClintock returned to Philadelphia and occupied the west building from 1845–47. J. M. Allen, who meanwhile had occupied the east building, assumed charge of both buildings from 1847–52. In 1852 Allen became a professor of anatomy at the Pennsylvania Medical College.

The first woman to dissect in the Philadelphia School of Anatomy joined Allen's class in 1843–4. "'It was probably,' says her sister, 'the first time that a woman had dissected as a medical student'" (Keen.)

Dr. D. Hayes Agnew assumed the responsibilities of the school in 1852, and held it for ten years. He was found a most inspiring teacher. While teaching here he published his "New Arrangement of the London Dissector" (1868), and a series of papers on anatomy in its relation to medicine and surgery. In "The Life of Agnew," by J. H. Adams (Philadelphia, 1892), some interesting details are given of the school at the time Agnew had charge of it.

In 1862 Dr. Agnew relinquished the anatomical rooms to J. E. Garretson, who was followed in turn by J. P. Andrews and R. S. Sutton and finally by W. W. Keen, who once more re-established the brilliant reputation of the school, as may be judged from the following quotation from his farewell speech:

"It ill becomes one to speak of himself, but I may perhaps be permitted to state the following facts: I have lectured here longer than any of my predecessors, Allen and Agnew only excepted; I have given nine winter and five summer courses of descriptive and surgical anatomy, two courses on artistic anatomy, and thirteen courses on operative surgery, besides private courses to numerous individual students and graduates. I have had nearly fifteen hundred students of whom at least five are already professors in medical colleges, and one has opened the first dissecting room ever established in Japan. They have come from the District of Columbia, and every state in the Union, except New Mexico and Nebraska, and from fourteen foreign countries, as follows: Canada, Nova Scotia, Prince Edward's Island, New Brunswick, Cuba, Porto Rica, Mexico, Costa Rica, Nicaragua, Denmark, Norway, Prussia, Switzerland and England.

"During this time, also, I have published a series of "Clinical Charts of the Human Body," a sketch of the "Early History of Practical Anatomy," and a pamphlet on the "Anatomical, Pathological, and Surg-

ical Uses of Chloral" (which I deem my most important contribution to practical anatomy). I have edited also "Flower's Diagrams of the Nerves" and "Heath's Practical Anatomy," and have published anatomical and surgical papers on a new diagnosis of "Fracture of the Fibula," on the "Anatomy of Optic Chiasm" (with Dr. William Thompson), on the "Ossification of the Atlas Vertebra," on a case of "Asymmetry of the Skull," on a "Malformation of the Brain," on the "Physiology of the Inferior Laryngeal Nerves and the Intercostal Muscles, in a Case of Judicial Hanging," and numerous general medical articles, besides gathering material for several other papers and perhaps more extended publications."

At the height of the prosperity of the Philadelphia School of Anatomy, the medical schools of Philadelphia charged for each course, and the student was allowed credit for a course in dissection taken elsewhere than in the school he was attending. Many students of the regular medical schools preferred to do this work at the Philadelphia School. The numbers decreased after the removal of the medical department of the University of Pennsylvania to West Philadelphia and the strengthening of the course in anatomy at the Jefferson Medical College. The teaching of anatomy at the Philadelphia School was of an essentially practical nature, with the relation of anatomy to surgery kept ever to the fore. The year after Keen delivered his farewell address a new school with the same name was started by a former instructor at the Philadelphia School, and, under one form or another, was continued until recent years.

Among others more or less associated with the Philadelphia School of Anatomy during the last twenty-five years of its existence, were J. F. Meigs, the well known obstetrician, S. Weir Mitchell, who began his work on snake venom in the building occupied by the school, and "with G. R. Morehouse discovered the extraordinary chiasm in the inferior laryngeal nerves in chelonia," and Dr. Brinton, who discovered a method of preserving fresh anatomical specimens by applying gutta percha dissolved in benzole, and published an excellent paper on "Dislocations of the Sternum." Harrison Allen also carried on some of his studies in comparative anatomy in the building occupied by this school. In spite of the great emphasis laid on the "practical side" of anatomy in the school scientific research held a real position there. Even medical students were encouraged to investigate. Thus the valuable statistical study of the brachial plexus made by Walsh ("American Journal of Medical Sciences," 1877, vol. lxxiv, p. 387), was begun there at Keen's suggestion.

At the Pennsylvania Medical College (the medical department of the Pennsylvania College at Gettysburg), which was founded in Philadelphia, in 1839, and discontinued in 1861, S. G. Morton was professor of anatomy from 1839–43. Morton gathered a splendid collection of skulls and pub-

lished among other works "Crania Americana," 1839, "Crania Ægyptica," 1844, "Ethnology and Archeology of the American Aborigines," 1846, and an "Illustrated System of Human Anatomy," 1849. His scientific work was of great value.

Among other Philadelphians interested in anatomy, who, however, held no chair of anatomy in any of the medical schools, Harrison Allen stands foremost. He was a graduate of medicine from the University of Pennsylvania and was appointed to the chair of comparative anatomy and zoology in the auxiliary department of medicine there in 1865, which position he held until 1878, when he became professor of physiology. He also served for some time as professor of anatomy and surgery in the Pennsylvania Dental College. In 1891–2, he was director of the Wistar Institute of Anatomy. From 1891 to 1896 he for the second time held the chair of comparative anatomy and zoology at the University. He was president of the American Society of Anatomists from 1891–3. He wrote a good text-book on human anatomy, and contributed a considerable number of important papers upon various subjects relating to physiology and anatomy. He also wrote an important monograph on the "Bats of North America."

In point of time New York seems to have been next to Philadelphia in the introduction of practical human anatomy. Until the appearance of Dr. Dulles' paper, cited above, it was commonly stated that the first practical teaching of anatomy in this country was the private course in human anatomy offered at New York by Doctors John Bard and Peter Middleton, about 1750.

In 1763 a course of lectures on anatomy was given at King's College (afterwards Columbia University) by Samuel Clossy, a graduate of Trinity College, Dublin. Four years later, upon his proposal, a medical department was established in connection with the college. Clossy, Samuel Bard, son of John Bard mentioned above, and Peter Middleton were on the faculty of this new school of medicine. While at this and other medical schools in New York there were numerous teachers who fulfilled the requirements demanded, none showed the scientific spirit which distinguished the leading men at Philadelphia. The scientific microscopic anatomy introduced in New York by C. Heitzmann, Satterthwaite, Delafield, Prudden and others in the seventies and eighties, found no lodgment in the anatomical departments of the medical schools of that city, but was developed as an aid to pathology.

Among the early teachers of anatomy at Columbia (the College of Physicians and Surgeons) mention may be made of Wright Post, John R. Rhinelander and Robert Watts.

Dr. Valentine Mott, who about 1806 served as demonstrator of anatomy to Dr. Post, gives an interesting picture of the mode of obtaining

anatomical material in vogue in those days (an address delivered at the College of Physicians and Surgeons, New York, November 7, 1850):

"Material for dissection was scarce, and could only be obtained by individual enterprise, and in many such, now happily by the existing state of things, rendered unnecessary to your advancement in knowledge, have I been engaged. I well remember on one occasion driving, in disguise, a cart containing eleven subjects, from the old Potter's field burying ground, sitting on the subjects, and proud enough of my trophies; but we were not always so fortunate, being on many occasions discovered and pursued, and obliged to leave our spoils behind us, with only our hard labor for our pains. One little incident of the times, also, occurs to me. A German, who had been hung, was given to the college for dissection, and, with the colored porter, I went in a carriage in the evening to get the body. My other associate was a Dr. Buchanan, a Scotchman, and professor of obstetrics in the college, residing in the city.

"On calling at his rooms to take him up, I found him arranging his pistols, and complaining of feeling very agueish, and with difficulty persuaded him to proceed. The night was cold, and on arriving on the ground, the doctor's ague increased so rapidly and his valor oozed, like Bob Acres', in "The Rivals," so freely from the tips of his fingers, that he decided to return home, begging strongly for the use of the carriage, which I peremptorily refused him. With great difficulty we exhumed the body, but then my colored associate also deserted me, declaring he could not touch the subject, on account of his having been hung. I had, therefore, to lug the body, attired in its white robes, by my own strength, to the carriage—for I had great strength in those days—and partly by force and partly by menaces, compelled the man to assist me in getting the body into the carriage—and what was still more difficult, to get in along with it, so thoroughly was he terrified. On arriving at the college, I found my valorous associate slowly recovering from his ague fit, by the aid of a strong glass of brandy toddy, and deeply lamenting his inability to assist me on the occasion.

"At this time I was demonstrator of anatomy to Dr. Post, a fact which may account for some of my zeal in these resurrection adventures. I made, gratuitously, all the dissections for the course of anatomy and surgery, on which latter subject, by the way, I should observe, that only twelve lectures were delivered on practical matters, and the operations not performed before the class. A strong contrast, gentlemen, to the thorough manner in which surgery is taught at the present day. As to the Museum, it was contained in two rooms, one small, for wet, and one large, for dry preparations, and was well supplied. Most of the specimens Dr. Post brought with him from Europe, and the rest were furnished by the zeal of the students and alumni. There are even now in your

Museum, a part of which is the same, specimens of my own industry in the way of minute dissection, a pursuit to which I was very partial and strongly recommend you to follow—a preparation of the nervous system in a small subject and some of the arteries and the veins."

In Boston the earliest record of dissection for teaching anatomy appears to be that of the anatomical lectures given by Dr. John Warren at the request of the Boston Medical Society in 1780. This led up to the establishment of the Harvard Medical School. As early as 1748 there were, however, at Harvard College a human skeleton and a preparation of the human veins and arteries filled with wax, and in 1764, in the fire which destroyed all but one of the college buildings, there perished "a collection of the most approved medical authors, also anatomical cuts, and two complete skeletons of different sexes." This collection, as the "Massachusetts Gazette" of February 26, 1764, states, "would have been very serviceable to a professor of physic and anatomy, when the revenues of the college should have been sufficient to subsist a gentleman in this character."*

There is good evidence that plans for the teaching of anatomy as the basal science of medicine were entertained for some time before a professorship of anatomy was established at Harvard. Ezekiel Hersey, of Hingham, who died in 1770, left £1000 and his widow left a like sum to be applied to the support of a professor of anatomy and surgery. (Thacher, "Medical Biography," 1828.) The "Hersey professorship" was the first endowed chair of anatomy in the country. John Warren was appointed to the professorship in 1782, and held the chair until 1815. His son, John Collins Warren, held the chair from 1815–47. The professor of anatomy not only gave instruction to medical students, but also lectures to the academic students at Cambridge. In 1847 a new professorship of anatomy was established, the Parkman. The Hersey professorship was assigned to the academic department at Cambridge and conferred upon Jeffries Wyman, one of the most original and productive anatomists this country has produced. The Parkman professorship was assigned to the medical school in Boston, and conferred upon Oliver Wendell Holmes, who held the chair until 1882. E. L. Mark now holds the Hersey professorship and T. Dwight, the Parkman.

The two Warrens, although men interested in surgery rather than anatomy, were men of broad interests, and did much to build up the anatomical museum, now named after John Warren. John Warren, who introduced anatomy into Boston and Cambridge, was largely self-taught, although doubtless much influenced by the English anatomy of the eighteenth century. His elder brother, Dr. Joseph Warren, was a pupil of

*"The Benefactors of the Medical School of Harvard University with a Biographical Sketch of Dr. George Parkman," a lecture delivered by O. W. Holmes before the Massachusetts Medical College, November 7, 1750.

Dr. James Lloyd, who had followed the lectures of Cheselden, Sharpe, William Hunter and others. John Warren was also well acquainted with the leading men in Philadelphia, who had been trained in Great Britain.

Outside of the institutions mentioned the demand for good lectures on anatomy, produced several men, who acquired wide reputation. Of these the foremost was Corydon L. Ford, who was professor of anatomy at the University of Michigan from 1854 to 1894. During the greater part of this period, Ford's reputation as a teacher led to his being engaged as professor of anatomy at other institutions, as well as at the University of Michigan. The short sessions which marked the medical curriculum until recent years, and which did not coincide in different schools, rendered this possible. Ford gave lectures at Castleton until 1861, then at the Berkshire Medical College and at Bowdoin College, and finally from 1868 to 1886 at the Long Island College Hospital. Among the earlier teachers, John Doane Wells, Reuben D. Mussey, and Nathan Smith stand out with prominence. L. Agassiz was professor of anatomy at Charlestown in 1851 and 1852. Conditions were not such that he could stimulate in medical schools the scientific activity he did so much to arouse in students of natural history.

Of other teachers of anatomy in America, there seems little need to speak specifically. Many were men of marked natural ability, full of enthusiasm, who served to inspire their students with love and devotion to medicine. Crude as the laboratory facilities have so often been, teachers of anatomy in America have throughout insisted upon some practical work being done, some knowledge being gained by personal experience. Anatomy was long the only subject taught in this way, and for this reason, our teachers of anatomy have played a most important part in the development of American medicine. To the inspiring zeal of the anatomical lectures many a physician has owed the courage to get some mastery of human anatomy, in spite of facilities so crude as to make the acquirement difficult. Facilities for the study of human anatomy are vastly better now. Real first-hand knowledge is far easier to gain. Whether or not more knowledge will be gained under the newer conditions will depend largely upon whether or not the enthusiastic zeal of anatomical teachers, who were active practitioners, shall be exhibited by teachers who are professional scientists.

For an account of the history of anatomy in America, and a summary of its present progress, together with references to the literature, see Bardeen, "Anatomy in America," "Bulletin of the University of Wisconsin," No. 115, September, 1905.

C. R. Bardeen.

Surgery.

There is a tendency among surgical writers of most nationalities to overestimate the importance of achievements by their own countrymen. This is perfectly natural, and, unless something is radically wrong with the individual, it is difficult for him not to give his own people relatively first place in the world's history. Besides this natural prejudice, the difficulties of a foreign language lead many to overlook valuable publications. This has not been altogether true of American surgeons in the past. The leaders in the profession have been well educated, and they have keenly felt the shortcomings of American medical education.

Influence of European Schools.—In the early days, the influence of well established teachings and practice of older centers of medical education must have been greater than we can now well appreciate. The number who had studied abroad formed a considerable proportion of the surgeons in our sparsely populated country. London then easily held the first place in the world's surgery. A common language and the ties of blood probably also tended to turn many toward British centers of education. Among the early leaders in surgery whose work was doubtless strongly influenced by study abroad were: Valentine Mott and J. Kearny Rogers, of New York, and Benjamin Winslow Dudley, of Lexington, Kentucky, all of whom studied under Sir Astley Cooper and Abernethy in London. Rogers also studied under Brodie in London; Dudley under Larrey and Boyer in Paris; Mott under Bell and Munro in Edinburgh. Wright Post, of New York, was a student of Richard Bailey and Sheldon in London. Philip Syng Physick, of Philadelphia, was for four years under John Hunter in London. Probably Edinburgh had an influence second only to that of London; Ephriam McDowell, Nathan Smith and Valentine Mott all having come under the influence of the Bells and Munro. Going to European countries where more uniformly high standards of work prevailed to complete their studies, many students failed to keep in touch with the scattered articles by men of genius and high attainment in their own country. Also, in many cases, noteworthy achievements of American surgeons were not published at all until a number of years after accomplishment, and many articles of high merit appeared in unimportant medical journals with a small circulation. It is not surprising these did not reach even their own countrymen, to say nothing of progressive men in foreign countries.

Surgical Students and Founders.—Not alone do those deserve the honor and gratitude of the profession and the public who have for the first time performed some life-saving and daring operation, but also those who have discovered some great principle, such as anesthesia, or developed a new field of surgery, as in gynecology.

Among men of this type, Samuel D. Gross perhaps deserves first mention. His original investigations and monographs on "Wounds of the Intestines," "Foreign Bodies in the Air Passages," Diseases of the Bladder" and "Diseases of the Bones and Joints," all contributed greatly to the advancement of surgery, although not as likely to bring lasting fame as many other far less painstaking and laborious pieces of work. As a result of his investigations, Gross first advocated taking in the tough submucosa in the intestinal suture and the excision of the axillary lymphatics in cancer of the breast. As an organizer, he was one of the prime movers in the establishment of the American Surgical Association, the American Medical Association, and the Philadelphia Academy of Surgery. His influence as a teacher and inspirer of men is sufficiently shown by the fact that ten of his pupils held positions as professors of surgery in our medical colleges. (Keen, DaCosta and Hearn of Philadelphia, Rodman of Louisville and Philadelphia, Richardson of New Orleans, Yandell of Louisville, McGuire of Richmond, Conner of Cincinnati, Parkhill of Denver, Nancrede of Ann Arbor. ("Johns Hopkins Hospital Bulletin," 1906, vol. xvii.) While not having direct bearing on surgery, it is a noteworthy fact that Gross wrote the first book on pathology in the English language. At various times he edited several medical journals and probably published the first system of surgery to attract widespread attention outside of our country, it being translated into a number of foreign languages.

Among other students of surgery who should be mentioned are Jonathan Mason Warren, of Boston, whose "Surgical Observations" are of such interest and value that his book is still frequently referred to by writers on surgical topics.

Frank H. Hamilton was the author of a work on fractures ("A Practical Treatise on Fractures and Dislocations," 1860), which still has a great deal of interesting information for students. This was the first complete and exhaustive treatise on fractures in English.

Henry J. Bigelow, of Boston, whose monograph on the "The Hip" (1869), and whose studies of litholapaxy are of original value.

John Ashhurst, Jr., whose monograph on "Injuries of the Spine" is well known and whose "Encyclopedia of Surgery" is still an important mine of information.

Marcy's "Anatomy and Surgical Treatment of Hernia" thoroughly reviews the work of the old masters, covers the advance after the introduction of antisepsis, and presents many beautiful cuts. Relatively few important advances have been made since its publication.

Others might be mentioned whose work was of equal and perhaps even greater importance.

The early surgeons seem to have been most active workers in organiz-

ing the older medical colleges: J. Mason Warren at Harvard; Nathan Smith at Dartmouth, Bowdoin and Yale; Benjamin Winslow Dudley at Transylvania University, Lexington, Kentucky, the first medical college of the West, later transferred to Louisville; John Beale Davidge at the University of Maryland; Daniel Brainard, founder and many years professor of surgery at Rush Medical College, Chicago; George McClellen, founder and professor of surgery at Jefferson Medical College of Philadelphia.

The surgical specialties also owe much to our early surgeons who were chiefly concerned in establishing the gynecologic, orthopedic and eye and ear hospitals and until very recently the general surgeon did most of the operative work and trained many specialists of to-day. Illustrating this influence of early surgeons in establishing the specialties, in a report of Hamilton's "Surgical Dispensary Work," "Buffalo Medical Journal" (1847–8, vol. iii), out of thirty-two cases recorded ten were of the specialties, most commonly the eye, and in the same journal, Hamilton has a long article on enlarged tonsils and their treatment by operation. In his address on the "First Century of American Surgery," Gross deplores the tendency to specialize, though admitting the value of the work of Sims, Emmett, Peaslee and the Atlees. A reviewer of Sayre's book on "Orthopedic Surgery," published in 1875, writing in the "American Journal of the Medical Sciences," is quite caustic in his criticism of those who would set themselves up as specialists, although also admitting that such specialization may in certain cases give valuable results. It seems strange to-day to recall that many of those pioneers in surgical specialties were burdened for many years with general practice, as well as the surgery quite apart from the work of their choice.

It is interesting to note that men representative of nearly all nationalities who early settled this country had an honorable share in the progress of our surgery. As a very large proportion of the early settlers were English-speaking people, it is not surprising their names should be most numerous. Warren, Wolcott, Parker, Dudley, Hamilton, Smith, Post, Bigelow and many others will at once be called to mind. Among Irish names, Conner, McGuire and Moore might be mentioned. Of the Scotch; Sims, McDowell, McClellan: of the Dutch; VanBuren, VandeWarker, VanDuyn, Vanderveer, and among more recent comers: Scandinavians; Fenger and Hermann Mynter; of the German and Swiss, Nicholas Senn and Gross. Thus far each nationality well established in the United States seems to have contributed a fair proportion to surgical knowledge.

With best intentions, it would be impossible to give proper credit to all who deserve honor for priority in surgical achivement. It so often

happens that many men in different places come upon the same idea independently at about the same time. To attempt any such work would call for an extensive reading and study of surgical literature impossible for a surgeon earning his livelihood through his profession. Any man attempting it would have to be highly impartial, an omniverous reader, and have a ready knowledge of several modern languages. But it is probably possible for most of us to keep up with contemporary progress and credit our own countrymen where they deserve credit. The important work of Americans has until recently been almost entirely ignored by Europeans, and many French, German and English writers have credited their own countrymen with work that has been accomplished long before by Americans. As examples: the study of spinal anesthesia, the modern hernia operation, excision of the Gasserian ganglion, and decortication of the lung for old empyema. Corning, of New York, and his confrères not only used spinal anesthesia on animals, but also for operation on man as early as 1885 ("New York Medical Journal," October 31, 1885). This method fell into merited disuse at that time, but was re-discovered by Bier over ten years later, yet it is not probable that many German surgeons know the work was not entirely original with him. So too, although Halsted, of Baltimore, described and published an account of an operation differing in no essential particular from the Bassini operation several months previously, Bassini is usually credited with this method even by American surgeons.

Henry O. Marcy, of Boston, probably antedates all others in the use of modern successful methods in the cure of reducible hernia. He described a highly satisfactory operation in 1878 ("Transactions American Medical Association," vol. xxix), and later, at the International Congress ("Transactions," vol. ii), in London, which perhaps suggested to Bassini and others many important points in the operation.

Frank Hartley, of New York, described an operation for excision of the Gasserian ganglion ("New York Medical Jounal," 1892) quite independently and before Krause, who is still given the exclusive credit by most German writers.

George R. Fowler ("Medical Record," December 30, 1893) performed decortication of the lung as a means of treating old cases of empyema with thickened pleura long before Delorme, although all French writers describe the operation as Delorme's operation and doubtless many American surgeons do not know of Fowler's work.

These are but a few instances of many which might be cited where American surgeons have failed to receive credit due for original and progressive work.

The discoveries of anesthesia and antisepsis divide the modern from the old in the history of surgery. Before this surgery consisted mainly

in the treatment of fractures and dislocations, the occasional ligation of arteries, amputations, cutting for stone and the excision of a few small and readily accessible tumors. In these limited fields Americans did their full share of original work.

Ligation of Arteries.—Early American operators were especially bold in the ligation of the large arteries, and have contributed proportionately more to this field than the surgeons of other nations. In this connection Valentine Mott, of New York, deserves first mention. He was the first to tie the innominate artery, May 18, 1818 ("Medical and Surgical Register," New York, 1818, vol. i). This carried his reputation to all parts of the civilized world; but that was a small part of his work in the ligation of arteries. Gross, in his memoir of Mott, published in 1868, says: "No surgeon, living or dead, ever tied so many vessels or so successfully for the cure of aneurysm, the relief of injury or the arrest of morbid growths." He credits Mott with having tied the femoral artery fifty-seven times, the carotid fifty-one times, the popliteal ten times, the subclavian eight times, the external iliac six times, the internal iliac twice and the common iliac once. In all he is said to have ligated great arteries of the body 135 times.

J. Kearny Rogers, of New York, first ligated the left subclavian artery between the scaleni muscles ("New York Journal of Medicine," 1846, vol. vi). Sir Astley Cooper had failed in such an operation attempted in 1809.

The subclavian artery was first tied on the scapular side of the scaleni muscles by Wright Post, of New York, then professor of surgery in the College of Pysicians and Surgeons, now Columbia University. Mott, in his memoir of Post ("Transactions of the Medical Society of New York," 1828), speaks of his ligation of the subclavian as follows: "But the masterly stroke of Dr. Post in surgery remains to be mentioned. It is certainly for the honor of our time, for the credit of America, and for the pride of our city that the first successful operation of tying the subclavian artery above the clavicle on the scapular side of the scaleni muscles for an aneurysm was first performed by him. To succeed in an operation of such delicacy and danger which had failed in the hands of such master spirits in surgery as Ramsden, Abernethy and Cooper was a triumph reserved for our friend."

The ligation of the common carotid artery was first done successfully in 1805 by Amos Twitchell, then of Keene, New Hampshire. He tied the common carotid artery for secondary hemorrhage following an accidental gun-shot injury at a regimental review. The hemorrhage occurred some days after the injury, and the artery is said to have spurted three or four feet, rendering the patient almost absolutely bloodless. It was then taught by surgeons and physiologists that it was unsafe

to tie the carotid artery, for it was thought that so much of the blood supply to the brain would be cut off that death would immediately result. Twitchell realizing, however, that the only possible salvation of his patient lay in securing the artery, compressed it with one hand against the vertebræ, while with the other he dissected it free and with the aid of the patient's mother applied a ligature. Twitchell wrote very little, and for a long time Sir Astley Cooper was credited with this operation, although, according to Twitchell's biographer, Dr. Albert Smith ("New Hampshire Journal of Medicine," 1850–51, vol. i), Twitchell performed the operation eight months previous to Cooper's first operation, which resulted in the death of the patient. Smith says of this operation: "Thus in an obscure country town, alone, unaided either by counsel or competent assistance, inexperienced and without any preparation, his only help an agitated mother, did he perform with masterly skill and self-possession what was then one great, untried and unsettled operation of surgery."

William Gibson, a native of Maryland, the professor of surgery in the University of Maryland, and later, from 1818 to 1854, in the University of Pennsylvania, was the first to tie the common iliac artery. ("American Medical Recorder," 1820, iii.)

Philip Syng Physick first advised the use of animal ligatures ("Eclectic Repertory," Philadelphia, 1816, vol. vi), which he cut close and left buried in the wound in tying arteries. Physick made the ligatures of buckskin, rolling them under a marble slab. There is still considerable discussion as to the advisability of using absorbable ligatures, but there are those who believe that this is an important contribution to surgery. Among other important contributions Physick invented the tonsillitome and advocated rest in the treatment of hip-joint disease. About ten years later, Jameson ("Medical Recorder," Philadelphia, 1827, vol. xi), carried out a series of experimental ligations on animals which he felt showed convincingly the superiority of animal ligature material. He credits Physick with introducing this.

In connection with the ligation of arteries may be mentioned the treatment of aneurysm by digital compression. This was introduced by Jonathan Knight ("Boston Medical and Surgical Journal," 1845, vol. xxxviii), of New Haven, Connecticut, who succeeded in curing a popliteal aneurysm in this way. Jonathan Mason Warren, of Boston, also treated two inoperable aneurysms of the subclavian artery successfully by compression applied with weights directly over the aneurysmal tumor. ("Surgical Observations," Boston, 1867.)

Bone and Joint Surgery.—Excisions of bones and joints had been practised in certain cases long before the settlement of America, but Horatio G. Jameson, a Baltimorean, in 1820 first excised the upper

jaw. ("American Medical Recorder," Philadelphia, 1821, vol. iv.) Gross, in discussing this subject, states that many others had chipped off pieces of the superior maxilla, but Jameson was the first to remove the entire jaw with the exception of part of the roof of the antrum, in 1820.

Excision of the lower jaw was first performed by W. H. Deaderick, of Rogersville, Tennessee, in 1810, although his report of the operation did not appear until many years later. ("American Medical Recorder," Philadelphia, 1823, vol. vi.) The operation was performed for a large enchondroma, involving the entire inferior maxillary bone and filling the mouth completely. The patient made a good recovery, and was reported well thirteen years after the operation.

Valentine Mott ("American Journal of the Medical Sciences," 1828, vol. iii) first excised the clavicle for malignant growth in the days before the introduction of anesthesia, the operation lasting four hours, forty vessels requiring ligation.

Interscapulo-thoracic amputation or removal of the entire upper extremity must have been a most heroic operation in the days before the introduction of anesthesia and antisepsis. Dr. Dixi Crosby, of Hanover, New Hampshire, was the first to perform this operation in 1836. ("Monograph by His Son," A. B. Crosby, Concord, New Hampshire, 1873.) His patient lived twenty-eight months and is said to have died with paraplegia, probably as a result of metastases of the growth to the lumbar spine. Twitchell and McClellan, of Philadelphia, were also among the first to amputate the entire upper extremity for malignant growth.

One of the most important advances in the treatment of fractures was the use of extension apparatus. This method was first brought before the profession by Gross ("Autobiography," vol. i), who states that his preceptor, Joseph K. Swift, of Easton, Pennsylvania, was the first to use it. Gurdon Buck ("Bulletin of New York Academy of Medicine," 1860–62, vol. i), of New York, deserves great credit for introducing the well-known apparatus for treatment of fractures of the femur, however, which is commonly known as Buck's extension. In his paper he reports his results including measurements in twenty-one cases.

Up to about fifty years ago dislocations were commonly treated by a barbarous system of pulleys and forcible extension, although manipulation had been recommended by several surgeons from the days of Hippocrates to Nathan Smith, who practised manipulation successfully in the reduction of dislocations. ("Medical and Surgical Memoirs of Nathan Smith," published after his death, in 1831.) Dr. William W. Reid ("Buffalo Medical Journal," 1851–52, vol. vii), of Rochester, New York, by a series of dissections and experimental study showed the rationale of reduction of dislocations by manipulation. He used manipulation

and demonstrated its value to his colleagues, including Moore, then professor of surgery, in Buffalo, in a number of cases including difficult hip-joint dislocations.

The modern operative treatment of osteomyelitis is usually credited to Brodie, but Nathan Smith ("Philadelphia Monthly Journal of Medicine and Surgery," 1827, vol. i) operated at an earlier date. His description of the pathology and symptoms is interesting and his suggestions as to trephining early in the disease and removal of sequestra later in the disease by Hey's saw and bone forceps, does not differ greatly from modern practice. His son, T. Morven Smith ("American Journal of the Medical Sciences," 1839, vol. xxiii), later called attention to the value of his father's method which had attracted little attention in surgical centers, and reported four successful operations. But antedating even Smith, are the operations of Benjamin B. Simons ("Carolina Journal of Medicine, Science and Agriculture," 1825, vol. i), who reports a series of six cases in which sequestra were removed by Hey's saw or trephine and seven cases of trephining and removal of dead bone from the medullary cavity of long bones.

Brain operations were very seldom performed except for fractures of the skull, before the time of the introduction of anesthesia. Benjamin Winslow Dudley deserves mention as one of the first surgeons to successfully trephine for the relief of epilepsy. He operated upon his first case in 1819 and afterwards reported six successful cases of trephining for this condition ("American Journal of the Medical Sciences," 1832, vol. xi). Dudley was also a famous lithotomist, having operated upon two hundred and seven cases with the loss of only six patients. Dudley was born in Virginia in 1785. He studied under Sir Astley Cooper, Abernethy and Klein; in Paris under Baron Larrey and Boyer. He was professor of surgery in Transylvania University, Lexington, Kentucky, and he performed successfully practically all of the operations in surgery which were known in his day.

In 1858 Carnochan ("American Journal of the Medical Sciences," 1858, vol. xxxv), of New York, reported his method of resection of the superior maxillary nerve beyond Meckel's ganglion for neuralgia.

Probably the first operation for brain abscess was by Benjamin B. Simons ("Carolina Journal of Medicine, Science and Agriculture," 1823, vol. i). The abscess followed a fall and injury of the skull. The patient lay comatose for about six months when a superficial abscess was opened. Simons did not see the patient until twelve months after the accident. He found pus escaping from a small opening, trephined and evacuated a large abscess. At the time of the operation, he inserted his finger into the cavity in the brain for about two inches and found that by making

pressure he could reproduce the unconsciousness which had preceded the evacuation of the pus. The patient made an excellent recovery.

Hartley's method for removal of the Gasserian ganglion has already been mentioned and soon found most general use. Americans have performed nearly half the entire number of Gasserian ganglion operations thus far reported.

A complete tabulation of all cases of brain tumor operated upon up to 1903 shows (article by Keen and Tinker in Chipaults "L'État Actuel de la Chirurgie Nerveuse," vol. iii), that nearly one-third of something over three hundred brain tumors then reported had been operated upon by American surgeons with a proportionately large number of successful cases.

The surgery of the respiratory and circulatory system belongs for the most part to strictly modern surgery, since the discovery of anesthesia and antisepsis. One operation by an American surgeon in the pre-antiseptic days deserves mention, however. Operation for gangrene of the lung is still a matter of decided gravity. While there may be some doubt as to the cause of extensive disorganization of a large part of the right lung reported by Anthony ("Philadelphia Journal of the Medical and Physical Sciences," 1823, vol. vi), gangrene seems the most likely cause, and his operation, involving extensive resection of the fifth and sixth ribs, is certainly noteworthy. A hasty search through the "Surgeon-General's Catalogue" does not show any record of such an operation antedating Anthony.

Gross's important monograph on "Foreign Bodies in the Air Passages" has already been mentioned, as also Fowler's operation of decortication of the lung for old empyema. At the present time, with a better educated body of general practitioners, the occasion for extensive operations for the relief of permanently collapsed lung following long standing accumulation of pus is less frequent and none of these operations are frequently called for. If such an operation is needed, the fact that Fowler's operation permits re-expansion and use of the crippled lung seems to make it preferable to the operation of Schede or Estlander, which, while they permit recovery of the patient, do not restore the use of the crippled lung.

Intubation as a substitute for tracheotomy is now in general use. Very likely it would be considered a medical operation, although it supplants an important surgical procedure. Certain it is that O'Dwyer, who introduced intubation, was a physician and not a surgeon. While the results after tracheotomy for obstruction of the larynx by membrane in diphtheria were usually fatal, intubation has given a large percentage of recoveries. As Matas ("Annals of Surgery," 1899, vol. xxix) strikingly puts it: "His (O'Dwyer) medical transformation of the

bloody and tragic picture of tracheotomy in diphtheria into a simple, painless and bloodless bit of technical jugglery by his perfected method of intubation, has practically closed for all time one of the most conspicuous chapters in the history of surgery." ("Analysis of Fifty Cases of Croup Treated by Intubation of the Larynx," J. O'Dwyer, "New York Medical Journal," 1888, vol. xlvii.) Aside from its value as a substitute for tracheotomy, Fell (a Buffalo physiologist) first saw that it might have other important uses. During the modern advances in thoracic surgery, much study has been devoted to some method which will obviate the disadvantages resulting from collapse of the lung when the pleura is opened. The Fell-O'Dwyer apparatus was probably the first means ever used for inflating the lung. (See paper by Northrup, "Transactions, Association American Physicians," June, 1895.) Many other forms of apparatus accomplishing the same result in a somewhat different way have been devised by other workers, but the principle is the same, and there is a growing belief that this simpler form of apparatus is quite as satisfactory as the costly and cumbersome Sauerbruch's chamber.

Suture of heart wounds belongs to the most daring of the modern operations made possible by antisepsis and anesthesia. The successful operation for an incised wound of the heart reported by Marks ("Medical Fortnightly," 1893, vol. vi), is probably the first operation ever reported for suture of a heart wound. G. T. Vaughn gives priority to Farina, of Rome (1896) ("Journal American Medical Association," 1909, vol. lii). The fact that stabbing affrays are less frequent in this country than in some other parts of the world gives less frequent opportunity for this operation. However, a number of successful heart sutures have been reported by American surgeons. Vaughn's table showed up to 1901, 150 operations.

Abdominal Surgery.—In the pre-anesthetic days abdominal surgery had its origin in America with Ephraim McDowell's first ovariotomy performed in 1809. He afterwards operated in thirteen cases with eight recoveries. This is one of the few operations first performed by American surgeons for which credit it generally given.

Nathan Smith performed a successful ovariotomy in 1821, without knowledge of McDowell's operation, tying the stump with leather ligatures said to have been cut from a buckskin glove.

After the introduction of anesthesia the progress in abdominal surgery was far more rapid. The claims of Wolcott, of Milwaukee, for the first nephrectomy and of Bobbs, of Indianapolis, for the first cholecystotomy ("John Hopkins Hospital Bulletin," 1901, xii) will bear careful investigation. In addition to these operations nearly all of the mechanical methods of intestinal anastomosis which have greatly hastened and promoted the growth of stomach and intestinal surgery were introduced

by Americans; also the importance of taking in the submucosa in the suture method of intestinal anastomosis first suggested by Gross. But the Murphy button, Senn's bone plates, Laplace's and O'Hara's anastomosis forceps, Abbé's catgut rings, the Halsted, Cushing and Connell stitches, though now mainly a matter of history, are of such recent introduction that they are well known to every one.

Several years ago sensational newspaper reports as well as much professional interest was called forth by the report of a complete excision of the stomach by Schlatter, of Zurich ("Correspondenzblatt für Schweize Aertze," December 1, 1897, and "Medical Record," 1897, vol. lii). A little investigation showed, however, that a complete excision of the stomach had been done by Phineas S. Conner, of Cincinnati, about twelve years before Schlatter's operation. Dr. Conner reported this operation at the Cincinnati Academy, and it was noticed in the "Centralblatt für Chirurgie" for 1885. After the great stir about Schlatter's operation, he again brought his report before the profession in an article published in the "Journal of the American Medical Association," 1898. The interest in the subject about this time also brought to light the fact that two other operations in this country were performed between Dr. Conner's operation and that of Schlatter, one by Dr. A. C. Bernays, of St. Louis, Missouri ("Journal of the American Medical Association," 1898), and a second by Dr. J. M. Bayley ("Journal of the American Medical Association, 1898). The fact that all three of the patients operated upon by American surgeons died within a short time prevented the report of the procedure from attracting much attention. There is no question but that all these American surgeons were well fitted by skill and experience to perform the operation, and the success of Schlatter's operation justified their attempt. The magnitude of the procedure illustrates the fearlessness and ingenuity of American surgeons. The daring of such men has made possible the ever widening field of surgical intervention. With experience in stomach surgery, that which was at first a desperate chance becomes a fairly good risk.

American surgeons have done more to show the importance of operative treatment of appendicitis than the rest of the world put together and in this way have been instrumental in saving thousands of lives. In 1867 Willard Parker ("Medical Record," 1867, vol. ii), of New York, showed as the result of his experience that early operation would save 75 per cent. of all cases as compared with nearly 50 per cent. mortality without operation. He advocated operation from the fifth to the twelfth day, and after his operation had been in use fifteen years, the mortality was still further reduced to 15 per cent. Fitz ("American Journal of the Medical Sciences," 1886, n. s., vol. xcii), of Boston, though not a surgeon, by his exhaustive study of this subject and his advocacy of early opera-

tion, did as much as any one to bring about the views now generally accepted. R. J. Hall ("New York Medical Journal," 1886, vol. xliii) was probably first to remove the appendix by laparotomy followed by recovery, but the operation was undertaken with a mistaken diagnosis of strangulated hernia. Thomas G. Morton reported at the thirty-ninth meeting of the American Medical Association a case of appendicitis operated upon April 27, 1887, which was probably the first deliberately planned successful appendectomy on record, but the diagonsis was alternative, "either intussusception or perityphlitic abscess." Henry B. Sands ("New York Medical Journal," 1888, vol. xlvii) first opened the abdomen with a positive diagnosis and removed the appendix with a successful result. These are only a few of the many American names deserving honorable mention in this connection. In Germany, England and France many of the best known surgeons still have not advanced further than had Willard Parker over forty years ago, and only a few of the most progressive surgeons of European countries have come to adopt the treatment which has been proved by the experience of the thirty years in America to save most lives. At the present time there are unquestionably a number of American surgeons who in originality, resourcefulness, skill and wide experience in abdominal surgery have no superiors and few equals. Their special methods and a record of their successes are of course out of place in an historical paper.

The Principles of Surgery.

Besides the definite operative measures which have been mentioned, American surgeons have introduced many new and important general principles of procedure. They were among the first to advocate the necessity of excision wide of the disease in the treatment of malignant growths. As an example of this, Crosby's complete removal of the upper extremity, interscapulo-thoracic amputation has already been mentioned; also Gross's advocacy of the importance of wide excision for breast cancer and of removing the nearest group of lymphatic glands. In discussing bone surgery, manipulation in the reduction of dislocations has been mentioned with the important part taken in this advance by Physick, Nathan Smith, Reid and Bigelow; also extension in the treatment of fractures suggested by Swift and Gurdon Buck. The introduction of the use of absorbable ligatures by Physick, the experimental work of Jameson showing its value, and the introduction of kangaroo tendon as suture, have also been mentioned.

The importance of rest in the treatment of surgical tuberculosis has recently been strongly emphasized. As I have also mentioned previously in this article, Physick advocated this important principle in hip-

joint tuberculosis (paper by Randolph, "American Journal of the Medical Sciences," 1830–31, vol. vii, p. 299). He was without question far in advance of his time in this matter. About the middle of the nineteenth century, the importance of rest not only in conditions which we now know to have been surgical tuberculosis of the bone, but in other diseases, was strongly advocated by Hilton in his classic book "Rest and Pain." How much, if any, of the suggestion of the value of rest Hilton got from Physick it is impossible to tell, but his work no doubt profoundly influenced British surgeons of that date and ever since. However, even as late as 1874, Sayre in his "Lectures on Orthopedic Surgery" states that continental surgeons were at that time still opposed to rest in such cases, then a generally recognized principle of practice by American surgeons. Sayre credits Harris with introducing extension in the treatment of joint tuberculosis and calls attention to the fact that in this way pressure of the opposing joint surfaces is prevented. Sayre's recommendation as to the importance of rest, fresh air, and abundant nourishing foods, including cod liver oil, cream and milk, leaves little to be added in the general treatment of bone tuberculosis, now thirty-five years after the time that these important matters were emphasized by Sayre.

F. H. Hamilton, in his little monograph, "Ekloplasty and Anaplasty" (1854), was probably the first to advocate skin grafting, many years before the procedure of Thiersch and others whose names are commonly linked with the introduction of skin grafting. This was a very important advance, which perhaps failed to attract more general notice because of the curious title which he gave to his little monograph.

The most important contributions to the principles of surgery—the introduction of antisepsis and anesthesia—remain to be mentioned. In both of these indispensable principles, early American surgeons had an important part.

In the development of modern aseptic and antiseptic surgical technic, three ideas are of fundamental importance: First, that the infectious material may be transferred from the diseased to the healthy person by direct contact or carried indirectly by the hands of doctors or nurses; second, that the infectious material is a living organism; third, that the infectious material may be destroyed or its action checked by certain chemical or physical means.

The second of these great facts—the fact that infection is caused by living organisms—is undoubtedly of greatest importance, and the credit for this epoch-making discovery is due to Pasteur. But the first and third of these principles are also indispensable, and our American profession deserves credit for advocating them at probably an earlier date than the workers in any other country. Oliver Wendell Holmes's

great essay on "The Contagiousness of Puerperal Fever" (1842) brought out the important fact that infection is carried by the hands of doctors and nurses from one patient to another. While this was primarily a contribution to obstetrics, the principle is quite as important in its application to surgery. While Holmes undoubtedly did not succeed in convincing many of the leading men of his day of the correctness of his conclusions, his most forceful writing undoubtedly did a great deal to promote greater care on the part of doctors and nurses to avoid carrying infection by their hands from the diseased patients whom they attended to others not so afflicted. No other writer up to that time had ever collected such a vast amount of data or presented it in anywhere near as convincing a manner. It undoubtedly had an important influence in paving the way for aseptic and antiseptic surgery.

Relatively few of those interested in the history of asepsis and antisepsis know that Nathan Smith advised the use of bichloride of mercury solution, ten grains to the pint, many years before it came into general favor as a substitute for carbolic acid in antiseptic wound treatment. Had this observation, published in the "Philadelphia Monthly Medical Journal of Medicine and Surgery," 1827, vol. i, attracted much attention in that day, the general introduction and use of antiseptic surgery would have come about forty years earlier than it actually did. As it did not attract very much notice, Smith was at least spared the harsh criticism and abuse which fell to Lister as a result of his suggestion to use carbolic acid. Lister deserves great credit for introducing the use of carbolic acid in the treatment of wounds. His observations at first were entirely empirical, and had not Pasteur soon shown the reason why carbolic acid is a valuable aid in wound healing, it is possible and even probable that the method would have fallen into disuse as did Smith's bichloride solution.

Although there are some who still regard the use of operating gloves unnecessary, probably the majority of successful surgeons of to-day consider the introduction of rubber operating gloves as one of the important advances in modern aseptic technic. There seems to be no question that W. S. Halsted was the first to suggest the use of rubber gloves. The important question of their value in surgery is thoroughly discussed by Lockett ("Philadelphia Medical Journal," 1899, vol. iii). He gives the details of a series of experiments carried out in Keen's clinic, showing that the cotton gloves then advocated by Mikulicz and other continental surgeons are not reliable as a means of hand disinfection, and refers to Halsted's paper in the "Johns Hopkins Hospital Reports" (March, 1891, vol. ii). Curiously characteristic of the attitude of German writers, Klemm, in his "Leipzig Inaugural Dissertation," exhaustively reviews the subject of hand disinfection, giving careful references, yet he credits

Zöge-Manteuffel with the introduction of operating gloves in spite of the fact that his own references show that Halsted published his article advocating the use of rubber gloves eight years earlier than Zöge-Manteuffel.

Quite equal in importance to the introduction of antisepsis was the discovery of anesthesia. Not only does the truly epoch-making discovery of prevention of pain during operations by ether anesthesia belong to America, but far more has been done by Americans than is generally known in introducing other forms of anesthesia. After the introduction of ether anesthesia, it was a relatively easy step to apply other similar gases for the production of anesthesia. To Simpson, of Edinburgh, no doubt belongs the credit of suggesting the use of chloroform, but there seems to be every reason to believe that the credit of the discovery of the chemical, chloroform, belongs to Guthrie, who then lived at Sackett's Harbor, New York. In an article published in "Silliman's American Journal of Science and Art," October, 1831, he described "A New Mode of Preparing the Spiritous Solution of Chloric Ether." The Germans give credit to Leibig, the French to Soubeiran, but careful investigation seems to show that Guthrie antedated both. (See pamphlet entitled "Memoirs of Dr. Samuel Guthrie and the History of Discovery of Chloroform" by Ossian C. Guthrie, Chicago, 1877.)

Corning's use of spinal anesthesia has already been mentioned. In his little book on local anesthesia, published in 1886, he also discusses many of the important questions concerning local anesthesia, such as the effectiveness of weak solutions, lack of harmful influence in wound healing, nerve blocking, etc., which have later interested many workers in this field.

While Sir Humphrey Davy discovered the chemical nitrous-oxide gas, and knew something of its anesthetic properties, Horace Wells doubtless made much more practical use of this anesthetic than any previous worker, and his influence on Morton very likely helped to lead to the discovery of ether anesthesia.

Anesthesia and antisepsis are certain to stand through all time as the great discoveries not only of the nineteenth century, but of the entire history of surgery. Important as all regard antisepsis, it is certain that most persons, if they had to choose between operations without anesthesia or without antisepsis, would take the old dirty methods rather than the terrible torture of an operation without anesthesia. Every member of the medical profession should know of William T. G. Morton who introduced ether anesthesia in 1846; how after failing in business in Boston, he studied dentistry in Baltimore, and later medicine in Boston; how he entered the dental office of Horace Wells, of Hartford, Connecticut, who used nitrous-oxide gas anesthesia, first as an assistant,

later becoming Wells's partner; how, while at Harvard Medical School, he was an office student of Charles P. Jackson, the physician and chemist; and after much experimentation on animals, upon himself, and upon dental patients, he finally established the value of ether anesthesia. The long controversies as to whether the credit for the discovery of anesthesia belongs to Crawford W. Long, of Danielsville, Georgia, who removed a small tumor from a negro's neck under ether anesthesia as early as 1842, or to Jackson or Wells, both of whom also laid claim to the credit for this discovery will still be remembered. Sir James Paget has summed up their relative claims very well: "While Long waited and Wells turned back and Jackson was thinking, and those to whom they had talked were neither acting nor thinking, Morton, the practical man, went to work and worked resolutely, he gave ether successfully in severe surgical operations, he loudly proclaimed his deeds, and he compelled mankind to hear him." Whatever our decision may be as to the relative merits of the claims of these different men, they were all Americans, and the credit for the discovery of anesthesia certainly belongs to America.

The unprejudiced student of the world's surgery, from American Colonial times to the present, can hardly escape conviction that the achievements of early Americans were of equally high significance in medical science as were those of their countrymen in statesmanship and war. These early American surgeons were of good British, Dutch, German and French descent and traditions, many of them students of the acknowledged masters of their day. They came from town and hamlet, in New York, Pennsylvania and New England, and from the then frontier outposts of Kentucky and Wisconsin, from the Carolinas and Georgia, and from newly-settled Ohio and Indiana. Few states failed to furnish a surgeon of noteworthy achievement, even as they furnished soldiers for the wars. They were trained in orignal, inventive thinking, and aggressive, forceful action by a thousand conditions of their pioneer lives. It would have been strange if men of such training and tradition had attained so much in other lines of activity and failed in work of such practical significance as surgery. During many years in which the American profession was ignored and ridiculed in the older centers of education, our surgeons were successfully undertaking operations in abdominal, brain, thoracic and bone surgery which had never been thought of by their European masters of that time. A few names of those truly remarkable men, like Ephraim McDowell, Nathan Smith, and Marion Sims, are quite generally known and honored; a much larger number are unknown even to the majority of their own countrymen, who more often credit French, German, or English workers with priority. It should be a matter of patriotic pride with American citizens to know and credit our pioneers with achieve-

ments which were easily as far in advance of their times in surgery as were many policies of our statesmen in government.

MARTIN B. TINKER.

NOTED SURGEONS OF THE UNITED STATES ARMY AND NAVY.

When the War of Independence broke out the American Colonies were entirely unprepared for the great struggle. Armies had to be created, horses, arms, ammunition and all the necessaries of war to be provided for. A medical department, one of the most important elements for carrying on war successfully, had to be established. Fortunately the country had men equal to the task. Morgan, Shippen, Cochran brought order out of chaos; they organized the medical service, established hospitals, introduced sanitary measures and gathered a competent corps of surgeons. The services these men rendered the cause of liberty were no less valuable than those of the men who fought and bled on the battlefields of the Revolution.

During the War of 1812, Surgeon-General Tilton stood at the head of the Medical Department of the Army. He had a rare talent for organization, and by his zeal and devotion rendered his country invaluable services. Tilton was followed by Lovell, a noble and high minded gentleman, who labored incessantly for the elevation and perfection of the medical service of the army. During the period immediately preceding the Civil War the department stood under Surgeon-General Lawson, who commands both our admiration and respect as an organizer, as a man of deep sense of duty and rare executive ability.

Then came the great struggle between the States, and the Medical Department of the Army was put to a severe test, but "the corps proved true to its past record and astonished the world, not less by the vastness of its operations than by the success of their accomplishment." So marked was the progress in military surgical and sanitary science during the great war, and so efficient was the work of the medical department, that it attracted the attention of European governments, who found it to their interest to study its organization and "to avail themselves of the vast treasures of experience accumulated by the medical department in our last great war."

The Medical Department of the Navy is of a later date than that of the army. The navy was very small during the Revolution and its medical service was practically without an organization. The man who organized the Medical Department was Dr. Barton, who, in 1842, became chief. The standard was steadily raised until it is now equal to that of any navy in the world.

Among the surgeons of the United States Army and Navy who dis-

tinguished themselves by their scientific investigations or literary contributions to medical science, there are a number who will always hold a prominent place in the history of medicine. One of the brightest stars is William Beaumont, who was a pioneer in the physiology of gastric digestion and whose name is mentioned in every text-book of physiology. Tripler occupies a prominent place as a writer on military surgery. The writings of Barton and Ruschenberger, of the navy, commanded attention outside of America. Barton's works on "American Plants" belong to the best that has been written on this subject. Hammond was a noted writer on surgery; his works have been translated into the principal foreign languages. The names of Otis, Huntington, Smart and Woodward, the authors of the "Medical and Surgical History of the War of the Rebellion," will always be mentioned conspicuously in the history of military surgical and sanitary science. Elliott Coues of the army distinguished himself as a writer in ornithology, zoology and comparative anatomy. The brilliant work of Reed, Carroll and Lazear needs no mention here; it has become the property of the civilized world.

A. Allemann.

History of Gynecology in America.

The history of gynecology seems to me more full of dramatic interest than the evolution of any other medical or surgical specialty. What used to be called gynecology by the ancients, Soranus, for example, in the second century of this era, and what passed for gynecology in the collections of Bauhin, Wolf and Spach in the last half of the sixteenth century bears no resemblance whatever, except in name ("Gynaeciorum, etc."), to the fair specialty we know to-day. Gradually out of the inchoate mass transmitted to us through the centuries, in the course of the last hundred years, there has arisen a specialty which has aroused more interest, and whose development has been followed with more enthusiasm than that of any other branch of our art.

The uncertain, fragmentary, speculative and pottering gynecology of the ancients came to an odd fruitage in the last century in such books as Dewees' (1768–1841) "Treatise on the Diseases of Females" (1826), where inflammation of the uterus and hysteria are the dominant ailments, and in the work of Hugh L. Hodge (1796–1873), "Diseases Peculiar to Women," Philadelphia (1860), where nervous irritation and irritable uterus, and "irritable" diseases occupy 230 out of 436 pages, and displacements of the uterus demand 150 pages for their non-surgical treatment.

The last writings of this kind, which reached their acme in the pessary school of gynecologists, emanated from the pen of Grailey Hewitt (1828–1893), "The Diagnosis and Treatment of Diseases of Women," London, 1863.

In the meantime, while the old gynecology was thus going to seed, there was, beginning with McDowell, in 1809, and Marion Sims, in 1849, a new gynecology springing up full of life and vigor, sturdy, independent and aggressive, about to disown all but a remote kinship with the pining maiden allied to obstetrics, still wearing a pessary, woe-begone with an irritable uterus and bed-ridden with hysteria.

The new specialty, the first of all modern specialties, was the child of a new spirit in a new age, born in an era of healthy scepticism, and fostered by every new and quickening influence in an age pre-eminent in scientific investigation and progress.

Gynecology thus sprang not like Minerva fully armed from the head of Jove, perfect at the onset, but took shape gradually, being moulded feature by feature and limb by limb, the formation and assemblage of the parts being hastened by the discovery of certain general principles, affecting and quickening the whole art of surgery in all its branches. It was, notably, anesthesia which robbed surgery of its horrors, asepsis which robbed it of its dangers, and cellular pathology which came as a godsend to enable the operator to discriminate between malignant and non-malignant growths.

The vital question which now affects gynecology is this, is she destined to live a spinster all her days? For we see her on one hand courted by her obstetrical ancestor, who seeks to draw her once more into an unholy, unfruitful alliance, destined to rob her of virility, to be rocked into inocuous desuetude for the rest of her days in the obstetric cradle, sucking the withered ancestral finger in the vain hope of nourishment [with apology for mixed metaphor].

On the other hand, we see her wooed by a vigorous, manly suitor, General Surgery, seeking to allure her from her autonomy into his own house under his own name, obliterating her identity.

Aside from the three great factors mentioned which have done so much to transform modern surgery, certain other scarcely less important factors took their rise in the spirit of the times, and were scarcely less effective if less spectacular and less heralded.

These were:

1. The formation of voluntary mutual improvement associations for the discussion of medical topics and the promulgation of new ideas, commonly called state or county medical societies.

2. The more or less regular publication of journals or transactions by these societies for the permanent record and the wider diffusion of knowledge.

3. The formation of lectureships and professorships on Diseases of Women in various teaching institutions. Giving dignity to the subject and training young men.

4. Special societies devoted to gynecology and obstetrics, exclusively.

5. The publication of journals devoted exclusively to obstetrics and gynecology, associated it might be with pediatrics.

6. The publications of books devoted to diseases of women.

7. The founding of special hospitals for the treatment of gynecological patients.

8. The original work of certain individuals. State and county societies.

I cannot here do more than refer to the early existence of some of our societies, and as an example of the kind of work they were wont to do refer to Horatio Storer's Digest in his "Outline History of American Gynecology," published in the "Journal of the Gynecological Society of Boston," 1869–1870.

Some of these societies were:

1735. A Medical Society in Boston.

1765. The Philadelphia Medical Society.

1766. The New Jersey State Medical Society.

1769(?). A Medical Society in New York City.

1781. The Massachusetts Medical Society.

1787. The College of Physicians of Philadelphia.

1789. The Medical Society of South Carolina.

1789. The Medical Society of the State of Delaware.

1791. The New Hampshire Medical Society.

1792. The Connecticut State Medical Society.

1797. The Academy of Medicine of Philadelphia.

1798. The Medical and Chirurgical Faculty of the State of Maryland.

1847. The American Medical Association.

1878. The Chicago Gynecological Society.

For a list of these and other societies, some now extinct, see "A Century of American Medicine," vol. lxxii, "American Journal of the Medical Sciences," 1870 (Dr. John S. Billings).

Among these early societies which issued their transactions for the edification of their members and the medical public at large were:

The New Jersey Medical Society in 1766.

Massachusetts Medical Society in 1790.

The College of Physicians of Philadelphia in 1793.

Medical Society of the State of New York in 1808.

Medical Society of the State of Maine in 1834.

American Medical Association in 1848.

It would be going too far afield to mention here the numerous medical journals, often of short existence, which also did much to stimulate study and diffuse information. The best and most representative of these was undoubtedly the veteran "American Journal of the Medical Sciences,"

which began as "The Philadelphia Journal of the Medical and Physical Sciences," in 1820, under Dr. Nathaniel Chapman. In 1827 Isaac Hays edited and re-named it.

Before this came the first American journal, "The Medical Repository," edited by S. L. Mitchell, and others, published in New York, 1797, and the second in 1804, "The Philadelphia Medical Museum," edited by Redman Cox. Baltimore produced the third, "The Baltimore Medical and Physical Recorder," edited by Tobias Watkins, 1809.

The first west of the Alleghenies was the "Western Quarterly Reporter of Medical, Surgical and Natural Science," 1822, with John Godman, editor.

"The Illinois Medical and Surgical Journal" began at Chicago in 1844; in the South the first was the "Journal de la Société Médicale de la Nouvelle Orleans," 1831.

"The Journal of the American Medical Association" began its valuable publications in 1848. "The Annals of Surgery" took its birth in 1885.

Journals Devoted to Gynecology and Obstetrics.

First and foremost in the record of splendid service rendered gynecology and obstetrics stands, "The American Journal of Obstetrics and Diseases of Women and Children," which issued its first volume in New York in 1869, under the editorship of E. Noeggerath and B. F. Dawson.

Paul F. Mundé, its best known editor, did his finest work in connection with this journal which he edited from 1874 to 1892.

The "Annals of Gynecology" (1887) and "Pediatrics" (1889), edited by E. W. Cushing, of Boston, has issued many articles of the first importance in these special lines, and "The New York Journal of Gynecology and Obstetrics" appeared in 1889, under the editorship of J. Duncan Emmet. This ran a brief course for four years and then became "The American Gynecological and Obstetrical Journal," while "American Gynecology," with Charles Jewett as editor, ran through 1902–3. One of the most influential journals in the country at present is "Surgery, Gynecology and Obstetrics," edited by F. H. Martin.

Chairs of Diseases of Women.

Theodore Woodward (1778–1840) appears to have been the first professor of "Diseases of Women and Children" in this country, in the year 1822. This was at the Vermont Academy of Medicine and combined with obstetrics. John W. Francis (1789–1861) occupied a similar chair from 1819–1820 at the College of Physicians and Surgeons, New York.

Some early professors and lecturers on diseases of women and children (with other subjects) at the various medical colleges appear to have been:

Theodore G. Prioleau (1824), Medical College of South Carolina; Richard Wilmot Hall (1813), University of Maryland; Joseph A. Eve (1839), University of Georgia; Bedford S. Gunning (1840), Medical College of New Jersey; Charles Meigs (1841), Jefferson Medical College, Philadelphia.

E. R. Peaslee was professor of gynecology at Bellevue Medical College in 1874; and in 1866, he was succeeded by T. G. Thomas who took the title professor of obstetrics and diseases of women, 1863, at the College of Physicians and Surgeons.

Four special local societies devoted to gynecology and obstetrics holding monthly meetings, and societies with a national membership holding yearly meetings, have apparently done more than any other agency to bring the nascent specialty to a state of perfection. Among those deserving honorable mention are: 1. the Gynecological Society of Boston, founded in 1869; 2. the Philadelphia Obstetrical Society founded in 1868, which published its transactions which were later committed to the "American Journal of Obstetrics." 3. The New York Obstetrical Society was formed in 1876 and its proceedings have appeared since that date in the "American Journal of Obstetrics." 4. Two years later the Chicago Gynecological Society was organized.

First and foremost of all our special societies in its long and splendid record of service stands the American Gynecological Society which was founded in 1876, under the presidency of Fordyce Barker, with Washington L. Atlee and William H. Byford as vice-presidents and that veteran worker James R. Chadwick as secretary, Paul F. Mundé being treasurer. Other members of the council were Sims, Goodell, and Parvin, a galaxy of names ever famous in the annals of gynecology. Who can compute the value of the services of these earnest workers and their successors, or the value of the transactions which they have issued ever since, year by year.

The Southern Surgical and Gynecological Association, founded in 1887 and issuing its transactions yearly, has also done yeoman service for the allied specialties, leading gynecology out of her too narrow path into broader ways.

One must mention here too the American Association of Obstetricians and Gynecologists and their transactions. The first meeting was held in 1888. Since that time this rival society has held a high place of honor in the midst of the special societies of the country, numbering among its members many of the best special workers in the country.

Hospitals for Women.

Although there were lying-in wards and maternity hospitals dating onwards from Shippen's pioneer institution in 1762, a woman's hospital

for the exclusive treatment of surgical affections did not exist anywhere in the world prior to the one founded by Marion Sims in New York (1855), as given in "Sims' Autobiography," where Sims worked, assisted by Sister Margaret, and with Thomas Addis Emmet as his coadjutor. The Chicago Hospital for Women and Children was opened in 1805, and A. Reeves Jackson formed the Women's Hospital of the State of Illinois in Chicago, in 1870. Two followed in Philadelphia, the Kensington Hospital founded in 1883, by Howard A. Kelly, and the Gynecean Hospital founded in 1888, by Joseph Price and Charles B. Penrose. In New England, the Northeastern Hospital for Women and Children (Roxbury, Massachusetts) opened in 1863; the Free Hospital for Women was founded by Dr. W. H. Baker, in 1876.

The Work of Individuals.

With all these adjuvant agencies at their command, activities born of the very spirit of the times, it arouses no special wonder when we note that decade by decade earnest, inspired workers have come forward to aid in pushing the new specialty onwards to perfection. Two distinct lines of surgery sprang up and converged under one head, they were the intra-abdominal affections—tumors and inflammatory diseases, and the vaginal diseases mostly treated by plastic surgery.

It would be tedious, simply following a chronological order, to trace the advances, decade by decade, so I will preferably take up certain important topics and refer briefly to the work done under each head by some of the more prominent individuals, regretting that time and space prevent my attempting to do justice to all, for of many it may justly be said, as we may say of our great leaders to-day, they were but *primi inter pares*. The topics considered will be ovariotomy, fibroid tumors, normal oöphorectomy, extrauterine pregnancy, pelvic inflammatory disease.

Vaginal plastic operations constitute another field which has yielded abundant fruit to the gynecological surgeon. We will consider vesico-vaginal fistulæ, lacerations of the perineum, lacerations of the cervix uteri, rapid dilation of the cervix, uterine displacements, cystitis and pyelitis.

Ovariotomy.—McDowell (1771–1830), by his operation in 1809, cut gynecology as a specialty, by Cesarean section, *ex utero matris*, the successful major operation prophetically heralding the advent of all similar, minor procedures destined to follow in its train. ("Philadelphia Medical Repertory and Analytical Review," 1817.)

Nathan Smith (1762–1829), in 1821, one of the most original pioneer surgeons this country has ever seen, also independently conceived and executed this great operation. Ovariotomy was tried with varying success by A. Goldsmith, J. A. Gallup, D. L. Rodgers and J. Bellinger in

the interval, but was next taken up and made a great and successful operation by two men of the highest surgical genius, the distinguished Atlees, John Light (1799–1885) and Washington L. (1808–1878), in the forties and fifties.

John Light Atlee (1799–1885), of Lancaster, Pennsylvania, had seventy-eight cases with sixty-four recoveries. In 1843 he did the first double ovariotomy (Gross, Autobiography, p. 176). In 1855 Washington L. Atlee, who was a great writer, published his first thirty-five cases. He wrote his large work, the "General and Differential Diagnosis of Ovarian Tumors," Philadelphia, 1873.

I think the high-water mark of careful analysis, good teaching and good writing was reached by E. R. Peaslee (1914–1878), of New York, who widely influenced the practice of his day and generation and published our classical work on "Ovarian Tumors" in 1872; in this Peaslee devotes forty pages to the treatment of the pedicle, the most burning subject of that time.

In 1870 T. Gaillard Thomas did a vaginal ovariotomy ("American Journal of Medical Sciences," 1870), and in 1872 R. Davis, of Wilkesbarre, Pennsylvania, also successfully removed an ovarian tumor by the vagina ("Transactions State Medical Society of Pennsylvania," 1874). These pioneers in a new field were followed by J. T. Gilmore, of Alabama, in 1873 ("New Orleans Medical and Surgical Journal," 1873), and Robert Battey, of Rome, Georgia, in 1874 ("Atlanta Medical and Surgical Journal," 1872). H. T. Byford became a pioneer in this field in 1888. Vaginal oöphorectomy and vaginal ovariotomy were thus revived by Byford, of Chicago, after earlier operators had abandoned the method. ("American Journal of Obstetrics," 1888, p. 337.) (Byford's "Diseases of Women," 1888, revised by H. T. Byford.)

J. F. Miner, of Buffalo (1823–1886), in 1869 advocated "Ovariotomy by Enucleation without Clamp, Ligature or Cautery" ("American Journal of Medical Sciences," 1872, vol. lxiv, p. 391) with the object of getting rid of ligatures and so avoiding the greatest risk attending an operation in pre-antiseptic days, namely an infection so often introduced by an unsterilized ligature.

John S. Parry (1843–1870) wrote upon the "Sudden Enlargements of Ovarian Cysts from Hemorrhages" ("American Journal of Medical Sciences," January, 1871, p. 53).

Fibroid Tumors.—America has had perhaps more to do with the evolution of the surgery of fibroid tumors than any other country, and the early work in this important field is particularly creditable to the intrepidity and the ingenuity of our surgeons.

The history of fibroid tumors, judicially and well written by Charles P. Noble, of Philadelphia, forms one of that noted surgeon's most valuable

contributions to medical literature. ("History of Early Operations for Fibroid Tumors," "American Journal of Obstetrics," vol. xl, 1899.)

In 1844 Washington L. Atlee did a successful myomectomy. ("The Surgical Treatment of Certain Fibrous Tumors of the Uterus," New York, 1853.)

In 1846 John Bellinger did a deliberate hystero-myomectomy on a colored woman, using "animal ligatures;" the patient died of peritonitis on the fifth day.

In 1853 Walter Burnham, of Lowell, Massachusetts, did a successful hystero-myomectomy, being forced to remove the tumor which had become extruded from the incision. ("Boston Medical and Surgical Journal," January, 1883.)

In the same year Gilman Kimball (1804–1892), of Lowell, Massachusetts, did the first successful operation deliberately undertaken.

In 1884 T. A. Emmet operated for a fibroid cyst, amputating the uterus at the vaginal junction. The cervical stump was shut in by bringing the two raw surfaces in contact, the portion of the bladder which had been dissected off was then drawn over the stump so as to cover it with a hood, and the whole was thus placed outside of the peritoneum. ("Principles and Practice of Gynecology," T. A. Emmet, second edition.)

While Koeberlé of Strasburg, Hegar of Freiberg, Schroeder of Berlin, Tait of Birmingham, and Keith of Edinburgh were making Herculean efforts to perfect the radical operation for fibroid tumors by treating the pedicle of the tumor (the neck of the womb) with various adjustable cable constricting devices to control the hemorrhage and expose it to view by suturing it in the lower angle of the wound outside of the peritoneum to control sepsis, Joseph Eastman of Indianapolis, F. Krug, and William M. Polk of New York were endeavoring to get rid of the sloughing stump by doing a panhysterectomy.

H. T. Byford devised an extraperitoneal method of treating the stump called vaginal fixation of the stump in abdominal hysterectomy. ("Transactions American Gynecological Society," vol xiv, 1889, vol. xv, 1890.)

Mary A. Dixon Jones, of Brooklyn, reported a "complete hystero-myomectomy" in the "New York Medical Journal" for August and September, 1888, following a plan proposed in the "Medical Record," December 24, 1887, of removing the large uterine tumor above and extracting the cervix by the vagina so as to "leave the vaginal opening in the best and most natural way of drainage."

In 1889 L. A. Stimson, of New York, wrote on "Some Modifications in Technic of Abdominal Surgery" and proposed the abandonment of the mass ligatures, adopting the ligation of the cardinal vessels instead. ("Medical News," Philadelphia, 1889.) This simple idea of Stimson's proved to be the egg of Columbus in the treatment of these hitherto

difficult and dangerous tumors, for the difficulties and dangers of the situation were not inherent but were actually created by the coarse, unsurgical procedure of ligation *en masse*, begotten of the unwarranted fears of the surgeon.

In 1892 a perfected technic was offered by Benjamin F. Baer, of Philadelphia, a pupil of William Goodell, also advocating the ligation of the vessels independently without a single ligature in the tissues of the cervix, which was then dropped and buried underneath the pelvic peritoneum. ("American Journal of Obstetrics," 1892, vol. xxvi.)

In 1894 W. R. Pryor, of New York, advocated "A New and Rapid Method of Dealing with Intraligamentous Fibromyomata" in which he cut across the cervix from the free side, reached the intraligamentary tumor and shelled it out in a direction from below upwards. ("Medical News," 1894.)

Normal Ovariotomy, Pelvic Inflammatory Diseases.

In 1873 Robert Battey, of Rome, Georgia, read a paper before the Georgia Medical Association, published in the "Atlanta Medical and Surgical Journal," 1873, advocating the removal of both ovaries for intractable dysmenorrhea and other aggravated troubles where the invalided patient could not be relieved by any other method. This operation, known as "Battey's," taken up by Hegar of Germany, and Tait of Birmingham, England, opened up the whole field of pelvic operations for diseases of the organs other than gross ovarian and fibroid tumors. Tait's experience with "Battey's operation" is shown by this quotation, "so far as my own work in Battey's operation is concerned, in not a single one of the six patients operated upon were the uterine appendages normal." ("Medical News," September 6, 1884.) It was a case of *capere occasionem*, and Battey's work was quickly followed on new lines by Tait, who opened up and developed the treatment of pelvic inflammatory diseases, which was noticeably taken from his hands in this country by the brothers Joseph and Mordecai Price of Philadelphia, by Arthur W. Johnstone of Cincinnati, E. C. Dudley of Chicago, and others. W. H. Byford (1817–1890) originated, in 1885, the plan of dilating the opening of pelvic abscesses discharging into the rectum in order to secure efficient drainage. ("Chicago Medical Journal and Examiner," January, 1886.)

It is hard for a younger surgeon in this day to realize how difficult it was for a surgeon in the eighties to emancipate himself from the errors of such Nestors in surgery as Emmet and Thomas, and to recognize as tubal inflammatory diseases and tubal abscesses, conditions which these great observers diagnosed as phlegmons developing in the para-uterine cellular tissues. The greatest surgical battle ever fought was that waged in the various obstetrical societies on this subject.

One can more readily appreciate the pre-eminent and original part Joseph Price has borne in the evolution of the treatment of pelvic inflammatory diseases in the eighties as he dictated the practice not only of this country but to some extent of the entire world ("Transactions of Philadelphia County Medical Society," Philadelphia, 1890) when we recall the fact that Tait's work on pelvic abscesses began as late as 1880. Tait was then in the habit of suturing the abdominal incision down to an opening made in the exposed abscess, which he at that time thought could not be removed. Of Price's high skill in dealing rapidly and safely with these cases there are surgeons living in all parts of the country to testify.

Extra-uterine Pregnancy.—The most dramatic operation in the whole realm of surgery is that for a ruptured extra-uterine pregnancy which lingered so long as one of the most hopeless and distressing ailments. The conquest of this malady was one of the most brilliant achievements of the last century. The early history of this subject will be found scattered through the pages of John S. Parry's classical work, "Extra-uterine Pregnancy, etc.," Philadelphia, 1876. Also an outline in "A Sketch of the History of Obstetrics in the United States up to 1860," by J. Whitridge Williams.

In 1759 John Bard made a diagnosis of extra-uterine pregnancy and opened the abdomen and removed a macerated fetus. The wound was kept open and the patient recovered. ("Medical Observations and Enquiries," London, 1764, vol. ii.)

In 1791 William Baynham, of Virginia, operated successfully upon the wife of a planter. He repeated the operation in 1799 upon a slave. ("New York Medical and Philosophical Journal," 1809, vol. i.) For these references see Parry (*ut supra*) ("American Journal of Medical Science, 1876," vol. lxxii).

In 1817 Samuel Bard ("A Compendium of the Theory and Practice of Midwifery, etc.," New York, 1817) expressed the opinion that an abdominal pregnancy was never primary.

Hodge tells us that in 1827 Thomas Chalkley James, of Philadelphia, also insisted that "Ventral or Abdominal Pregnancy" (address before the College of Physicians of Philadelphia) never originally occurred, that tubal or uterine pregnancy had previously existed, in cases where the child was found in the cavity of the abdomen. (Hodge's Biography," American Journal of Medical Sciences," July, 1843.) This anticipates a long discussion settled finally by the microscope in the hands of Werth and others.

In 1867 S. Rogers advocated gastrotomy after the rupture of the cyst of an extra-uterine pregnancy. ("Transactions of the American Medical Association," 1867, vol. xviii.)

In 1872 J. G. Allen, of Philadelphia, reported three cases of extra-uterine

pregnancy in which he had used a "very powerful galvanic current to destroy the extra-uterine pregnancy in fetus in some three cases," in 1869, in 1870 and later. All the patients recovered but the last one died later passing fetal bones by the vagina. ("American Journal of Obstetrics," vol. v, 1872.)

This practice of Allen's was widely discussed and largely influenced the practice of a generation which was destined to try out all the possibilities of electricity, galvanism and faradism as therapeutic agents.

Lawson Tait began his radical surgical work on extra-uterine pregnancy in the seventies. ("Successful Case of Gastrotomy in Extrauterine Pregnancy," "Medico-Chirurgical Transactions," London, 1873.)

Joseph Price took up this most important subject in the early eighties and taught our country at large how to recognize and how to treat with success this hitherto difficult and fatal class ("Ectopic Pregnancy and Puerperal Peritonitis," Philadelphia, 1890).

No steps of importance have been taken since then, except the experiments by Hunter Robb at the Lakeside Hospital, Cleveland, showing that if the uterine vessels are cut in an animal, the bleeding will cease spontaneously and the animal will recover if no operation is done, thus supporting the doctine of a watchful armed neutrality in the desperate cases.

Vaginal and Plastic Operations.—The gynecological specialist has ever been fortunate in finding a broad and diversified field for his special services, one covering not only the graver abdominal operations for ovarian and uterine tumors, but also a variety of delicate plastic operations, for the most part relating to the repair of injuries received at birth. This latter group of operations originated too in a dramatic way, being identified at the outset with the person and the activities of the famous J. Marion Sims (1813–1883) of Montgomery, Alabama.

Vesico-vaginal Fistulæ.—Previous to 1850, the flesh of womankind was probably heir to no more distressing ailment, no more deplorable condition, than a vesico-vaginal fistula. John Peter Mettauer, of Virginia (1787–1875) had healed a case with leaden sutures and reached the conclusion "that every case of vesico-vaginal fistula can be cured and my success justifies the statement." ("Boston Medical and Surgical Journal," vol. xxii; also "American Journal of Medical Sciences," July, 1847.)

Jobert de Lamballe was persisting in spite of repeated failures and many deaths in Paris to replace the defect by his method of *autoplastie par glissement.* George Hayward (1791–1863), of Boston, had even succeeded in three cases out of nine in giving relief ("American Journal of Medical Sciences," August, 1839); Joseph Pancoast, of Philadelphia (1805–1882), had operated successfully in two cases ("American Journal of Medical Sciences," October, 1842; also "Medical Examiner," May, 1847).

Sims, almost with a magic wand, changed the whole subject from one succession of dismal failures to nearly a uniform success by new methods graphically described and clearly illustrated in a paper on "The Treatment of Vesico-vaginal Fistula" ("American Journal of Medical Sciences," vol. xxiii, 1852).

In 1853 he removed to New York City and in 1857 he delivered his memorable address on "Silver Sutures in Surgery." ("Transactions of New York Academy of Medicine," November, 1857.)

He visited Europe in 1861, teaching and honored, and awarded medals wherever he went; he returned to America in 1862, revisited Europe in the same year and remained there until 1868. For Sims' numerous contributions to surgery see "The Story of my Life," edited by his son, H. Marion Sims, New York, 1885, where in a brief biography by J. M. Toner, we have a list of his more important contributions on page 459.

In the dramatic rise of gynecological surgery in the fifties and sixties, the American surgeon deserves an unusual share of the credit of the evolution of the treatment of fistulæ. A yet greater share of credit, for the working out rational operations for the treatment of the ruptured vaginal outlet, including complete tear dividing the sphincter, is due to Thomas Addis Emmet. Emmet with the remarkable insight of genius caught Sims's idea at once, acquired his methods, and improved upon them and did more than any other surgeon to teach the members of the profession in this country how to do these operations at the Woman's Hospital in New York City. Emmet's book "A Treatise on Vesico-vaginal and Recto-vaginal Fistula," 1868, describes more graphically than anything written before or since, the methods of dealing with difficult cases.

Nathan Bozeman (1825–1905), another remarkable surgeon hailing from Alabama, also took up Sims' work and with some variations in the methods did many successful operations and became widely recognized as a teacher. (See "Remarks on Vesico-vaginal Fistula," Louisville, 1856.) (See also "Urethro-vaginal and Vesico-vaginal Fistula," "North American and Surgical Review," Philadelphia, 1851.)

Bozeman's merit is further enhanced by his treatment of pyelitis by irrigation of the kidney by means of a catheter introduced up the ureter through a vesico-vaginal opening. (See "New York Journal," vol. xlvi, 1887; also "American Journal of Medical Sciences," vol. xcv, 1888.)

The greatest inheritor of the skill of Sims and Emmet in the fields of plastic work appears to be E. C. Dudley of Chicago.

Alexander H. Ferguson describes a method of closure of a fistula by cutting deeply around its periphery through the vaginal walls down to the bladder. The circular flap made in this way is inverted into the

bladder and its raw surfaces approximated with buried catgut sutures, after which the vaginal walls are sutured together, closing in the entire raw area. ("American Journal of Obstetrics," vol. xxxi, 1895.)

John Ball, in 1873, wrote upon "Forcible and Rapid Dilatation of the Cervix Uteri for the Cure of Dysmenorrhea."

Lacerations of the Cervix.—T. A. Emmet devised and extensively practised the operation of the excision of connective tissue in the angles of a lacerated cervix associated with the denudation of the anterior and posterior lips and their union by suture. ("Surgery of the Cervix," etc.; "American Journal of Obstetrics," vol. i, 1869; also vol. vii, 1874.) This operation of recent years has been largely abandoned for the more radical German method of amputation of the cervix.

In perineal operations, Emmet's name stands pre-eminent as the one American who placed this common operation for the first time upon a sound, rational basis, by devising a successful widely-used procedure. The student of gynecological history has but to recall the painful efforts of his predecessors, Agnew, Ashhurst, Goodell, and others who made a bilateral, semicircular denudation called the "butterfly operation" and then drew the tissues together with deep wire or silk sutures which caused extreme pain commonly associated with suppuration.

Lawson Tait's flap operation, for many years refused by American surgeons preferring Emmet's methods, has latterly found favor associated with suture of the levator ani muscles; its simplest expression is the operation practised by Wayne Babcock, of Philadelphia. ("Journal American Medical Association," May 15, 1909, vol. xlii.)

In complete tear of the perineum, Emmet's work has also been supreme; to this C. Warren has made the important addition of turning down an apron of tissue from the perineum so as to shut off the rectal side of the tear. ("Transactions of American Gynecological Society," vol. vii, 1882; also "Boston Medical and Surgical Journal," January 3, 1878.)

R. L. Dickinson and J. Le Conte have added the special direct suture of the sphincter muscles, the former in recent obstetric cases, the latter in older cases.

George H. Noble has added the liberation and displacement downwards of the rectum itself to make up the defect and obviate the need of placing sutures on the bowel side.

Cervical Cancer of the Womb.—The evolution of the radical operation for cancer has been profoundly influenced by the work of a notable group of Americans.

In 1895 J. G. Clark, while still a resident in the Johns Hopkins Hospital, undertook to co-ordinate the operation for cancer of the cervix of the uterus with that of the breast, as worked out by Halstead, by making a wide extirpation including all the pelvic glands. ("Johns Hopkins

Hospital Bulletin," July and August, 1895; February and March, 1896.)

E. Ries, of Chicago, also independently conceived and executed the same procedure. ("Zeitschrift für Geburtshülfe und Gynäkologie," 1895, vol. xxxvii, 1897.)

John A. Sampson made a series of elaborate studies of the mode of advancement of cancer of the cervix as well as the relations of the ureters to the cervix in malignant disease ("Johns Hopkins Hospital Bulletin," December, 1902). Sampson pointed out the sheath investing the ureter as it passes through the broad ligament. ("Johns Hopkins Hospital Bulletin," 1904.)

Wertheim's operation, less limited in its extent than either of these, was naturally finally adopted as a compromise with these aggressive and more dangerous procedures.

Earlier still are the galvano-cautery extirpations of J. Byrne of Brooklyn, who, pursuing an ideal branded by his contemporaries as *ignis fatuus*, yet obtained far better results than they in this evolutionary period of the technic of this great operation.

The extensive use of the actual cautery, using such a simple outfit as a plumber's soldering iron, for advanced cases, we owe to the doctors, William and Charles Mayo.

To George Gellhorn we owe the use of acetone as a palliative to be applied to inoperable cervical cancerous growths. "A New Mode of Treatment for Inoperable Cancer of the Uterus by Means of Acetone." "Journal American Medical Association," Chicago, 1907, xlviii.

Postures in Gynecology.

Henry Fraser Campbell of Georgia (1824–1891) wrote his well-known and until recently much-quoted paper on the knee-breast posture entitled Pneumatic Pressure, and Mechanical Appliance in Uterine Displacements." ("Georgia Medical Association," April 23, 1875; "Transactions American Gynecological Society," vol. i, 1876.)

J. Marion Sims described his left lateral posture with his duck-bill speculum in his paper "On the Treatment of Vesico-vaginal Fistula." ("American Journal of Medical Sciences," January, 1852, p. 59.)

Suspension of the Uterus.—Methods of suspension or fixation of a retrodisplaced uterus have been devised by William Polk, W. Gill Wylie, G. M. Edebohls, J. Riddle Goffe, D. Tod Gilliam, J. M. Baldy, W. Bovee, J. C. Webster, S. Watkins, and William Mayo.

Cystitis.—Willard Parker devised the plan of opening and draining the bladder for cystitis. "Cystitis and Rupture of the Bladder Treated by Cystotomy." ("New York Medical Journal," vol. vi, 1851.)

This was also devised and extensively used by Emmet, from whom it has been widely adopted by the surgeons of to-day.

Gunning S. Bedford (1806–1870) was the first to use a patient in

gynecological teaching, taking a woman into the amphitheatre and using the speculum, an innovation and a bold procedure which naturally led to a great public outcry. ("Gross' Autobiography," vol. ii.)

Suspension of the Kidney.—The name of George M. Edebohls will ever be associated with suspension of the kidney ("Movable Kidney," etc., "American Journal of Medical Sciences," 1893); another field in which he also holds indisputable claims to originality and priority is the operation by decapsulation of the kidney in inflammatory affections. "The Cure of Chronic Brights' Disease by Operation." ("Medical Record," New York,1901, lx.)

In 1880, A. J. C. Skene described the important para-urethral glands commonly known as Skene's glands, lodging places for a latent gonorrheal infection. I do not know of any other anatomic discovery of note made by a gynecologist. ("American Journal of Obstetrics," vol. xiii, 1880.) Skene was also a pioneer in his treatise on "Diseases of the Bladder and Urethra in Women," New York, 1878.

The more purely scientific and analytic side of gynecology as represented by careful, well-digested, microscopic and anatomic studies, has unfortunately found but few representatives in this country. Among these few investigators we must mention Thomas S. Cullen, who has published a remarkable monograph on "Cancer of the Uterus," New York, 1900; he has also discovered the true source of adeno-myomata in the Muellerian organ and written a monograph upon this important disease, "Adenomyoma." To him we also owe the fullest investigation yet made of fibroid tumors, see "Myomata of the Uterus," Kelly and Cullen, Philadelphia, 1909. Other articles by Cullen are a "Study of Hydrosalpinx, its Surgical and Pathological Aspects, with a Report of Twenty-seven Cases." ("Johns Hopkins Hospital Report," 1894–5, iv, Nos. 7–8); also "Tuberculosis of the Endometrium," etc.

The works of J. Whitridge Williams are also models of scientific investigation, such as his "Contributions to the Histogenesis of the Papillary Cystomata of the Ovary" ("Johns Hopkins Hospital Bulletin," vol. ii, 1891), and "So-called Caseous Tumors of the Ovary" (Johns Hopkins Hospital Bulletin, vol. iii, 1892), and "Tuberculosis of the Female Generative Organs" ("Johns Hopkins Hospital Reports, vol. iii, 1892).

I append here a list of some important papers dealing with the history of gynecology, valuable repositories of data for the investigator; they are chronologically:

Storer (H. R.), "An Outline History of an American Gynecology." ("Journal Gynecological Society," Boston, 1869, i.)

Fitch, Simon, "Peculiarities of the Operations of Three Great Ovari-

otomists, Wells, Atlee and Keith." ("American Journal of Obstetrics, May, 1872.)

Lewis, Winslow, "The History and Progress of Gynecology in New England," 1872.

Thomas, T. Gaillard, "A Century of American Medicine." (Section iii, Obstetrics and Gynecology, "American Journal of the Medical Sciences," vol. lxxii, 1876.)

Sims, J. M., "Annual Address of the President." ("Transactions, American Gynecological Society," 1880, Boston, 1881.)

Valentine, M. T., "Biography of Ephriam McDowell, with Life Sketches and Portraits of Prominent Members of the Medical Profession," 1897.

"Transactions of the American Gynecological Society," 1909, vol. xxxiv. McDowell Centennial Number.

HOWARD A. KELLY.

HISTORY OF OBSTETRICS.

Europe had a galaxy of distinguished obstetricians and a respectable body of obstetrical literature before America ever thought of this fundamental branch as in any sense scientific, for parturition in the colonial days was considered a simple physiological function to be absolved in secrecy with a friend or a midwife at the bedside.

The first reference to a "male obstetrician" appears in a New York paper of 1745 which notes "the universal regret and sorrow" of the city that "Mr. John Dupuy, M. D., man-midwife" had died. The next obstetrician we hear of was Dr. John Moultrie, of South Carolina, practising there from 1733–1773 (Thacher), whose death created so great grief that depression laid such a heavy hand on women in labor and they lost courage and died.

Next appear three men, fresh from study under Hunter and Smellie, James Lloyd in Boston, William Hunter in Rhode Island, and William Shippen, Jr., in Philadelphia. Hunter gave the first medical lecture in America, and Shippen (1736–1808) was the first professor of midwifery in 1780 (University of Pennsylvania), including with that branch those of anatomy and surgery. Shippen provided "a convenient lodging —— under the care of a sober, honest matron" for poor lying-in women. He began his lectures on midwifery in the year 1762, after announcing his course in the" Pennsylvania Gazette."

The Revolution (1776) overturned all chairs for awhile, but later we find midwifery or obstetrics conjoined in one chair with medical jurisprudence, physics, surgery and anatomy.

Philadelphia continued to lead in systematic teaching, for in 1810 Thomas Chalkley James (1766–1835) became professor of obstetrics

as a distinct chair in the University of Pennsylvania. James is said to have been the first to induce premature labor for a contracted pelvis. He edited "Burns' Principles of Midwifery" in 1831, and Merriman's "Synopsis of the Various Kinds of Difficult Parturition" in 1816.

Walter Channing (1786–1876) was appointed lecturer of obstetrics in Harvard University in 1815. Between this date and 1824 some eleven new medical colleges or departments were founded, and in all obstetrics formed an obligatory or voluntary study.

Dr. Samuel Bard (1742–1821), the first professor of medicine in King's College, also made this quarter of a century notable by writing the first book on obstetrics in America entitled "A Compendium of the Theory and Practice of Midwifery" in 1807, a book which reached its fifth edition.

William Potts Dewees (1768–1841), of Philadelphia, next wrote his admirable "Compendious System of Midwifery" (1824) which had fourteen editions, and became the leading text-book, 9000 infant Philadelphians attesting in cherubic strains to the veracity of his quoted experience, and such was his fame that one lady—so it is said—delayed her accouchement a whole month because he was out of town.

J. W. Francis (1792–1869) of New York and C. D. Meigs of Philadelphia translated and edited valuable European works. "The New York Medical Repository," the first medical journal in America, born in 1797, gathered into its pages valuable suggestions and essays; later, in 1839, Meigs embodied his views in his systematic work, "Philadelphia Practice of Midwifery" (1838).

By this time the obstetric infant occupied an honored place in the halls of medicine, though as late as the forties Samuel Gregory of Boston, and John Stevens from London, England, wrathfully denounced and exposed in a pamphlet "the danger and immorality" of employing "men in midwifery," Stevens even dedicating his labors to the Society for the Suppression of Vice. The futility of their arguments was best shown by the fine folio of Hugh Lenox Hodge in 1864, on the "Principles and Practice of Obstetrics," illustrated by 159 lithographs from original photographs. For thirty-one years he had been a lecturer on obstetrics in the University of Pennsylvania, and at the age of seventy, with eye-sight almost gone, began this monumental book at once widely recognized and influential abroad, which laid the foundation of scientific obstetrics in America. Upon this basis Fordyce Barker, William F. Lusk, Charles Jewett, B. C. Hirst, J. Clifton Edgar and J. W. Williams have built their splendid superstructure of scientific investigation and teaching. In view of Hodge's great work in studying the parturient canal we to-day charitably forget his and Meigs' opposition to Holmes's new theory of puerperal contagion.

The greatest discovery ever made in the field of obstetrics is without a shadow of doubt the fact that puerperal fever is highly contagious and transportable by the physician from one patient to another. This discovery was made by Oliver Wendell Holmes, who issued a clarion appeal to the profession in 1843, in which he declares "the disease known as puerperal fever is so far contagious as to be frequently carried from patient to patient by physicians and nurses"! ("The Contagiousness of Puerperal Fever," "New England Quarterly Journal of Medicine and Surgery," 1842–3, vol. i).

Most great discoveries have been heralded by premonitory suggestive notes showing a trend of human thought, but this one, the greatest of all, sprang complete in all its important details from Holmes's brain. (Osler, "An Alabama Student and Other Biographical Essays," 1908.) (J. Whitridge Williams, "The History of Obstetrics in the United States up to 1860," "American Gynecology," 1903, vol. iii.)

Charles D. Meigs (1792–1869) was particularly vehement in opposing Holmes's views ("The Nature, Treatment and Signs of Childbed Fever," 1854), and Holmes answered the philippics of Meigs and Hodge ("The Non-contagiousness of Puerperal Fever," 1852) by a second one in 1855 on "Puerperal Fever as a Private Pestilence," Boston, 1855, to which he appended the first. This writing paved the way for the modern antiseptic regime in obstetrics.

J. P. White, of Buffalo (1811–1881), was the first to establish an obstetric clinic in America, in 1850, where the act of parturition was shown before a class. This new departure raised a storm of popular and even professional wrath and opposition. White's work as a teacher has culminated in our day in the splendid clinical teachings of our obstetricians in the various leading medical schools.

Chief among the obstetric works of a high scientific order come the studies of George J. Engelmann, of St. Louis, who has written an elaborate monograph upon "Labor Among Primitive Peoples," etc. One of Engelmann's last and most important works was comparative study of the function of menstruation. ("Transactions American Gynecological Society," vol. xxvi, 1901.)

That great statistican, Robert P. Harris, of Philadelphia, awards the first Cesarean section in America to Prevost, of Donaldsonville, Louisiana, who operated four times successfully prior to 1830, losing but one mother and operating twice on one woman.

We cannot pass the name of R. P. Harris without a merited tribute to this great writer, for the rehabilitation of the Cesarean section in modern times, a result of his innumerable clear writings upon this subject.

Braxton Hicks in England, in 1860, advocated combined cephalic version, but Marmaduke B. Wright, of Cincinnati, Ohio, had in "Difficult

Labors and Their Treatment," in 1854, advocated the same procedure. Hicks applied the principle also to podalic version.

In 1820 Ritgen, of Germany, proposed and actually did gastro-elytrotomy following Jörg's suggestion (1779–1856) in 1806; in 1822 P. S. Physick, of Philadelphia, proposed it to Horner, the anatomist, and in 1823 Baudelocque wrote a thesis upon it. J. G. Thomas independently originated the same idea which he first put into practice in 1870 on a cadaver and then did it on a woman *in articulo mortis* ("American Journal of Obstetrics," vol. iii,1870).

Most writers accord John Bard priority in diagnosing and operating on an extra-uterine pregnancy (1759), though there was a case—operator unrecorded—reported in the "American Magazine" for 1740; suggestions as to the advisability of abdominal section for intra-peritoneal hemorrhage were also made by W. W. Harbert in 1849, and Stephen Rogers in 1867.

Hodge and Meigs, America's greatest teachers, but aggressively conservative, opposed the use of ether in labor, the latter banning the anesthetic because "it made the patient practically drunk and no self-respecting woman would place herself under such an influence." Meanwhile, N. C. Keep, of Boston, had used it on April 7, 1847, and reported it to the "Boston Medical and Surgical Journal" of that year under the caption "The Letheon Administered in a Case of Labor." A year later, Walter Channing had thus noiselessly opened the gates of life 581 times.

Several hospitals had lying-in wards after Shippen started his small private maternity hospital in Philadelphia in 1762. The Society of the Lying-in Hospital, New York, was founded in 1799: for want of funds it amalgamated with the New York Hospital. Joseph Warrington started the Lying-in Charity in Philadelphia in 1828; Jonas Preston founded the Preston Retreat (1873) in the same city.

In Boston the first lying-in hospital was organized in 1832.

Howard A. Kelly.

Pamphlets on the History of Obstetrics.

Hodge, Hugh L., "The Principles and Practice of Obstetrics," (introduction). Philadelphia, 1864.

"A Century of American Medicine," 1776–1876. Philadelphia, 1876. ("Section on Gynecology and Obstetrics," by T. G. Thomas.)

Engelmann, G. J., "Pregnancy, Parturition and Childbed Among Primitive People." "American Journal of Obstetrics," New York, 1881, xiv.

Williams, J. W., "A Sketch of the History of Obstetrics in the United States up to 1860," "American Gynecology," 1903, vol. iii, a valuable

monograph which has been consulted at every step in the preparation of the preceding summary.

Dermatology.

Dermatology is a specialty of comparatively recent growth; in early times, when all medicine was more of less a matter of conjecture and experiment and the physician blindly groping after a few rays of scientific light, cutaneous diseases, more than others, were generally attributed to a supernatural cause.

When medicine became more firmly founded in science, skin diseases still received but little attention, although ever and anon, some writer would report a case of some rare cutaneous disorder, more as a curiosity than as a scientific contribution; hence, dermatology did not receive much notice until late in the eighteenth and early in the nineteenth century.

Then the teaching of Willan, the pioneer, Biett and Cazenave began to direct the attention of the advanced physician to the fact that cutaneous diseases were not of Divine origin nor was the understanding of them beyond the comprehension of mortal man.

The first medical publication in this country of dermatologcial interest; was a brochure entitled "A Brief Guide in the Small-pox and Measles," by the Rev. Thomas Thacher, a skillful physician as well as a preacher.

This work was published in Boston in 1677.

It is evident that syphilis was recognized and studied in this country as early as 1646, for it is recorded that there were so many cases of *lues venerea* in Boston that Elder Winthrope declared it "raised a scandal upon the town and country."

The medical writings of the eighteenth century often contained articles on diseases more or less related to dermatology; it was not, however, until the beginning of the nineteenth century that this specialty began to take any definite shape in America; perhaps the first step towards this beginning was the publication of Willan's treatise on cutaneous diseases, an English work which appeared in 1799. In 1824 Bateman's synopsis of Willan's work was published, and in 1829, one year after the issue of the original French edition, Dr. R. E. Griffiths, of Philadelphia, translated Cazenave and Schedel's "Abrégé Pratique des Maladies de la Peau." An American edition of Green's "Practical Compendium" was brought out in 1838.

In 1842 Henry D. Bulkley, of New York, edited, with copious additional notes, Thomas H. Burgess' Translations of Cazenave and Schedel's "Manual of Diseases of the Skin."

These text-books were the only ones used in this country until 1843, when Lea and Blanchard brought out an American edition of Erasmus Wilson's "Practical and Theoretical Treatise on Diseases of the Skin." This justly famous work was so accurate in its descriptions that it is even yet authoritative. It ran through a number of American editions, the last appearing in 1868.

In 1852 the same house published the first American edition of Neligan's "Practical Treatise on Diseases of the Skin." This work ran through four editions, the last one appearing in 1864.

In 1867 Dr. Howard F. Damon, of Boston, published a series of photographs of diseases of the skin taken from life; and in 1871 Dr. B. Joy Jefferies, also of Boston, wrote the Boylston Prize Essay on "The Recent Advances in Pathology and Treatment of Diseases of the Skin."

These works of Damon and Jefferies, aside from infrequent magazine articles, were, perhaps, the first distinctly American contributions to dermatology; although, in 1840, Dr. Henry D. Bulkley published a brochure of 66 pages on "Syphilis in Infants," which attracted widespread attention.

The first systematic treatise on dermatology by an American author was "An Elementary Treatise on Diseases of the Skin," by Dr. Henry G. Piffard, of New York, which was published in 1876.

In the same year (1876) Dr. Louis A. Duhring, of Philadelphia, published an "Atlas of Skin Diseases," which he followed in 1877 by his "Practical Treatise on Diseases of the Skin."

Since then Drs. J. Nevins Hyde, George T. Jackson, Henry W. Stelwagon, William A. Pusey and other American authors have written and published valuable works on dermatology.

The first journal devoted to this specialty was a quarterly journal known as the "American Journal of Syphilography and Dermatology," edited by Dr. Morris H. Henry, New York. The first number appeared January, 1870, the journal was discontinued in 1874.

In October, 1874, a quarterly journal entitled "Archives of Dermatology" succeeded the discontinued journal; Dr. L. D. Bulkley was the editor. The "Archives" was published until 1882, when it was succeeded by the "Journal of Cutaneous and Venereal Diseases." The first editors were Drs. Henry G. Piffard and Prince A. Morrow. This journal is still being published under the name of "The Journal of Cutaneous Diseases," and in 1911 became the official organ of the American Dermatological Association.

The only other journal devoted to this specialty, in America is the "American Journal of Dermatology and Genito-urinary Diseases," edited by Dr. S. C. Martin, of St. Louis. The first volume appeared in 1897; the publication is still continued (1910).

The first society for the study of skin diseases was established in New York City, the New York Dermatological Society. It was organized in 1869 and was the first strictly dermatological society in the world. The New York Dermatological Society has always been a clinical society, and its members are especially fortunate in being able to see and study many rare and peculiar specimens of cutaneous disorders.

In 1876 the American Dermatological Association was founded; its organizers were: Drs. L. Duncan Bulkley and George H. Fox, of New York, Louis A. Duhring, of Philadelphia, Edward Wigglesworth, of Boston, Isaac E. Atkinson, of Baltimore, and Lundsford P. Yandell, of Louisville; these six gentlemen issued an invitation to about fifty physicians in different parts of the United States who were more or less interested in dermatology, to join them in organizing a national association for the study of dermatology.

Twenty-nine accepted the invitation, and the association was successfully launched at Niagara Falls, September, 1877. The papers read before the American Dermatological Association are of high order, and the association stands with the best of the scientific bodies of the medical world.

In recent years dermatological societies have been organized in Brooklyn, Philadelphia, Boston and Chicago; all, with the exception of Brooklyn, are still in existence and are helping maintain the high standard that this specialty has attained in America.

There is no record of any special instruction by lecture upon this subject before 1836; then, Dr. Henry D. Bulkley, who had studied at the St. Louis Hospital, Paris, gave a course of seven lectures at the Broome Street Infirmary for diseases of the skin.

In 1841 he delivered a course of lectures on diseases of the skin during the spring term of the College of Physicians and Surgeons.

In 1861 Harvard University established a lectureship on diseases of the skin. Instruction on this subject was also given at the Rush Medical College, Chicago, 1865.

The same year (1865) regular lectures were given at the College of Physicians and Surgeons in New York.

In 1866 Bellevue Hospital Medical College, New York, and Jefferson Medical College, Philadelphia, created a lectureship on dermatology and venereal diseases.

In 1867 New York University established a professorship; the university had had lectures on dermatology two years previous to this.

In the seventies the Long Island College Hospital and the University of Maryland created lectures or professorships in skin diseases, and now all the representative medical schools have this branch of medicine properly taught.

The first dispensary in America for the treatment of skin and venereal diseases was the Broome Street Infirmary for Diseases of the Skin, established in 1836 by Drs. Henry D. Bulkley and John Watson.

In 1853 the DeMilt and Northwestern Dispensaries of New York created a special department for the treatment of skin and venereal diseases.

In the same year the Howard Hospital of Philadelphia was established with departments for the several specialties; cutaneous disease was included among the other branches.

In 1856 a clinic for skin and venereal diseases was opened at the Eastern Dispensary of New York City. A year later a clinic of the same character was established at the German Dispensary.

In 1862 the Northeastern Dispensary of New York opened a clinic for the treatment of skin and genito-urinary diseases.

In 1868 Dr. Howard F. Damon had charge of a clinic for diseases of the skin at the Boston City Hospital.

In 1869 the Massachusetts General Hospital opened a like service under the charge of Dr. James C. White.

After 1870 nearly all of the dispensaries of the United States established clinics for the treatment of these diseases, and many of the hospitals reserved wards for dermatological patients.

This, briefly, is a history of the rise of dermatology in America; and to one especially interested in this subject it shows what earnest persistence can accomplish against great odds.

Until about 1850 the study of skin disease in America, if studied at all, was done in a desultory manner, and the available literature was anything but helpful.

The French school of dermatology had been, for some years, at the height of its glory, and all that was written on this subject was more or less tinctured with the teachings of Biett and Albert; it was not until the American student's attention was attracted to Vienna, where Hebra was teaching dermatology in a comprehensive and commonsense manner, that this interesting and difficult type of disease began to be scientifically observed and studied, and Americans began to do original work in this specialty; then quickly followed text-books, atlases and histo-pathological reports and the American school of dermatology was founded.

James McFarlane Winfield.

Ophthalmology.

The beginnings of ophthalmology in this country are not known. It is probable that in the early days there were those who devoted themselves chiefly to the treatment of affections of the eye. Thus the Med-

ical and Chirurgical Faculty of Maryland adopted a resolution in 1805 that "the Board of Examiners be authorized to grant special licenses to dentists and oculists to practise in their respective branches, subjecting them to an examination only on the branches they possess . . . ." It is probable that these "oculists" did not stand in good repute and that they belonged to the class of traveling charlatans which had existed for several hundred years in Europe. As quacks cut for stone, so quacks operated for cataract. Thus Hirschberg quotes Lazare Rivière (1589–1655) . . . : "Because of its uncertainty the operation for cataract should not be performed by the regular surgeon but by the quacks who travel about in this practice."

A few papers, of no importance, published in the early part of the last century are evidence of an awakening interest on the part of general practitioners in the eye and its diseases. The importance of this subject was recognized more and more. In 1817 Elisha North of New London opened the first eye infirmary in this country. The New York Eye Infirmary came into existence in 1820, through the efforts of Edward Delafield and John Kearney Rodgers, and George McClellan established a similar institution in Philadelphia in 1821. Dr. George Frick opened an eye department in connection with the Baltimore General Dispensary in 1823 and one of the four wards of the newly completed Baltimore Infirmary was devoted to diseases of the eye. The Massachusetts Eye and Ear Infirmary was founded in 1824, and Wills Eye Hospital of Philadelphia in 1830. The men who founded and served at these institutions were for the most part physicians and surgeons who had acquired special knowledge of ophthalmology and skill in ophthalmic surgery in European hospitals—only a few of the earlier men like Frick, Littell and Isaac Hays devoted themselves exclusively to the treatment of diseases of the eye.

A description of ophthalmic practice in Philadelphia about 1860 is given by Black in his "Forty Years in the Medical Profession:" "Forty years ago in Philadelphia there were few specialists. In the eye, Dr. Isaac Hays and Dr. Littell did little or no other work. They were both very eminent men of their day, and Dr. Hays was a very scholarly man and cultivated gentleman. . . . All the general surgeons like Pancoast, Gross, Agnew, Morton, Hunt, Levis, and others, did eye-work. Ezra Dyer came to Philadelphia fresh from Von Graefe's clinic in Berlin, and soon established a large practice. He was followed by George Strawbridge, a most accomplished oculist and eye surgeon. . . ."

The first text-book on ophthalmology printed in the United States was an American edition of Saunders, published in Philadelphia in 1821. In 1823 Frick's "Treatise on Disease of the Eye," the first work of an American writer, appeared, which in its turn was re-published in England. Besides a number of English works which were re-published in America,

we find a "Treatise on the Semeiology of the Eye," by Lobstein, printed in New York in 1830, and "A Manual of the Diseases of the Eye," by Littell, published in Philadelphia in 1873.

During this period a number of monographs likewise appeared. Among early writers the names of Stout, Wallace, Dix, Hocken, Hamilton, Foote, Isaac Hays, and H. W. Williams must be mentioned.

Until a late period, diseases of the eye were taught by the chair of surgery in American medical colleges. The earliest special course of instruction was given by Dr. Frick in Baltimore in 1822. In 1860 Holmes became lecturer in Rush Medical College in Chicago, and in the same year E. Williams became the first professor of ophthalmology at Miami Medical College of Cincinnati.

In the development of the ophthalmoscope we must mention the names of Wadsworth, who invented the "tilting mirror," and of Loring whose ophthalmoscope is one of the most convenient and widely used, and whose two volume "Text-book on Ophthalmoscopy" (1886) is one of the most valuable in the English language.

Among those who distinguished themselves in ophthalmic surgery are: Hays, Dix, Levis, Horner, H. W. Williams, Agnew, Holmes, Hotz and Knapp.

In the history of ophthalmology in America the formation of the American Ophthalmological Society in 1864, and the publication of Knapp's "Archives of Ophthalmology" in 1869, mark important dates.

In surveying the medical history of America, the pre-eminent services rendered to ophthalmology are the discovery of the part played by errors of refraction in the production of nervous symptoms and especially of headaches, by Weir Mitchell and Thomson of Philadelphia, and of the abnormalities of equilibrium of the ocular muscular apparatus and the resulting disturbances, by Stevens. These discoveries overshadow all the other numerous contributions to clinical ophthalmology and mark great and beneficent advances in this specialty.

HARRY FRIEDENWALD.

LARYNGOLOGY.

The history of laryngology in this country as elsewhere properly begins with the discovery of the laryngoscope. Prior to this, however, some diseases of the throat had been studied and more or less written concerning them. The earliest reference in America seems to have been published by Capt. Morton in his "New England Memorial." In this he says: "In 1650 a disease of the mouth and throat prevailed which proved mortal to many in a short time." In "An Account of Two Voyages to New England made during the Year 1658 and the year 1663," by John Josselin, it is stated of the settlers, "Also they are troubled with a dis-

ease of the mouth or throat which had proved fatal to some in a very short time, and to quinsies and impostumations of the almonds or tonsils and great distempers of cold." In 1736 William Douglass, M. D., published an essay of eighteen pages upon "The Practical History of the New Epidemical Erupted Miliary Fever with an Angina Ulceuculous" which prevailed in Boston, New England, in the years 1735–6. This seems to describe an epidemic of scarlet fever, while the disease mentioned by Josselin and Morton is apparently diphtheria.

Most of the literature of the time seems to have related to these two diseases. In 1740 William Curry gave a short account of the influenza, which prevailed in America in 1739. Up to 1817 little is found that does not relate to the consideration of these diseases or to "croup." In that year, Cheesman published an article upon "Growths and Tumors of the Throat." In 1820 Trowbridge, some on "Nasal Polyp and Foreign Bodies." In 1822 Bradford wrote upon "Laryngeal Diseases," Handy upon "Aphonia" and Waters upon "Whooping Cough," while Cartwright in 1825 wrote upon "Laryngotomy." From this time on the range of subjects rapidly increases, although croup predominates.

The subjects include, in chronological order, syphilitic laryngitis, inflammation of the larynx, foreign bodies, cleft palate, tumors of the tonsils, ozena, tracheotomy and croup, laryngismus, surgery of the tonsils, aphasia, paralysis, and, in 1833, the treatment of diphtheria.

A case is recorded in 1835 of a pin removed from the larynx by external incision. In the same year, removal of the thyroid gland. In 1837 nose deformities and rhinoplasty are discussed and a case of rupture of the larynx is reported; ulcers of the larynx are described in 1841. In 1842 nasal cancer, in 1844 medication of the nose, in 1847 voice anomalies and a case of loss of the larynx by a musket shot; a case of "ticking" sound in the larynx is also mentioned. In 1848 Gurdon Buck published his first epoch-making paper upon "Edematous Laryngitis and its Treatment by Scarification," and Howard described tumors of the palate. In 1846 Horace Green appeared in literature, presenting his "Treatise on Bronchitis." In this he advocated the employment of topical applications to the larynx and of catheterization. Cystic tumors were described in 1851, also erysipelas of the larynx. In 1852 we find the first mention of malignant growths. In 1853 there appears an article upon the trachea and in 1854 several masterly contributions from Horace Green and an article on "Epilepsy as Relating to the Larynx."

The use of insufflators is mentioned in 1855, and in the same year "showering syringes" in laryngeal and catarrhal diseases. The subject of inhalation was also brought forward by Trousseau and taken up in this country. Bowditch wrote upon malignant growths in 1858. In 1859 pharyngotomy is mentioned. For the next ten years little

appears beyond papers upon diphtheria, croup, foreign bodies and laryngeal growths. Subsequent to that date, however, the variety of subjects increases, also the volume of literature issued, showing a rapid advance in the number of papers published and the subjects discussed. The explanation of this is apparent. In 1858 the laryngoscope of Garcia, made available by Czermak and Turck, was introduced into Europe and its value at once appreciated by several Americans, notably by Dr. Horace Green. Dr. Ernest Krackowizer procured a laryngoscope from Vienna in 1858, and shortly after its arrival used it in New York. Not being satisfied with the head-mirror of Semeleder, he had it modified and was probably the first physician in America to demonstrate the vocal cords. Dr. Horace Green predicted of the instrument that "if it could be brought into general use, the profession would be able to cure diseases which are now too frequently overlooked." The United States has had a share, if a small one, in the development of the laryngoscope. In January, 1858, Dr. Ephraim Cutter, of Massachusetts, in conjunction with Mr. G. B. Clark, of Cambridge, Massachusetts, devised a laryngoscope having two tubes, one for observation, the other for illumination. At the pharyngeal end was a prism to divert the rays of light into the pharynx.

While the value of the new method was at once recognized it was some time before the use of the laryngoscope became general. Meanwhile, under the brilliant leadership of Horace Green, the study of throat diseases was conducted in no uncertain way.

As mentioned by Elsberg, this specialty as a distinct part of regular medical practice seems to have originated in America, Horace Green being the first at all events in recent times who devoted himself to throat and respiratory diseases. The career of this great man marks him as one of the pioneers of his time, a contemporary and friend of Trousseau and easily his peer.

In 1873 Dr. Clinton Wagner, of New York, appreciating the advantage to be derived from a society for the consideration of laryngological work called a meeting of a number of those who had studied laryngology in Vienna and elsewhere and who held positions in throat clinics in New York City and organized what was at that time known as the Laryngological Society of New York, this being the first society devoted exclusively to laryngology and rhinology established either in this country or Europe. Five years later, in the City of Buffalo, New York, in June, 1873, at a call issued by Dr. Frank Davis, of Chicago, the American Laryngological Association was organized. About twenty years ago the New York Laryngological Society was merged into the section of laryngology and rhinology of the New York Academy of Medicine. Its history has been one of uninterrupted and ever-increasing usefulness.

The founding of the New York Laryngological Society marked a distinct epoch in the history of laryngology in America as well as in the world at large. Of even greater importance was the founding of the American Laryngological Association. This, unquestionably the first national association in laryngology in the world, stood alone for more than ten years, after which time its example was followed in England and much later in France, Germany and other countries in Europe. Membership to it is limited and its aim has been to uphold the highest ideals of ethics and of scientific work. The volumes of its annual transactions now number thirty-two, every year of the society's existence being thus represented and the whole offering an accurate exhibition of the progress of laryngology and rhinology in the United States.

Another factor in the advancement of the specialty has been the section in laryngology of the American Medical Association. This has given opportunity for a wide variety of effort and has furnished a medium through which any reputable member of the profession could present his inventions or ideas. More recently, other associations have been formed. Of these the American Laryngological, Rhinological and Otological Society, founded in 1894, is the largest and most important.

In the literature of laryngology, America has been among the foremost. In pre-laryngoscopic days the work of Horace Green easily ranks first. The introduction of the laryngoscope marked a great accession of literature, and it was not long before more extensive works began to appear. The writings of such early authors as Turck, Czermak and Fauvel dealt with only small parts of the whole science of laryngology, and while good work in this direction was done, notably by Mandl, Stoerk and others in Europe, it remained for three English-speaking authorities to place the sciences of laryngology and rhinology upon a firm scientific basis. These men were Prof. J. Solis-Cohen, of Philadelphia, Sir Morell Mackenzie, of London, and Prof. Francke H. Bosworth, of New York. Dr. Cohen's book, published in 1872, gave a full exposition of the science up to the date of its publication. It was more comprehensive than anything which had yet appeared. Morell Mackenzie's treatise was published in 1880. This was not only the most complete work of its kind to date but contained an exhaustive bibliography. In 1881 appeared the work of Dr. Francke H. Bosworth, in which the subject of rhinology which was being extensively entered into by American authorities, especially by Dr. Bosworth himself, was carefully considered and presented. Somewhat later came the excellent text-books of Prof. Ernest L. Shurly, of Detroit, and of Prof. E. Fletcher Ingals, of Chicago. In the last twenty years these have greatly multiplied. Prominent among them are the books of Sajous, Charles H. Knight, Braden Kyle, and Grayson. Among the contributors to the original literature of the subject not

already mentioned are Harrison Allen, John N. Mackenzie, C. E. Sajous, T. R. French, D. Bryson Delavan, Beverley Robinson, Frederick I. Knight and Jonathan Wright.

In 1879 Dr. Louis Elsberg published a "History of Laryngology in America" and a "Bibliography of American Laryngological Literature." This appeared in the first volume of the "Transactions of the American Laryngological Association." A general bibliography of the subject was taken up by Dr. George M. Lefferts, beginning May, 1875, and continued in the "New York Medical Journal" until 1880, when a special journal known as the "Archives of Laryngology" was founded by four of the leading laryngologists of the country: Louis Elsberg, J. Solis-Cohen, Frederick Irving Knight and George Morewood Lefferts. The bibliography was continued in that magazine for four years. At the close of the career of the "Archives of Laryngology" the reports were continued in the "Index Medicus," so that a fairly complete bibliography of the subject is furnished from the earliest period of medicine in this country up to the present. Combining the reports mentioned above with the bibliography given in the work of Sir Morell Mackenzie and in Ziemssen's Encyclopedia, we have a good record from earliest times.

An idea of the present literary productiveness of the United States may be gained from the statistical record of 1909 ("Centralblatt für Laryngologie," January, 1911), which credits us with published articles relating to the upper air passages to the number of 659, Germany with 482, France, 325, Austro-Hungary 308, Great Britain and Colonies 241, these with the remaining countries aggregating a total number of 2610. Of this number the contribution of the United States equals more than 25 per cent.

To enumerate all the contributions to the science of laryngology from this country would be impossible. Even to-day the work of Horace Green has never been surpassed. He it was who first demonstrated that a foreign body could be introduced into the larynx without producing suffocation, thus making intra-laryngeal medication and operation, with all which that implies possible. The contentions of Dr. Green were not received by all of his contemporaries, and his demonstrations of the fact that the vocal cords could be touched by a suitable instrument were ridiculed. In these later days O'Dwyer demonstrated that a tube could be retained continuously in the larynx without removal for months and even years. In addition to the physiological fact above mentioned Dr. Green introduced the system of intra-laryngeal medication, making various applications to the larynx by means of a sponge probang or a laryngeal brush. Like Trousseau, his favorite application in laryngitis was a solution of nitrate of silver. His method was taken up by the Viennese

school by whom nitrate of silver was used almost exclusively in affections of the larynx for over fifty years. It was Horace Green also who emphasized the importance of diseased conditions of the tonsil. His instruments devised for the removal of the tonsil are ingenious and effective and they have been extensively imitated even up to the present day.

Long prior to his time, however, operations for the removal of large tonsils by various methods had been performed in this country. Before the tonsillotome was suggested the glands were removed with a scissors or bistoury, aided by a vulsellum or tenaculum. It is said that the Icelanders from prehistoric times have used a small ring-knife instrument for amputation of the uvula. Bell described such an instrument in his "System of Surgery," in 1783. In 1827 Dr. Physick, of Philadelphia, not only improved the uvulatome, but enlarged it for use as a tonsillotome. This American invention is perhaps more extensively used, especially in England, than any single tonsil instrument of the present day, under the form known as "Morell Mackenzie's modification." Nothing more satisfactory of its kind has ever been offered.

In 1832 Dr. Fahnestock, of Lancaster, Pennsylvania, devised a tonsillotome made upon the ring-knife principle and differing essentially from the instrument of Physick. Under one modification and another this has come into general use throughout the Continent of Europe. Thus, America has furnished the two types upon which the tonsillotomes of the world are at present modeled.

The study of rhinology was practically begun in this country. The most important contributors to it were Harrison Allen, John N. Mackenzie, Jarvis, Bosworth, Shurly, Daly, Bryan and Roe. Long before this Catlin, in 1832, basing his observations upon nasal obstruction in the American Indian, had published his classic treatise upon "Mouth Breathing." The discovery by Jarvis of the part played in nasal obstruction by enlargements of the turbinated bodies marked one of the most important advances of the time. His instrument, the so-called "Jarvis Snare," designed for the removal of posterior hypertrophy of the turbinated bodies, is a remarkable exhibition of the perfect adaptation of an implement to the object for which it is to be used.

Among other contributions by Dr. Jarvis the use of chromic acid as a cauterant in the upper air passages is one of the most valuable.

About this time Bosworth called attention to the importance of excrescences upon the nasal septum as factors in causing obstruction and he devised a saw for the removal of septal spurs. Soon afterwards the nasal trephine was suggested by Dr. James H. Goodwillie. The importance of these improvements will be understood when it is realized that hitherto the evils of nasal obstruction had not been fully understood. Its recognition has been the means of preventing and overcoming many diseases

of the upper air passages. Certain laryngeal conditions in particular which were formerly common are now much less often met with.

The use of the sponge probang and the brush for making applications to the larynx, introduced by Horace Green and universally adopted abroad, was largely supplanted in the United States by the spray method, perfected about 1872 by Sass, although not suggested by him. In the surgery of the larynx the development of the operation of thyrotomy at the hands of Clinton Wagner is worthy of mention, also the work of Rufus P. Lincoln in the removal of retro-pharyngeal fibromata through the natural passages instead of after extensive preliminary operation.

One of the most valuable contributions to laryngology ever made was that of Joseph O'Dwyer, of New York, who in 1880, demonstrated that a foreign body could be tolerated by the larynx indefinitely and who devised and perfected the method known as intubation. While Bouchut had attempted something of the kind in 1856, and Horace Green and McEwen had shown that a catheter could be passed below the glottis and the patient thus enabled to respire, full credit for intubation is conceded to O'Dwyer, whose personal character as well as his achievements as a pathologist and an inventor cause him to rank as one of the great men of his time.

In 1886 Prof. Thomas R. French, of Brooklyn, presented a new and complete method for photographing the human larynx. Lennox Browne has succeeded in obtaining some indifferent pictures of the larynx of Emil Behnke, a famous teacher and vocalist, by means of the ordinary camera and an oxy-hydrogen light, but the exposures were not instantaneous and his observations were confined to one individual. Dr. French evolved a complete system of laryngeal photography, whereby any patient whose larynx or pharynx could be demonstrated might be photographed. Sunlight was used at first, later the arc light. The exposure is instantaneous. Both physiological and pathological processes could be pictured. The art was perfected by Dr. French and his apparatus and methods have never been improved upon.

About this time Dr. Franklin H. Hooper, of Boston, was conducting his famous experiments upon the innervation of the larynx, with especial reference to the functions of the recurrent laryngeal nerve. His contributions to this department are of historic value. It was Dr. Hooper who returned from Europe bringing the information that Sir Morell Mackenzie had taught him to remove hypertrophied adenoids from the pharynx under general anesthesia, a method hitherto not accepted in this country. The introduction of this idea into the United States was effected by Dr. Hooper, with unspeakably beneficial results.

For the relief of deformities of the nose in general the work of Dr. John O. Roe, of Rochester, New York, represents unequaled originality

and skill. In the anatomy, pathology and surgical treatment of diseases of the accessory sinuses of the nose, the labor of Dr. Joseph H. Bryan, of Washington, D. C., has contributed much that is valuable and new. His original researches in this branch have been important and the value of his methods for dealing with difficult cases of sinus disease without resort to external operation has been generally recognized.

For the correction of deformities of the nasal septum of a certain type Dr. Morris J. Asch, of New York, developed and perfected the idea originally suggested by Adams and furnished an easy means of securing results which before had been unattainable.

The history of instruction in laryngology in the United States is a record of rapid and brilliant progress. Recording the statements of the late Dr. Louis Elsberg ("Tranactions of American Laryngological Associations," vol. i), he himself seems to have been the first in this field. He began lecturing on laryngology in 1861, and in 1863 established a laryngological clinic in connection with the University Medical College. Dr. Elsberg claimed that this was the first public throat clinic in America and perhaps in the world. Fifteen years later there were twenty-five teachers of the specialty in the medical colleges of the United States. Meanwhile a number of men from this country had studied the new art abroad and on their return home its growth here become rapid and influential.

Laryngology was introduced into the Harvard Medical School as a part of clinical medicine. It was first taught as a special subject by Dr. H. K. Oliver, in 1866. In 1872 Dr. Frederick I. Knight was made instructor in laryngology at Harvard and established a clinic in that branch.

Dr. J. Solis-Cohen, of Philadelphia, began giving private lectures in laryngology in 1866. In 1870 he was elected lecturer on laryngology and diseases of the throat and chest in Jefferson Medical College and later was appointed full professor of laryngology.

In 1869 Dr. Woolsey Johnson was appointed clinical lecturer on laryngology in the College of Physicians and Surgeons, New York, and in 1874 was succeeded by Dr. George M. Lefferts.

Closely following these were others, including Dr. Frank Donaldson, Sr., of Baltimore, Dr. Hosmer A. Johnson of Chicago, Dr. Ernest L. Shurly of Detroit, Dr. William C. Glasgow of St. Louis, Dr. Francke H. Bosworth of New York, and Dr. Harrison Allen of Philadelphia.

These men were physicians and specialists of first rank and the instruction which they gave was of a high order of merit. Indeed the department of laryngology at the College of Physicians and Surgeons, New York, was the best organized and most perfectly equipped of its kind either in this country or in Europe. No other clinic compared

with it in the completeness, thoroughness and impressiveness with which instruction was carried out. In 1888 the New York Polyclinic and the New York Post-Graduate School, institutions for the instruction of graduates in medicine, were founded. In both of these pioneer institutions the department of laryngology was an important feature.

At the present time there are few medical schools and important hospitals throughout the United States and Canada in which this department is not represented, while there are upwards of fifty officially recognized infirmaries and dispensaries where diseases of the throat are treated in the City of New York alone.

The specialty has been ably represented in Cuba for many years, while Semeleder, one of the founders of the Science made his home in the City of Mexico.

Women in Medicine in America.

A little more than half a century has passed since the movement started to admit women to the study and practice of medicine in America.

Undoubtedly progress was sweeping broadly on to this end, but if we look for a specific cause for the starting of the movement we find it in the introduction of surgery and surgical methods into the practice of obstetrics; men's assumption of this branch of medicine justified by their superior training, the consequent ousting of women from their age old profession of midwifery and their subsequent attempt to regain their lost footing by claiming the right to study medicine.

The various phases of this movement have been subdivided by Dr. Mary Putnam Jacobi:

1. The Colonial period of exclusively female midwifery dating from the early days of the settlers to approximately 1750.

2. The period of suppression and relegation to the background brought about by increased activity on the part of physicians. Two causes are assigned for this; first, they, by travel and study in Europe, put themselves in touch with advanced methods and theories of practice and made themselves thereby desirably efficient; second, the necessity for emergency and hospital work during the Revolutionary War. This submerged condition of women lasted until about 1848.

3. The period of reaction and

4. The period of action following in quick succession, characterized by a crusade against man-monopoly of midwifery, the opening of schools and the forming of societies for the purpose of giving women opportunity to study medicine and the advent of that little group of noble pioneers. However imperfect and inadequate the first attempts at training proved, they represented at least a stand taken and an attack on the

established order of things, thence forward the question of women in medicine was a live issue. Always where the tale of women's progress is told the names of these pioneers must be remembered with honor:* Elizabeth and Emily Blackwell, Marie Zakzrewska, and Ann Preston are the ones who above all bore the burden and heat of the day. Writing of them Dr. Putnam Jaocbi says, "the little group of women who nevertheless dared to face this opprobrium contained collectively nearly all the elements necessary for success, although in no one member of the group were these united. Instructive enthusiasm for the science of life, predilection for medical practice, enlightened resolve to elevate the intellectual capacity and enlarge the practical opportunities of women, the habit of progressive philanthropy, personal interest in the pursuit of nearest friend, the husband; literary training." In 1849 Hobart College at Geneva admitted and graduated Elizabeth Blackwell, the first woman in America to receive a medical diploma. In 1851 the Eclectic College at Rochester graduated two women, and in 1852 the Cleveland Medical College gave a degree to Emily Blackwell. The Rush Medical College of Chicago had previously admitted her, but for this act was censured by the State Society and so refused her continuance of instruction. Of the schools that were started for women the Gregory Medical School of Boston was the earliest, in 1848, offering a curriculum inadequate to the purpose; in 1874 its funds were handed over to Boston University to which women were eligible, but the medical school became homeopathic. In Philadelphia the Pennsylvania Medical School arose, but never achieved anything above mediocrity and finally lapsed. In 1850 The Woman's Medical College of Pennsylvania was founded, many years and lives of effort went to its upbuilding before it entered upon its present era of prosperity and thoroughness. The various established medical schools throughout the country were vacillating in their attitude to the movement, opposed for the most but with just enough yielding to importunity to keep alive a flicker of hope. Meagre and insufficient as the opportunities were, it is not surprising that a number of women obtained degrees without being in any way qualified to undertake the duties of a physician, but this was also true to a great extent of the men, the requirements in many institutions being notoriously inadequate and perfunctory.

5. The period in which women physicians began the founding of hospitals where they could obtain clinical training. The earliest of these was the New York Infirmary for Women and Children, founded by the Drs. Blackwell, chartered in 1854 as a dispensary, a ward of twelve beds for lying-in women being added in 1857. In 1865 the hospital was increased to thirty-five beds—now a flourishing modern hospital; in this same

* *Vide*. Biographies, Elizabeth Blackwell, Marie Zakzrewska and Ann Preston.

year a medical college was added to the Infirmary. In 1862 the Woman's Hospital of Philadelphia was founded by Dr. Ann Preston and her colleagues and has been constantly successful, always largely gynecological in character. In the same year the New England Hospital for Women and Children organized under Dr. Marie Zakzrewska was incorporated and increased like its sister institutions from year to year.

In 1865, under Dr. Mary Thompson, of Chicago, a fourth hospital for women and children was opened. The Woman's College of Chicago, followed in 1869, merging in 1891 into the Northwestern University. In 1875 the Pacific Dispensary and Hospital under Dr. Charlotte Blake Brown and Dr. Annette Buckle began its useful career, and in 1882 a sixth hospital under the management of women physicians was organized in Minneapolis, a second hospital in Philadelphia opened in 1895—the Hospital and Dispensary of the Alumni of the Woman's Medical College.

In a further effort to sift out incapacity, a prospectus was issued by the New York Infirmary in 1865, in connection with its medical school which was regarded by many as quixotic in the severity of its requirements. These were: a three years' graded course with detailed laboratory work during the first year and detailed clinical work during the last, and the appointment of an independent board of examiners consisting of professors from the different city schools. This scheme was not fully enforced until 1876, but at this time Harvard was the only other college in the country which required a three years' course. When the Cornell University Medical School was created, the necessity of continuing the Infirmary school ceased; it was discontinued and the efforts of its directors concentrated upon its hospital.

In 1882 the Woman's Medical College of Baltimore began its existence, and Kansas City opened one in 1895. Cincinnati also has a college for women. The state universities of the West, beginning with Michigan in 1869, have opened their medical colleges to women. Syracuse University and the Buffalo School both admit them. The admission of women in 1893 to Johns Hopkins Medical School and Hospital was a fact of great significance. In Canada the Universities of Toronto, Dalhousie and Manitoba have extended their privileges to women.

With the definite entrance of women into public practice of medicine came the question of recognition from brother practitioners, individually and collectively.

This constitutes the sixth period and was precipitated by the action of the Philadelphia County Medical Society which, in 1859, introduced a resolution declaring that any member who should consult with women should forfeit his membership. A committee of the State Medical Society endorsed this recommendation, and held strictly to this attitude until 1871, when the resolution was rescinded, but not until 1881, however,

did the State Society admit its first woman delegate to membership, the Philadelphia County Society yielding only in 1888.

In 1876 The American Medical Association accepted by acclamation a woman delegate sent by the Illinois State Medical Society, Dr. Sarah Hackett Stevenson, of Chicago. New York State proved less obdurate. In 1869 the Drs. Blackwell were accepted members of the Medical Library and Journal Association of New York. In 1873 Dr. Mary Putnam with her previously acquired honor of a Paris diploma was admitted without discussion to the Medical Society of New York, and the following year sent as a delegate to the Annual Meeting of the State Medical Society.

The Massachusetts Medical Society, after prolonged deliberation extending over many years, finally acted on a minority report to admit women for examination; the "Boston Medical and Surgical Journal" made the following ungracious announcement: "We regret to be obliged to announce that at a meeting of the councilors held October 15, 1879, it was voted to admit women to the Massachusetts Medical Society." Evidently the pill was not even sugar-coated. Slow as was the acceptance of the new order of things, it was hastened by many years by the chivalrous men physicians* who aided the movement.

Years ago women recognized that if limited to their own hospitals, which are given up so largely to obstetrical, gynecological cases they would suffer the disadvantages of specialism and miss the broad, general insight of science. Admission to the general hospitals, therefore, either as students, internes or visiting physicians is a vital matter viewed from the standpoint of best results. The entering wedge was of course in the guise of students, but, even so, how grave a matter for deliberation! The Boston City Hospital obtained reports on the contemporary usage of ninety-one hospitals throughout the United States before granting the petition that women students be admitted. The correlated and inevitable sequence of events is so curiously and frequently lost sight of.

To the position of internes and visiting physicians women have also made their way, not largely but perhaps proportionately. In the field of dispensary work they have been particularly active and successful and the movement which originated in Pennsylvania requiring the appointment of women physicians to the female wards of the insane asylums is one which has received legislative sanction in many states.

As regards the scientific side of woman's work Dr. Osler in his memorial tribute to Dr. Mary Putnam Jacobi says: "That in the past quarter of a century the long battle has been won, is due less to a growing tolerance among physicians at large, less to the persistence with which

*Drs. Hartshorn, Atlee, Stillé, Thomas, of Philadelphia. Drs. Bowditch, Cabot Putnam, Chadwick, Derby, of Boston. Dr. Byford, of Chicago. Dr. Abraham Jacobi of New York.

obvious rights have been asserted than to the presence of a few notable figures who have demonstrated the capacity of women for the highest intellectual development and who have compelled recognition by the character of the work accomplished in the science and art of medicine; that the work which they are doing in chemistry, histology, pathology, embryology, bacteriology, neurology and anatomy is everywhere attracting attention."

Elizabeth Blackwell, the first woman to take a degree in medicine, has just died. She lived to see 7399 women physicians and surgeons in America at the present time following in the trail she blazed.

Literature.

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Alfreda B. Withington.

Medical Jurisprudence.

As I write, there lies before me an old and battered volume, the grain of whose fine tree calf is well-nigh undiscernible on account of much use and age. The work has plainly belonged to a rather large number of persons. It bears the stamp and labels of five or six dealers in second-hand books, as well as an equal number of hand-written inscriptions. One of these latter relates that the volume was presented to Dr. ———— by his patient ————, the daughter of another physician. Another inscription says, "Oh how I wish I had my eyes to read this book, but my eyes are old." The volume has also belonged to a medical student. Evidently, a much owned and much used book. The outside title reads, "Rush's Lectures." The title-page says, "Sixteen Introductory Lectures, to Courses of Lectures," etc., "by Benjamin Rush, M. D." The date at the foot of the page is 1811. In the table of

contents, the ultimate item runs, "Lecture XVI, On the Study of Medical Jurisprudence." To this lecture let me turn at once, for its words are the earliest utterance printed in America on the most important subject in either medicine or law.

Reading this interesting chapter (and nothing composed by Rush was ever otherwise) one is struck by a number of most remarkable and even astounding facts:

1. The style of the book is extremely modern, in fact very much like Macaulay's without his disagreeable mannerisms. It exhibits the finely balanced constructions, the brief incisive sentences, the highly "organic" paragraphs which distinguish the remarkable author of the "Essay on Milton." It lacks, however, the forced antitheses, the eternal seesaw, the white this but black that and the black this but white that, and the well-nigh incredible exaggerations of the composer of "The History of England." In a word, the style is of those writers who, coming after Macaulay, have learned to adopt, to a great extent, the virtues of that master style, while avoiding its very obvious vices. *And yet Rush came before Macaulay.*

2. The subject-matter, or substance, of this lecture is also extremely modern. First, this medical master, in the beginning of the lecture, animadverts on the fact that "they entertain very limited views of medicine who suppose its objects and duties are confined exclusively to the knowledge and cure of diseases." He runs on: "Our science was intended to render other services to society. It was designed to extend its benefits to the protection of property and life, and to detect fraud and guilt in many of their forms. This honor has been conferred upon it by the bench and bar, in all civilized countries both in ancient and in modern times," etc. This strikes a note that sounds strictly and strangely modern.

Again, Dr. Rush hints at the dearth (or rather total absence) of American literature on the subject of medical jurisprudence, and the paucity of a corresponding literature in Great Britain and Ireland. He says: "I have thus barely named the subjects of medical jurisprudence. There has been much learning displayed in treating upon them in France, Germany and Italy. It is to be regretted that the works of Dr. Fodéré, a French physician, contain the only valuable repository of that learning which has reached this country. In Great Britain the science has advanced with more tardy steps than in other European countries," etc., etc. All this also sounds familiar to the reader of the medical journals of to-day.

Finally, in Rush's implication that the schools of his time are not exactly performing their duties in the matter of teaching medical jurisprudence there is again the modern note.

This brief lecture constitutes, as I have said, the beginning of medical jurisprudence in the United States. Now I want to describe such progress as we are able to discern in the medico-jurisprudential literature of America, also the advance which has been made in this country in the teaching of legal medicine (real or reputed), and, furthermore, such American discoveries in medicine as possess an especial legal value, with finally, the improvement, if any, in the matter of medico-jurisprudential societies.

Following close upon the lectures of Rush (in 1814), Dr. James S. Stringham, professor of medical jurisprudence in the College of Physicians and Surgeons in the City of New York, published in "The American Medical and Philosophical Register" a syllabus of lectures which had been delivered by him in the institution mentioned. This is only a syllabus, it is very brief indeed, and, finally, possesses merely a modicum of interest save what is exclusively and purely historical.

The next important writing on medical jurisprudence did not appear till 1817—a graduation thesis by Dr. John Brodhead Beck, entitled "An Inaugural Dissertation on Infanticide, Submitted to the Examination of Samuel Bard. . . . . of the College of Physicians and Surgeons of the University of the State of New York; and Publicly Defended for the Degree of Doctor of Medicine. . . . ." In my collection of works on legal medicine I have a copy of this book which I very highly prize, for it bears upon the title-page the handwritten inscription, "T. Romeyn Beck, M. D., from his affect. Bro., The Author." A recent writer remarks of Beck's little brochure, "It may be truly said that in this treatise the subject was so thoroughly presented that subsequent writers have done little more than reproduce it, more or less imperfect, and that it is still the standard work on infanticide in the English language." This is high praise, but probably not too high. The work was incorporated by its author's brother, the much more famous Theodric Romeyn Beck—he to whom the little volume above-mentioned was presented—into the most remarkable work on medical jurisprudence which has ever appeared in America—a work next to be considered.

This notable production—the book of the brother—appeared in 1823. It consisted of two rather large octavo volumes, entitled, simply, "Elements of Medical Jurisprudence." Dr. Theodric Romeyn Beck was at first professor of medical jurisprudence in the College of Physicians and Surgeons in the Western District of the State of New York, later of materia medica at a school which has always held in the esteem of both doctors and lawyers an extremely high place for the excellence of its teaching in medical jurisprudence—the Albany Medical College. The lectures of Dr. Beck had indeed already attracted much attention for the profoundity of their substance and the perfection of their form,

but the book, as a matter of course, aroused a much larger and more atonishing interest. The doctors and lawyers of Europe for a moment ceased sneering, sat up, then gasped: "And is this fountain of scientific knowledge aflow in America? 'Are not Abana and Pharpar, rivers of Damascus, better than all the waters of Israel?'"

Dr. Beck's book was certainly better than any yet out in either Europe or America, excepting, possibly, that of Fodéré. To the present time it has not ceased to be an authority both at home and abroad. An English edition appeared in 1825—two years after the first American one, and by the time of the author's decease, four English, one German, and five American editions had been issued. Since his death, another American, and even a Swedish, edition, has been issued. Traill, the great Scotch legal physician, called this very remarkable treatise "the best work on the general subject which has appeared in the English language." The famous Guy "acknowledges his obligations in a special manner to Beck's learned and elaborate 'Elements of Medical Jurisprudence.'" And at the present day, Prof. Rudolph A. Witthaus declares this scientific classic "*facile princeps* among English works on legal medicine . . . as admirable for scholarly elegance of diction as for profound scientific research."

Considerably later than Beck's great treatise (in 1838) appeared a work by Dr. I. Ray, entitled, "The Medical Jurisprudence of Insanity." Says Ray, in his preface to the first edition: " . . . the English language does not furnish a single work in which the various forms and degrees of mental derangement are treated in reference to their effect on the rights and duties of man." To supply this very deplorable deficiency was the object of his book. And so well indeed did the doctor write that the volume has not been entirely superseded to the present day. It was rivaled, but not excelled (in 1878), by Ordronaux's "Judicial Aspects of Insanity." Ray was the first, so far as I know, who wrote not only in the English language, as he claimed, but even in any language, upon the medical jurisprudence of insanity. Many other writers had expatiated freely on the subject in general, and a few had even imagined that they had dealt with the legal relations of mental incompetence, but that was only because they did not understand how numerous and complicated those legal relations are. Ray's work is a legal consideration of the subject, not merely an exposition of the diseases of the mind with here and there a legal consequence adverted to.

No less important than his matter is Ray's distinctive manner. There is not a dull page in the whole of a rather large book. Solid and serious, he is never prosaic, and has that full and copious utterance which renders his pages the pleasantest of reading. His words come forth in a steady profusion, rolling easily on and on, from appar-

ently inexhaustible resources, but he is a closely connected reasoner, as well as a ready writer.

For the next twelve long years no lego-medical book of the very slightest import appeared in America: the science of legal medicine in America appeared (to use the words of the immortal Micawber) to be progressing in a retrograde direction. Then (in 1850) came a volume by a lawyer, a production to be considered here merely as a matter of completeness, for this cyclopedia deals exclusively with doctors. I refer to the substantial work of Amos Dean, Esq., professor of medical jurisprudence in the Albany Medical College, entitled, "Principles of Medical Jurisprudence: Designed for The Professions of Law and Medicine."

This is a very scholarly work, not to be compared, however, with the masterpiece of Beck. The reader is just a little surprised and disappointed to find the legal side of the subject rather feebly developed. Take for instance the division on insanity. There is nowhere here a tracing out of the legal relations of the subject, such as given by Ray in his "Medical Jurisprudence of Insanity." The style of the book is clear, and, in general, good.

In 1855 appeared a larger and much more widely circulated volume than that of Dean—the "Medical Jurisprudence" of Wharton and Stillé. Francis Wharton was a distinguished lawyer and Moreton Stillé, a young doctor who died between the completion and the publication of the book. The work is thorough. It is also richly illustrated with well narrated cases, and even the old editions are much read at the present time.

In the same year (1855) appeared an essay on one of the specialties of legal medicine, a production which deserves to be mentioned in even the briefest possible summary of medico-jurisprudential progress. I refer to Hamilton's "Deformities after Fractures." The influence which this little book of fewer than 100 pages has had, directly and indirectly, on the results of suits for malpractice, brought against physicians, has been almost incalculable. It is not an obsolete volume yet, by any means, and still repays careful perusal.

Another work concerned to a large extent with malpractice appeared in 1861, entitled "Elwell's Malpractice, Medical Evidence, and Insanity." Elwell was both a doctor and a lawyer, and a profound student of both medicine and law; his work makes excellent reading. He became an authority abroad as well as in America and the book went through four editions.

In 1867 appeared once more in the medico-jurisprudential heavens a star of the first magnitude—Wormley, whose chief work is "The Micro-Chemistry of Poisons." This is rather a large volume, distinguished around the world for its thoroughness and accuracy. It contains the results of a number of original researches and gave to its indefatigable

author an international reputation. Not the least of the merits of the work consists in the extremely delicate and precise steel engravings which accompany it. These are the result of the remarkable skill and unflagging industry of Mrs. Wormley, the author's distinguished wife. The very touching circumstances under which Mrs. Wormley began, adhered to, and completed the arduous labor required for the production of these engravings will be found set forth in the biographical sketch of Dr. Wormley in the body of this book.

An important matter connected with the "Micro-Chemistry of Poisons" consists in the fact that its author has everywhere written *with a careful regard for the court room.* As Ray and Ordronaux have treated the legal relations of insanity as though the subject of insanity did really possess some legal relations, so Wormley has treated poisons as though that subject were likely at times to appear in the courts. But Wormley labored under an obvious disadvantage: he knew but little of the law. However, throughout his treatise, from title-page to index, he seems to bear in mind that toxicological tests must be able to withstand a rigorous cross-examination. He wants them all *court-proof.* If he did not fully comprehend the intricacies of American law, he did at least know and remember that toxicology is a subject peculiarly liable at times to assume important legal relations.

In 1869 appeared Ordronaux's "Jurisprudence of Medicine." This is really and strictly a medical jurisprudence. That is to say, it is legal rather than medical. It is an excellent exposition of the American—and to some extent the English—law relating to medical (and also pharmacal) matters. The volume was the first genuine work on medical jurisprudence, as distinguished from legal medicine, printed in America. Its author, Dr. John Ordronaux, was both doctor and lawyer.

The same author, in 1878, produced a volume entitled "Judicial Aspects of Insanity." This volume is the only one I know in the English language by a deceased author which can at all compete with the masterpiece of Ray. It treats of the judicial aspects of insanity as though insanity were really possessed of judicial aspects, and not as so many of its writers on the so-called medical jurisprudence of insanity are accustomed to handle their subjects—*i. e.*, as if it had but little connection with the courts. The effects of the various forms of insanity from a legal view-point are traced out carefully and in full.

Then, too, the procedure in lunacy, the care and custody of the insane, a dozen or more of similar topics, are treated in a way that brings out much important legal matter which doctors, as well as lawyers, assuredly ought to know about.

Ordronaux's style in the main is good, but it is often labored and abstruse. It is, in fact, far too abstract and remote from human interest.

The writer seems actually to fear lest he may produce some pictorial or concrete effect.

Reese, in 1874, put forth a little volume so useful that a person does not like to point out its rather obvious defects. Some years ago, by actual count, I found that Reese's "Medical Jurisprudence" was the "preferred" text-book in forty-five out of fifty medical schools.

Finally, we come to Irving C. Rosse, whose merits as a writer on lego-medical topics I do not think are by any means appreciated. It is chiefly, though not at all only, as a stylist that Dr. Rosse excelled, but let no stickler for "substance and not form" raise up his shrill protesting voice on that account.

In spite of manifest defects, the writings of Rosse are clear, convincing and impressive. They are even more; they are rich, sumptuous, and filled to the running-over point with genuine enthusiasm.

Rosse we know as a medico-jurisprudentist chiefly by his chapters in Witthaus and Becker's "Medical Jurisprudence, Forensic Medicine, and Toxicology." For this encyclopedic undertaking he wrote the articles on "Personal Identity," "Death by Drowning," and "Unnatural Crimes." Turn to any one of these and in a moment you are fairly whirled away by the rapidity of Rosse's movement, and by his own deep and genuine interest. No one, indeed, can read Rosse and not in a very short time begin to understand that this man is really in love with his subject, as well as learned. His are no mere dry duties performed; his no perfunctory and soul-wearying task. So abundant an understanding of his subject does he possess that he pours his treasures out before you like some great Eastern nabob, with proud but careless profusion. Zoology, geology, astronomy; history, philosophy, Hebrew antiquities; the old red sandstone, fishes, the African races, how a man handles a cane in walking, the prevalence of beastiality in China—all these and a thousand other matters that the reader feels all the while he would never himself have thought of are all poured together in Rosse's medico-jurisprudential treasure-heap till the reader is astounded, overwhelmed, agasp with wonder and pleasure.

Moreover, Rosse never treats a subject, or a single department of a subject, generally and abstractly, but always concretely and specifically. This tendency is seen in the very simplest matters and sentences. For example, instead of remarking, abstractly, that human bone-tissue cannot certainly be distinguished from the corresponding tissue of animals, he observes, concretely, "we cannot say with safety whether the fragment belonged to a mouse, a man, or an elephant." Who can imagine an abstract writer—Dean or Ordronaux—producing such a sentence? Again, instead of contenting himself with the general statement that the bodies of persons who have drowned often drift long distances from the

spot where the drowning took place, he remarks, of his own experience, and specifically: "Such a circumstance I noted a few years ago at Brownsville, Texas, where it was a common sight to see bloated cadavers going down the Rio Grande."

Unfortunately, he never attempted a complete treatise on the subject of medical jurisprudence.

In the matter of translations Americans have not done much. Most of the French and German writers who have found their way into English have come by the British route. There have, of course, been some notable exceptions. Orfila, for instance, came in by the American route, and a very excellent one it proved to be. I refer to the first American translation of Orfila, which was made by Joseph G. Nancrede, of Philadelphia, and published in Philadelphia in 1817.

In addition to books and brochures (original and translated) there have appeared (especially in the last fifteen or twenty years) a rather large number of articles on medico-jurisprudential subjects in law and medical journals by American writers. Now and then these have been good.

Two journals devoted—to a certain extent at least—to legal medicine have, to my knowledge been published in America. The first was Hammond's "Psychological and Medico-legal Journal," started in 1874, but now defunct. It was a very excellent journal, and contained some strictly lego-medical matter, yet not much. A little later was founded a second periodical—"The Medico-legal Journal" of New York City. This is still in existence, and ably edited by Clark Bell of the New York bar. The fact is much to be regretted, however, that so useful a journal cannot be confined to lego-medical matters, but has to admit to its columns purely legal biography, every conceivable branch of state medicine, and even telepathy and spiritualism.

I have now briefly considered progress made in America in medico-jurisprudential literature. We have, probably, outstripped Italy, have almost kept abreast of England, and have never caught so much as a single glimpse of the dust of Germany or France.

Briefly now I review advances made in America (1) in the teaching of legal medicine, (2) in lego-medical discoveries, and (3) the establishment and continuation of lego-medical societies and associations.

First, teaching: Here again we have almost "progressed in a retrograde direction." The earliest lectures given in this country on the subject (not counting the single "introductory" lecture of Rush) were those delivered by Prof. Stringham at the College of Physicians and Surgeons in the City of New York. This interesting event took place in 1813. About the same time, Dr. Charles Caldwell delivered a course of lectures at the University of Pennsylvania. How good or how bad

these lectures were we have no means of knowing. We do, however, understand that, at the Albany Medical College, beginning with Amos Dean, a record was established for excellence of teaching in medical jurisprudence never broken to this day. Dean, Beck, Porter, Mosher, Tucker, Balch, and McFarlane, have been the able and eloquent instructors to whom is owing this honor of the Albany school. By the middle of the century, the teaching of medical jurisprudence was very general and, possibly, very good. As to the extent to which the subject was taught, Dean, in his preface, remarks: "No medical institution in this country or Europe could now deem its organization complete without a department devoted exclusively to an exposition of the facts and principles embraced in medical jurisprudence." Contrast this state of affairs with that of the present day!

In the matter of lego-medical discoveries Americans have not done much. Gross's experiments on strangling, performed in 1833 (or published in that year), were productive of important results. Prof. John C. Dalton brought out a number of good points as to the differentiation between the corpus luteum verum and the corpus luteum spurium. Finally, in 1869, Dr. Joseph Richardson discovered the extremely significant fact that human erythrocytes can be distinguished with certainty from the corresponding cells of nearly all the lower animals. "These three, and no more." A sort of trefoil clover-sprig, which has brought no very good luck in the matter of further discoveries.

Societies for the study of legal medicine have been established in various cities and states. The most widely known, perhaps, is the New York Medico-legal Society. Under the auspices of this vital and persistant association it is that the "Medico-legal Journal" is published. There exists in New York City another organization devoted to the same purpose, which is known as the New York Society of Medical Jurisprudence. There is also a Philadelphia Society of Medical Jurisprudence. And in Massachusetts exists the Massachusetts Society of Medical Jurisprudence. This last-named organization has published a number of interesting transactions.

What, on the whole, has been the progress which American physicians have made in lego-medical science? Certainly not much. American medico-jurisprudentists have written a few notable volumes; they have translated fewer; they have established not one-tenth enough societies devoted to the subject in question; they have founded two journals, but one of which is current; they have delivered a good many courses of lectures (by far too much condensed, and unaccompanied by clinical material) in the very few hours allotted and begrudged them by the authorities of the schools. Finally, they have made some two or three important and permanent discoveries. Beyond these few things—nothing.

The progress assuredly not great. In fact, I was reading, only just the other day, a medico-jurisprudential article which contained almost the same identical complaints which Benjamin Rush made so many years ago, at the beginning of American literature on medical jurisprudence. There was the same complaint as to the paucity of American medico-jurisprudential books and journals—a complaint not entirely justifiable in view of the rather large number of encyclopedic works which have been brought forth of recent years in America on the subject of medical jurisprudence. There was the same complaint as to the necessity of resorting to French and German writers; as to the lack of appreciation of the subject of legal medicine on the part of many physicians and even lawyers; and, at the close, precisely the same criticism as to teaching. Indeed, on the whole, a very striking resemblance existed between the recent article and Dr. Rush's lecture. The modern production, rather, sounded just a little old, while the old-time lecture seems modern. The only pronounced difference which appeared between the compositions was seen in the literary style—that of the recent writer obscure, awkward, flaccid, that of the master clear, elegant and strong.

The matter is disgraceful, if we pause to consider the progress made by Americans in other fields of medicine. Consider the share which American doctors have had in the advancement of general medicine and general surgery—how much they have done. But turning to legal medicine, the situation is disappointingly different, our only apology that the shameful state of affairs is not the fault of physicians. Here, to be sure, is an excellent chance "to lay the blame on the other fellow." And it can be laid on the other fellow with the utmost truth. What is legal medicine? It is not simply medicine, as many physicians who know little or nothing of the law would try to have us think. It is medicine *in the service of* the law, medicine *used by* the law. I have not here the time to point out how strangely the *emphasis* of medicine is altered just so soon as medicine enters a law court—for instance, take the matter of powder-marks, how little of interest these mere stains and tattoos possess for the systematic surgeon (except cosmetically) and yet of what extreme importance the merest markings of powder are in a court of law: The size of the whole patch, the size of the separate tiny marks of which the patch is composed, the grouping of these marks, their uniformity or non-uniformity of size, etc., etc. The alteration of emphasis is really astounding. Then, too, many facts which, to the surgeon, are not of any significance whatever, and are therefore generally to him a complete *terra incognita*, are, in courts of law, demanded to be known, are thundered for with all the insistence and urgency at the command of those who are trying to save life and reputation, or else to destroy these things. And the "expert" does not answer, or answers and is laughed at for the poser that he is.

After all, however, the fault is, as I say, not with the medical profession. The fault lies with the law. It is there that the nucleus, the kernel, of the trouble is to be found. Think for a moment of the method whereby "experts" are employed. The lawyer for one side searches till he finds a doctor who holds the opinion that is wanted. The lawyer for the other side searches till he finds a doctor who holds the precisely opposite opinion. Now these two lawyers bring these two doctors into court, and introduce them as entertaining views which truly represent the concensus of thought of the medical profession of the day. The whole proceeding is farcical. The opinions are diametrically opposed; besides, the whole world knows exactly how the "experts" were employed. Nobody believes a thing that is said: nobody is fooled. Some fees are paid, a very great deal of time is taken up, and that is the whole of the matter. Sometimes the reputation of the doctors is severely injured. Now, let us see how all this very abominable method affects the "progress" of legal medicine in America: 1. Doctors do not want to be experts. That is the first effect of the outrageous system. 2. When doctors do not desire to be experts, there is not much demand for expert literature (*i. e.*, the literature of medical jurisprudence) and there is but little (comparatively) of that literature produced. 3. When there is not much produced, and doctors do not want to be experts anyway, there is not much teaching of medical jurisprudence in law schools and medical colleges. 4. All these facts tend to depress the mind of the man who is qualified to make discoveries in the medico-jurisprudential field, and cause him to turn his attention and energies accordingly to regions where the work is more congenial, very much better paid, and much more highly thought of.

In Germany and France the system of employing experts is very different. From rather early times, in those lands, the legal authorities, recognizing legal medicine as something essentially different from systematic medicine because of its different aims and purposes, created and fostered almost a separate profession in the science of medical jurisprudence. The consequence is that those two countries, in everything pertaining to this highly important science stand out easily as leaders of the world.

Thomas Hall Shastid.

A

Abbott, Samuel Warren (1837–1904).

S. Warren Abbott was born in Woburn, Massachusetts, June 12, 1837. His father was a descendant of George Abbott, who emigrated from England about 1640, and his mother from Edward Winn, who came from North Wales about 1612. Samuel's great grandfather was Joseph Winn, who fought at Lexington and Bunker Hill. Samuel was educated at Phillips Andover Academy, Massachusetts, and graduated A. M. from Brown University (Rhode Island) in 1858.

He began to study with Dr. Benjamin Cutter of Woburn, and afterwards at the Harvard Medical School, where he graduated in 1862. He was assistant surgeon in the United States Navy from 1861 to 1864, then surgeon to the First Massachusetts Cavalry from 1864 until it was mustered out at the close of the war.

Dr. Abbott's chief interest was in hygiene. He was coroner of Middlesex County from 1872 to 1877 and medical examiner, under the new law, of the same county from 1877 to 1884. After the war he practised medicine in Woburn for four years and in Wakefield for the rest of his life. He was health officer of Massachusetts from 1882 to 1886 and Secretary of the State Board of Health from its reorganization in 1886 up to a short time before his death, which occurred in Newton, Massachusetts, October 22, 1904. He was president of the Middlesex East Medical Society in 1874 and 1875.

He married Martha W. Sullivan, of Woburn, in 1864.

Dr. Abbott was a member of the Massachusetts Medical Society, Massachusetts Medico-Legal Society, Société Française d'Hygiène.

His contributions to medical literature were many. Among them are: "Uses and Abuses of Animal Vaccination" (American Public Health Transactions, 1882); "The Influenza Epidemic of 1889–90" (State Board of Health Report, 1890); "The Distribution of Diphtheria in Massachusetts" (International Congress of Hygiene, London, 1891).

W. L. B.

Boston Med. and Sur. Jour., vol. cli., 1904.
Atkinson. Biog. Dict., 1880–1898.
Stone. Biog. Eminent Amer. Phys. and Surg.

Ackley, Horace A. (1815–1859).

Horace A. Ackley, surgeon of Cleveland, Ohio, was born in Genesee County, New York, in 1815, and received his early education in the district schools. At an early age he displayed a special bent towards medicine, acquiring some preliminary instruction in the towns of Elba and Batavia in his native county and subsequently attending medical lectures in the College of Physicians and Surgeons of the Western District of the State of New York, located at Fairfield, Herkimer County, receiving there his M. D. in 1833, at the early age of eighteen. The following year he settled in Rochester, New York, and, at the request of Dr. John Delamater, who had been one of his teachers in Fairfield, delivered at Palmyra a course of lectures on human anatomy. In 1835, Dr. Ackley removed to Akron, Ohio, and in the following year was ap-

pointed demonstrator of anatomy in the Willoughby Medical College, Ohio. Soon after he removed to Toledo, where he practised for several years and married in 1837 Miss Sophia S. Howell of Willoughby. On the organization of the Cleveland Medical College in 1843 he was called to its chair of surgery, and continued to occupy this position until his resignation in 1858. During the epidemic of cholera which decimated Sandusky in 1849, on the call for medical aid by the afflicted city, Dr. Ackley abandoned his practice, organized a relief corps of physicians and proceeded at once to the seat of the epidemic.

He was president of the Ohio State Medical Society in 1852.

Though for fifteen years the most active and eminent operative surgeon of Northern Ohio, no written records of his work have been preserved. But the almost unanimous testimony is conclusive in establishing the fact that Dr. Ackley was a bold and skilful operator, who divided with Dr. R. D. Mussey of Cincinnati the vast majority of the major surgical practice of his day in the region west of the Alleghanies and north of the Ohio River.

He was gifted with a most remarkable self-possession in the presence of danger, which stood him in good service, whether holding a mob at bay, in the performance of a dangerous surgical operation, or finding a mistake of diagnosis after the conclusion of the operation. He was considered a splendid medical witness, and his assistance was sought in all cases where medical testimony would affect the verdict. Particularly was this so in cases of malpractice and medical jurisprudence. It was of but little use for a attorney, no matter how astute, to cross-examine him in expectation of changing or controverting his proposition

Dr Ackley was neither an extensive reader nor a profound pathologist, and his lectures, while clear and accurate, lacked system and connection. As a clinical lecturer he was at his best. He was an enthusiastic sportsman, and whatever time he could snatch from the demands of an engrossing surgical practice was devoted to amusement with his rod and gun. It was upon his farm and largely at his expense that the first experiments in the artificial propagation of fish were made by his partner, Dr. Garlick, in 1853.

As an operator Ackley was bold, skilful and determined. Two ovariotomies performed by him in 1855 and 1857 are recorded by Dr. J. W. Hamilton of Columbus in the Transactions of the Ohio State Medical Society for 1859, where we find, also, two letters from the eminent physician and surgeon, Dr. John Delamater, of Cleveland, discussing the merits and demerits of the operation. In one of these letters he says: "Usually Professor Ackley was accustomed to dissuade patients from submitting to any operative proceedures in these cases, beyond that of mere tapping as a palliative in the later stages of the affection." The position of both Delamater and Ackley on the question of ovariotomy seems to have been practically the same.

Nil de mortuis nisi bonum—yet the truth of history demands further the brief and sad statement that Dr. Ackley in his later years fell into habits of intemperance, which not only obscured the honorable records of a strenuous life, but contributed in no slight degree to his premature death, April 24, 1859.*

H. E. H.

*An excellent portrait of Dr. Ackley is preserved in the faculty room of the medical department of the Western Reserve University, and very good engravings are found in the parlors of the Cleveland Medical Library Association, and in Cleave's Biographical Cyclopedia of the State of Ohio.

Cleave's Biographical Cyclopedia. "Medical and Surgical Reminiscences of the Maumee Valley," by W. W. Jones, Toledo, Ohio, 1892 (?) Transactions of the Ohio State Medical Society, 1859.

Adams, Horatio (1801–1861).

Horatio Adams, son of the Rev. Solomon Adams, of Middleton, Mass., was a prominent member of the Middlesex

South Branch of the Massachusetts Medical Society, and was born in Waltham, Massachusetts, February 20, 1801. He graduated from the Harvard Medical School in 1826 and practised in Waltham until the time of his death, April 22, 1861. In 1858 he delivered the annual discourse on "Investigations Upon the Subject of Vaccination" before the Massachusetts Medical Society (Committee Massachusetts Medical Society, vol. ix). "The Boston Medical and Surgical Journal" says of him: "It is believed that he was the first in this country who succeeded in proving the identity of the variolous and vaccine diseases. After reading an account of Mr. Ceeley's experiment of inoculating the cow, he was induced to repeat it and succeeded in obtaining the same results. From a crust obtained by inoculating a cow with variolous matter, a child was vaccinated and a vesicle appeared having all the characteristic marks of the true cow pox."

In the year 1852 he published (Transactions American Medical Association, vol. v) a paper, "On the Action of Water on Lead Pipes, and the Diseases Proceeding From it." This was considered a valuable contribution to the subject.

W. L. B.

Obit. by J. J. (James Jackson) Com. Mass. Med. Soc. vol. x.
Boston Med. and Surg. Jour. vol. lxiv., May 2, 1861.

Adams, Zabdiel Boylston (1829 1902).

Dr. Adams was the son of Zabdiel Boylston (Harvard College, 1813) and Sarah May Holland Adams. He was born in Boston, October 25, 1829, and graduated from Bowdoin College in 1849 and from the Harvard Medical School in 1853. He practised in Roxbury, a part of Boston, until the Civil War, when he volunteered his services to Governor Andrew. In May, 1861, he was commissioned assistant surgeon in the Seventh Massachusetts Volunteers, his first service being at Washington, where he arrived the following July. He was at the siege of Yorktown with the Seventh Regiment in the spring of 1862, and was also at Williamsburg and Fair Oaks. On May 26, 1862, he was commissioned surgeon of the Thirty-second Massachusetts Volunteers, joining the Army of the Potomac. He was at Harrison's Landing for two months and subsequently on the Rappahannock. He was at Antietam, Fredericksburg and the second engagement at Bull Run, and served under General Burnside in his "mud march." He was with his regiment at Chancellorsville, Brandy Station, and Gettysburg. Because of an affection of the eyes he resigned his commission as surgeon of the Thirty-second Regiment, August 4, 1863. On January 12, 1864, he re-entered the service and was commissioned captain of Company F., Fifty-sixth Regiment, and with that command participated in the Wilderness engagements, where he was twice wounded, one shot breaking his leg. He was taken prisoner and confined at Lynchburg for three months, when he was transferred to Libby Prison, being released on parole a month later. While in confinement, he was commissioned major by Governor Andrew, and in December, 1864, he was discharged for disability contracted in the service. At his own request he rejoined his regiment in February, 1865, and took a prominent part in the assault on Petersburg in April, 1865. Then he returned to Boston and resumed practice, shortly after removing to Framingham.

He married Frances Kidder, of Boston. His widow, a daughter, Frances, and a son, Z. Boylston Adams, M. S., 1902, survived him.

Dr. Adams was a member and had held office in the Middlesex County and Framingham Medical Societies and other medical organizations. He was identified with the Framingham Hospital and numerous other institutions and had been for twelve years before his death medical examiner of the Eighth Middlesex District.

His death, on May 1, 1902, at the age of seventy-two was due to a fall over the

Metropolitan Water Works dam at Southboro, Mass.

Dr. Adams was an ardent advocate of vaccination and still believed in the use of the lancet in the treatment of some forms of sthenic pneumonia. He was an old-fashioned doctor and a characteristic representative of a passing generation. W. L. B.

Bull. Har. Med. Alumni Asso., July, 1902. Boston Med. and Sur. Jour., vol. clxvi.

Agassiz, Jean Louis Rudolph (1807–1873). Born in Motier, Switzerland, May 28.

Louis Agassiz was the son of a clergyman; his mother was Rose Mayer, a physician's daughter, and Louis was the fifth of eight children, the first four of whom died in infancy. Agassiz developed a love of natural history when still a small boy, and at an early age made a collection of fishes and all sorts of pets, birds, field mice, hares, guinea-pigs, etc., which he reared with great care. He also showed considerable skill with tools, and is said to have owed much of his dexterity in manipulation to the training of the eye and hand, gained in making shoes and toys for his sister's dolls. He was a bright active child and a general favorite. The love of teaching he showed in later life may in part at least be traced back to his father from whom he had his earliest lessons.

At the age of ten he went to the College for Boys at Bienne and later he spent two years at that of Lausanne. A brilliant student, he showed much greater capacity for languages and natural history than for mathematics, physics, and chemistry. He became proficient in Latin and Greek as well as in German and Italian. He was a splendid swimmer but did not care for riding horses. He took no interest in shooting. Later, during his university life, he was a proficient fencer.

While at Lausanne, Agassiz came much under the influence of Dr. Mathias Mayer, a physician with a large practice and under him studied anatomy. He likewise met several scientists, who aroused an ambition in him to become a naturalist. Accordingly he persuaded his parents to let him give up going into business after finishing school, as planned, and send him to Zurich University to study medicine. To become a country doctor seemed Louis' desire in order that he might have opportunity to study natural history.

Two years followed at Zurich University, a year at Heidelberg, and finally three at Munich University. While at Zurich, Agassiz gave a good deal of attention to the study of natural history and his subsequent university career was guided a good deal more by his devotion to zoology than by his medical studies. He took the degree of doctor of philosophy when he was twenty-two, a year before he became a doctor of medicine. It was chiefly owing to the pleadings of his parents that he spent enough time on medical studies to take his degree. As a university student, he was a leader both in intellectual pursuits and in convivial recreation. One of his fellow students at Zurich said of him:

"Agassiz knew everything and he was always ready to demonstrate and speak on every subject. If it was a subject which he was not familiar with he would study and rapidly master it and on the next occasion he would speak in such brilliant terms and with such profound erudition that he was a source of constant wonder to all of us." (Quoted by Marcou.) On the other hand, "At 'Kommer's' he was always the first to come and the last to go, his strong constitution requiring an absorption of food and drink which left all the others far behind him. His motto was, 'First at work, and first at play.'" (Marcou.)

When twenty-two, he had already done important scientific work, and was mastered by an ambition to become a foremost student of natural science. During his student days, while engaged in scientific work, he kept one and sometimes two artists in his employ, not easy, he says with an allowance of $250 per year; but they were poorer than he, and so managed to get along together.

His first important work, undertaken at the request of Martius, was a description of Brazilian fishes collected by Spix, and a little later he began his great independent work on fossil fishes.

In 1832, when twenty-five, after a period of study under the influence of Cuvier in Paris, Agassiz entered upon a professorship of natural history at Neuchatel. He retained this professorship until his removal to America. While occupying this position, he extended his studies on fossil fishes, did valuable work on echinoderms, and made important contributions on the action of glaciers. To him is due primarily the knowledge of a general glacial epoch.

Agassiz had a wonderful power of attracting people and making them devoted to his interests. In his student days he not only got other students to join in with him in forming clubs for scientific study, but induced artists to work for him for almost nothing. He went about things as if he were very rich instead of poor and then managed to get relatives and friends to help him out of his financial troubles. At Neuchatel, where his salary at first was but $400, he had a large staff of scientific assistants and artists and got into very serious financial difficulties. His reckless daring in expenditures, however, enabled him to do a prodigious amount of scientific work, which otherwise would have been impossible. At the age of thirty he had achieved a world-wide reputation as a naturalist and had done the most important work on which his reputation as a scientist rests. After this period his scientific contributions, though considerable in amount and valuable, were hampered on the one hand by a too complex, unorganized, and not always harmonious staff of assistants, and on the other hand by the need to raise money to pay debts in which his undertakings involved him.

In 1846 his financial difficulties had reached such an acute stage that his home was broken up, while his wife, the sister of Alexander Braun, the botanist, a student and life-long friend of Agassiz, went with her three children to live with her brother. Agassiz departed for America on a grant obtained in his behalf from the King of Prussia by Alexander von Humboldt. On Agassiz's first visit to Paris in 1831–2 he had met and much attracted von Humboldt, who was then at the zenith of his power. After this period, von Humboldt showed his friendship for Agassiz in many ways, not the least of which was the obtaining of this grant.

Agassiz came to America at the age of thirty-nine. His primary object was to study the natural history of the country. He prepared himself, however, to make his visit as profitable as possible and diligently studied English on his long ocean trip. After arriving in America, he visited some of the chief cities of the country and met most of those who at that time were prominent students of natural history in America. He was especially attracted by the work of Dana of Yale and Samuel G. Morton of Philadelphia.

Before Agassiz came to America, his friend Charles Lyell had arranged that he might give a course of lectures before the Lowell Institute in Boston, thus giving him opportunity to supplement his income and at the same time to gain a public introduction. He was enthusiastically greeted. His wife states that:

"His skill in drawing with chalk on the blackboard was also a great help both to him and to them. When his English was at fault he could nevertheless explain his meaning by illustrations so graphic that the spoken word was hardly missed. He said of himself that he was no artist, and that his drawing was accurate simply because the object existed in his mind so clearly. However this may be, it was always pleasant to watch the effect of his drawings on the audience. When showing, for instance, the correspondence of the articulate type, as a whole, with the metamorphosis of the higher insects, he would lead his listeners along the successive phases of insect development, talking as he drew and

drawing as he talked, till suddenly the winged creature stood declared upon the blackboard, almost as if it had burst then and there from the chrysalis, and the growing interest of his hearers culminated in a burst of delighted applause."

Agassiz delivered courses of lectures similar to those given in Boston at the Lowell Institute, in Albany, New York, and in Charleston, South Carolina, and with similar success. At the request of the faculty of the College of Physicians in New York, Agassiz during the fall of 1847 gave a series of twelve lectures, and from this time on he was constantly in demand by the lecture-loving American public.

In the summer following his arrival in America, Agassiz established himself in a small house at East Boston. This home soon became "a hive of industry." He had there several artists and assistants, as well as voluntary co-workers, and went actively to work to study marine collections. In three months, from September to December, 1848, he had spent $3000, while his salary at the Lawrence Scientific School was only $1600 a year! (Marcou.)

In 1847 he was appointed to the chair of Zoology and Geology at the scientific school just established by Abbott Lawrence in connection with Harvard College. The salary attached to the chair, $1500, was guaranteed by Mr. Lawrence "until such time as the fees of the students should be worth $3000 to their professor," a time which never came. Agassiz's lectures, with the exception of the more technical lectures addressed to small classes, were always fully attended, but special students were naturally very few in a department of pure science. This was, however, counterbalanced in some degree by the clause in his contract which allowed him entire freedom for lectures elsewhere.

After his appointment, Agassiz removed to Cambridge, where he opened his first course in 1848. There were at the time of his appointment, "neither laboratories nor collections belonging to his department. The specimens indispensable to his lectures were gathered almost by the day, and his outfit, with the exception of the illustrations he had brought from Europe, consisted of a blackboard and a lecture-room. There was no money for the necessary objects, and the want of it had to be supplied by the professor's own industry and resources. On the banks of the Charles River, just where it is crossed by Brighton Bridge, was an old wooden shanty set on piles; it might have served perhaps, at some time, as a bathing or a boat house. The use of this was allowed Agassiz for the storing of such collections as he had brought together. Pine shelves nailed against the walls served for cases, and with a table or two for dissection this rough shelter was made to do duty as a kind of laboratory. The fact is worth noting, for here was the beginning of the Museum of Comparative Zoology in Cambridge, now admitted to a place among the great institutions of its kind in the world." (E. C. Agassiz.)

Much of his time was devoted to obtaining funds for this museum and its organization. So great were his persuasive powers that he obtained generous grants from the state Legislature during war times. In all he raised by public and private subscription about $700,000 for the museum, an amount since greatly increased by gifts from his son, Alexander. Agassiz took part in several scientific expeditions, among them one to Florida, one to Brazil, and one by sea from the Atlantic to the Pacific coast, fully utilizing opportunities this afforded for obtaining material for his pet museum.

Not long after Agassiz came to America his first wife died and in 1850 he married Elizabeth C. Cary, sister-in-law of President Felton of Harvard University. Mrs. E. C. Agassiz was of the greatest help to her husband. To increase his resources she established a private school for girls in which Agassiz himself was one of the teachers. This proved a success and Agassiz was a great favorite with the pupils.

Agassiz was great as an investigator, as a director of research, and as the founder of a magnificent museum. He was pre-eminent as a teacher. But Wilder, a devoted pupil, states:

"While Agassiz's personal charm seldom failed to attract those with whom he came in contact and frequently caused them to sacrifice their own interests for his, he was not particularly happy in his relations with several of his assistants and co-workers in Europe and America. Marcou acenses him on the one hand of being too free and easy with his assistants and on the other hand of lack of a thoroughly business-like understanding with them. For years it was a habit of his to provide room and board for his assistants and then to give them spending money for other needs when he had it to give. After his second marriage, he as a rule made definite arrangements as to compensation. From his assistants, Agassiz demanded complete devotion to his interests. Thus, when the museum was being established, he demanded of his assistants, who were scantily paid and who were there chiefly because of a desire to learn something about natural history from Agassiz, that they devote at least seven hours a day strictly to museum work. He was not disposed to be particularly generous in granting credit to his collaborators. Most of his best assistants and co-workers sooner or later left him with some ill-feeling toward him. On the other hand, he could be generous, as Burt Wilder and other of his pupils testified.

Of Agassiz's scientific contributions while in this country, the most important are:

"Lake Superior; its Physical Character, Vegetation and Animals, compared with Those of Other and Similar Regions," March, 1850. This volume contains a narative of the tour by J. Elliott Cabot and contributions by other scientific men as well as that of Agassiz. The execution of this work was greatly superior to that of most works of a similar kind previously published in this country, and served greatly to elevate the standards of illustrated scientific publications.

"Contributions to the Natural History of the United States." First two volumes issued in 1857, the third in 1860 and the fourth in 1862. The prospectus for this work was issued in 1855. There were 2500 subscribers at twelve dollars a volume. There were to be ten volumes, but only four were issued. Agassiz intended the work to be written in a non-technical style and yet to be a scientific contribution. With the exception of the introductory essay on Classification, the articles contained in the four volumes are, however, highly technical in nature. The essay on Classification is valuable in that the subject is taken up from a view opposed to that of Darwin and the evolutionists. The technical papers are on the North American Testudinata, the Embryology of the Turtle, the Acalephs in general, Ctenophoræ, the Discophoræ, and the Hydroidæ. The four volumes owe much to the drawing and engraving of Sonrel, who wore out his eyes in the work, and of Burkhardt and Clark.

In addition to these works, Agassiz published a large number of articles of greater length, a list of which may be found in his Life by Marcou. The topics treated of are scattered broadly in the fields of zoology and geology. Some papers are mere sketchy reviews, others are of great importance to science. Among the latter may be mentioned papers on corals and coral reefs, on the embryology of some of the invertebrates, and on the homologies of the radiates.

Of Agassiz's relations to medical education but little need be said.

In the summer of 1851 he became professor of anatomy at the Medical College at Charleston, South Carolina. He had been giving popular lectures on biology for the income which it brought him, and was glad to substitute for these popular lectures in various parts of the country, a regular course of instructions for students. While lecturing at the Medical College he established a laboratory on Sullivan's Island and there devoted the

greater part of his time to a study of the coast fauna. Three times a week he went to town to deliver lectures on human anatomy. In the following year his professorship at the college continued, but owing to illness he could give little attention to the work. He did not teach again in a medical college. His death took place at Cambridge, Massachusetts, on December 14, 1873.

While Agassiz's influence on natural history in this country was so powerful, he exerted little or no influence on the course of medical education, except in the indirect way of inspiring teachers who could train students in biology as a basis for technical medical study. C. R. B.

Louis Agassiz, his life and correspondence, edited by his wife. Houghton, Mifflin, & Co., 1885.
Louis Agassiz, life, letters and works, by Jules Marcou. McMillan and Co., 1896. This contains a list of the biographical sketches concerning Agassiz, and of Agassiz's scientific work.
A paper by Prof. Burt G. Wilder in the Popular Science Monthly for July, 1907, gives an interesting account of "What we owe to Agassiz" and references to some paper which appeared after Marcou's Life of Agassiz was published. Two other interesting biographical sketches by Prof. Wilder are: Louis Agassiz, Teacher (Harvard Graduates Magazine, June, 1907) and What Agassiz did for Cornell University (Cornell Era, vol. xxxix, June, 1907). Harvard Graduate, May, 1907.

Agnew, Cornelius Rea (1830–1888).

The parents of Cornelius Rea were William and Elizabeth Thomson Agnew, who lived in New York City. He graduated in arts at Columbia in 1849, and then took up the study of medicine under Dr. Kearney Rogers, and graduated at the College of Physicians and Surgeons in 1852. He studied in Dublin, London, and Paris, and returned in 1855 to New York to engage in medical practice, becoming a surgeon in the New York Eye and Ear Infirmary. In 1858 he was appointed Surgeon-General of the State of New York, and at the outbreak of the war was director of the State Volunteer Hospital, doing valiant service for the wounded.

In 1856 he married Mary, daughter of Lora Nash, of New York.

He was one of the founders of the American Ophthalmological Society in 1864, and president from 1873 to 1878; professor of ophthalmology and otology in the College of Physicians and Surgeons of New York. He displayed special adaption to the practice of his art, in operative work and sagacious treatment. His interests were very wide, his public positions many and distinguished, and a list of his writings can be seen in the Surgeon-General's Catalogue, Washington, D. C.

He died April 18, 1888, in New York.

H. F.

Trans. Am. Oph. Soc., vol. v.
Stone's "Biography of Eminent American Physicians and Surgeons."
Phila. Med. News, 1888, vol. lii.
New York Medical Record, 1888, vol. xxxiii.

Agnew, David Hayes (1818–1892). Born in Lancaster County, Pennsylvania.

David Hayes Agnew was the son of Robert Agnew, a well known physician. He studied at the Moscow Academy, Chester County, at Jefferson College, Canonsburg, and at Delaware College, Newark, Delaware, and entered the medical department of the University of Pennsylvania in 1835, where he graduated in 1838.

Upon graduation he practised near Nobleville, Chester County, until 1843, when he joined his wife's brothers in establishing the firm of Irwin and Agnew, iron-founders, continuing the business left by his father-in-law. In 1846 the firm failed, and Dr. Agnew resumed practice in Chester and Lancaster Counties.

In 1848 he removed to Philadelphia for the purpose of devoting himself specially to the study and teaching of anatomy and surgery, and in 1852 became connected with the Philadelphia School of Anatomy, where for ten years he gave instruction. He was exceedingly popular as a lecturer and considered an eminently practical teacher. When he took charge of the class it first numbered only nine students, but rose to two

David Hayes Agnew.

hundred and fifty, and would have been larger but for lack of accommodation. Agnew at this period was an indefatigable worker. He dissected for a time from "twelve to eighteen hours a day" (Adams). He gave as many as one hundred and eighty lectures during the year in his various courses including that on operative surgery. During a period when it was difficult to get anatomical material at the time of the cholera epidemic in 1854, Agnew went into the pit designed for the bodies of those dead of cholera, and injected bodies, which were then transferred to his dissecting rooms. One of his customs was to put subjects into a pond full of eels and these did their work very thoroughly. Unfortunately the man who had the reputation of selling the best eels in town secretly got them from this pond. The result, when by accident he learned how his eels were nourished, brought out rather a bad reputation for Agnew.

In 1854, he was elected a surgeon to the Philadelphia Hospital, where he established a pathological museum. He organized the Philadelphia School of Operative Surgery in 1863.

During the Civil War he performed many operations on wounded soldiers brought to the Hestonville and Mowry Army Hospital at Chestnut Hill, where Dr. Agnew and Samuel G. Morton alternated as consulting surgeon.

He married November 21, 1841, Margaret Creighton daughter of Samuel Irwin, Chester County, Pennsylvania.

Dr. Agnew had gone to Philadelphia without great medical or surgical experience, but by his own energy and self-reliance was able to acquire great popularity as a teacher owing to the clearness of his teaching, the soundness of his judgment, the precision of his operations, and the character of his writings. He was a rigid yet cautious operator, always showing coolness and presence of mind. He was a man of great nobility of character and of personal magnetism. He had much physical strength and courage. He was the chief operator in attendance on President Garfield after his assassination.

His last illness was in 1892 when he died, in Philadelphia, on the twenty-second of March, 1892.

Among his appointments he became demonstrator of anatomy and assistant professor of clinical surgery in the medical department of the University of Pennsylvania, and was elected surgeon to the Wills' Eye Hospital; in 1864, surgeon to the Pennsylvania, and in 1867, surgeon to the Orthopedic Hospital. In 1870, professor of clinical surgery in the University of Pennsylvania; 1871, of the principles and practice of surgery; 1889, emeritus professor of surgery and honorary professor of clinical surgery. In 1884 he resigned the position of attending surgeon to the Pennsylvania Hospital and became consulting surgeon, and in 1890 was elected president of the College of Physicians.

A list of his chief writings is given, but he first made his name as an author through his introductory lectures, and his "Classification of the Animal Kingdom," 1861, is considered a better work even than that of Baron Larrey.

"Practical Anatomy;" a new arrangement of the "London Dissector," with numerous modifications and additions, containing a concise description of the muscles, blood-vessels, nerves, viscera, and ligaments of the human body as they appear on dissection; with illustrations. Philadelphia, 1856.

"Vesico-vaginal fistula, its history and treatment." 42 pp., 8°. Philadelphia, office of the "Medical and Surgical Reporter," 1867. Reprinted from "Medical and Surgical Reporter," Philadelphia, 1886, xv.

"Lecture introductory to the one hundred and fifth courses of instruction in the medical department of the University of Pennsylvania," delivered Monday, October 10, 1870. Philadelphia, 1870.

Address delivered before the Philadelphia County Medical Society, January 5, 1875. (Published by order of the Society.) Philadelphia, 1875.

"The principles and practice of surgery," being a treatise on surgical diseases and injuries. 3 vol., 8°. Philadelphia, 1878–83. This is his best known work.

"General principles of surgical diagnosis." In "International Encyclopedia of Surgery" (Ashhurst), New York, 1881, i.

The same: "Principes généraux de diagnostic chirurgical." In "Encyclopédie international de chirurgie" (Ashhurst), Paris, 1883, ii.

The same: "Kwaika sinron. The principles and practice of surgery," being a treatise of surgical diseases and injuries. Translated by M. Toyabe. 2 vol. Tokio, 1889.

Memoir of John Light Atlee; read before the College of Physicians of Philadelphia, February 3, 1886. Portrait. Philadelphia, 1886. Reprinted from "Transactions of College of Physicians," Philadelphia, 1886, 3 s., viii.

F. E. P.

Adams, J. H. History of the Life of D. Hayes. Agnew, 8°. Philadelphia and London, 1892. Willard, F. D. Hayes Agnew, Biographical Sketch, 8°. Philadelphia, 1892. Internat. Clin. Phila., 1892, 2 s., ii.
J. Ashhurst, Jr. Tr. Am. Sur. Ass., Phila., 1892, x.
Internat. M. Mag., Phila., 1892, i, No. 4.
Med. News, Phila., 1892, lx.
N. Eng. Med. Month.; Sandyhook, 1884–5, iv.
J. W. White. Tr. Coll. Phys. Phila., 1895, 3 s., xv.
J. W. White. Univ. Med. Mag., Phila., 1892–3. v, port.

Alden, Ebenezer (1788–1881).

Dr. Alden, a noted medical biographer, was born at Randolph, Massachusetts, March 17, 1788. He was descended through both father (Dr. Ebenezer Alden) and mother (Sarah Bass) directly from John Alden of the *Mayflower*.

He graduated from Harvard College in 1808 and received his M. B. from Dartmouth Medical School in 1811 and M. D. from the University of Pennsylvania in 1812, coming under the instruction of Drs. Nathan Smith, Rush, Barton and Wistar. He settled as a physician in his native town where he passed his entire life.

From 1837 to near the close of life he was a trustee of Phillips Academy and Andover Theological Seminary. He was also a trustee of Amherst College and was one of the original trustees of Thyer Academy of Braintree.

In 1818 he married Anne, daughter of Capt. Edmund Kimball, of Newburyport, and had six children. He was totally blind for the last five or six years of his life.

Some of his writings are: "The Early History of the Medical Profession in the County of Norfolk," May 10, 1853, Boston, 1853; "Memoir of Bartholomew Brown, Esquire," Randolph, 1862; "Memorial of the Descendants of the Hon. John Alden," 1867, p. 184; "Notice of the Founders of the Massachusetts Medical Society" and "Historical Sketches of the Origin and Progress of the Massachusetts Medical Society," 1839.

Dr. Alden was a bibliophile and built up a private library of rare books and pamphlets, especially those appertaining to the Civil War and ecclesiastical history of New England. He had a strong love for antiquarian and genealogical pursuits, joining the New England Historic Genealogical Society in 1846, the year after its organization. As a lecturer on temperance he was well known and equally as a singer. Even when eighty-one years old he made one of the great chorus of the National Peace Jubilee in Boston, in 1869.

Dr. Alden died at his home in Randolph, January 26, 1881, aged ninety-three. There is a portrait in New England Historical Genealogical Register, 1881, p. 213.

W. L. B.

Boston Med. and Surg. Jour., vol. civ., 1881. Memorial by I. N. Tarbox, N. E. Hist. and Genealog. Reg., Oct., 1881., vol. xxxv.

Alexander, James Franklin (1826–1903).

J. F. Franklin was born on a farm in Greenville district, South Carolina, in 1826, a descendant of good old Scotch-

Irish stock and closely related to the Alexanders of Mechlinburg, North Carolina, who in May, 1775, signed the first "Declaration of Independence" known to be in existence in the United States. His grandfather, John R. Alexander, was a soldier in the Revolutionary War. His father, Thomas W., removing from South Carolina, settled in Gwinnett County, Georgia when James F. was only five years of age. James graduated at the Georgia Medical College in March, 1849, afterwards settling in the city of Atlanta, at once forming a partnership with a former schoolmate, Dr. John C. Calhoun, but the exorbitant price of six dollars per month rent for an office so deterred young Calhoun that he went back to his old home, Lawrenceville.

Among Dr. Alexander's first patients were a number of small-pox cases whom the other doctors refused to treat. Dr. Alexander gladly availed himself of this opportunity and this incident doubtless affected the whole of his future. The reputation he gained here for his successful management of the cases and obliterating the disease gave him such reputation that he was ever known, not only throughout Georgia, but the entire South as a successful small-pox expert. During his practice before and after the war he was known to have passed through fifteen or sixteen small-pox epidemics. In his early years he became an ardent advocate of general vaccination and re-vaccination.

In 1853, '54 and '55, he did much good work in helping to establish the Atlanta Medical College. But, of a diffident nature, he preferred private practice to appearing in the lecture hall.

Dr Alexander was surgeon to the Eighth Georgia Infantry during the Civil War for the first year. After this he resigned, returned home, serving the Confederacy as a surgeon in the hospital, principally looking after small-pox patients during the last two or three years of the war.

In politics he was an ardent Democrat and active Secessionist. From his popularity and general congeniality he was quite a favorite among the people and could have held any office that he wished, refusing all, however, except to be elected delegate to the convention which declared Georgia out of the Union.

He was the youngest member of the body of men who formed the Georgia Medical State Society in May, 1849. Up to his death he was an active and prominent member of this organization.

Dr. Alexander was very humane, never refusing the call of a pauper patient. It is estimated that in this line his gratuities reached almost one hundred thousand dollars.

He died November 14, 1903, of senile decay, after practising for fifty years.

His first wife was Miss Georgia Orme of Milledgeville, and his second wife, Ada, daughter of Judge Permeda Reynolds. From the first union there was an only daughter; from the second, two children, James F. and Ada. J. B. B.

Allen, Charles Warrenne (1854–1906).

Charles Warrenne Allen, a dermatologist, was born at Flemington, New Jersey, December 4, 1854. He was the son of a lawyer and went as a boy to the public schools of his native place; later he was sent to the Lycée Imperiale, Nantes, and in 1875 graduated from Phillips Exeter Academy, Exeter, New Hampshire.

He began to study medicine at Harvard, but received his degree from the College of Physicians and Surgeons, New York, in 1878.

In 1879–80 he studied in Vienna, Heidelberg and Paris, then in 1881 settled in New York City to practise, later devoting himself exclusively to diseases of the skin.

Shortly after his return from Europe he was appointed genito-urinary surgeon to the Charity Hospital, New York; when he resigned that position he was appointed consultant.

For many years he was physician to the department of diseases of the skin in the Essex Street Dispensary. In 1900 he was appointed to this chair in the New York Post-Graduate Medical School which position he held until death.

He was dermatological consultant to the Randalls Island Hospital, New York, the Hackensack and Bayonne Hospital, New Jersey; a member of the medical societies of the State and County of New York, the New York Dermatological society and the American Dermatological Association.

He wrote "The Practitioner's Handy Book of Medical Progress" and the "Practitioner's Manual," and in collaboration with Drs. Franklin and Sterne published, in 1904, "Radiotherapy, Phototherapy, and High Frequency Currents" and was on the editorial staff of the "New York Medical Record," also contributing frequently to various medical journals on dermatology.

Dr. Allen's vast experience and keen observation made him one of the most expert dermatologists in the United States; he was a ready debator and gave expression to ideas that were helpful to his confrères.

His death occurred at Genoa, May 17, 1906, while returning from the 1906 International Medical Congress.

J. M. W.

Allen, Harrison (1841–1897).

Harrison Allen, born in Philadelphia April 17, 1841, was the son of Samuel Allen and of Elizabeth Justice Thomas. On his father's side he was descended from Samuel Allen, who came over here from England with William Penn. He had his early education in the public grammar schools and at the Central High School of Philadelphia, and as a boy was greatly interested in natural history, and though afterwards he would have preferred pure science, financial considerations led him to study medicine, including dentistry.

It became necessary for Allen to leave school during his high school course and seek work. He tried two or three things and finally studied dentistry under Dr. J. Foster Flagg, devoting his spare moments to reading medical books, and taking the regular courses in medicine at the University of Pennsylvania, where he graduated in 1861. Upon graduation he became a resident physician in the Blockley Hospital, Philadelphia.

He was for the greater part of the war stationed in hospitals in and near Washington where a large part of his little leisure was spent at the Smithsonian Institution where he came under the influence of Profs. Joseph Henry and Spencer F. Baird.

Upon his resignation from the army Allen entered upon the practice of medicine in Philadelphia. Partly owing to his dental education he was led to develop the special surgery of the air passages, and among his fifty odd papers on medical and surgical subjects, many relate more or less closely to this field of work.

At the time Harrison Allen entered upon the practice of medicine there was little opportunity for a man to earn his living by entire devotion to science and teaching. While he was forced into practice for a livelihood, his deeper interests were in natural science, and these led him to welcome the ill-paid teaching positions offered.

Meanwhile, in the midst of practice and teaching he was actively engaged in scientific investigation, much influenced at first by his teacher, Joseph Leidy. He joined the group of investigators, which worked in the building occupied by the well known Philadelphia School of Anatomy and became an active member of the Philadelphia Academy of Natural Sciences.

The subject of his thesis at graduation was "Entozoa Hominis." This title suggests the guiding hand of Joseph Leidy, who did so much in this field. Allen's first published scientific paper, entitled "A Description of New Pteropine Bats from Africa," appeared in the "Proceedings of the Academy of Natural Sciences" in July, 1861. This was the beginning of a series of some thirty odd papers relating to bats. Of these the most important was his "Monograph on the Bats of North America" published by the Smithsonian Institution in 1864 and brought out in a second revised edition in 1893. In the course of his studies on bats

Allen gathered a considerable private collection of specimens which he bequeathed to the Academy of Natural Sciences at Philadelphia. While his work on bats constituted Allen's most important scientific contribution he published numerous valuable papers on other subjects including the joints, the muscles, locomotion, distribution of color markings and craniology. He dissected and described the Siamese twins. In craniology his most important papers were on "Crania from Florida Mounds" ("Proceedings of the Philadelphia Academy," 1896) and on "Hawaiian Skulls" (Proceedings of the Wagner Free Institute of Science," 1898). In both papers he paid special attention to individual adaptation of skull form to function and depreciated craniology as a certain criterion of race.

Harrison Allen published two textbooks, one in 1869 called "Outlines of Comparative Anatomy and Medical Zoology," the other in 1884, entitled "A System of Human Anatomy." The latter book is clearly written. The subject is taken up from the medical and surgical aspects. It was not commercially very successful, although the fruit of much painstaking labor.

In 1891 Allen published under the title "Addresses in Anatomy" a number of addresses previously delivered on the teaching and applications of anatomy. He did not believe that anatomy for medical students should be a mere handmaid of clinical surgery. To so teach anatomy he believed to be against the best interests not only of anatomy as a science, but also ultimately in its practical applications to medicine. He believed in taking it up from the morphological standpoint and that "morphology embraces all animated structures in a scheme of philosophy."

Allen was the first to suggest the term pedo-morphism in describing infantile characters in the bodies of adults.

In a work on "An Analysis of Life Form in Art" he collected much interesting material relating to design.

In all undertaken, he devoted the most patient attention to detail and was an exquisitely skillful dissector, although paying comparatively little attention to the technic of microscopic anatomy. As an example of Allen's methods of work, Brinton gives an account of his preparation of a paper on the "Jaw of Moulin-Quignon. This jaw was found in the Abbeville gravels in 1863, and was claimed by some to be that of a prehistoric man, while by others this was disputed. Allen became interested and took up the study of the human mandible with these questions in view:

1. What is the pattern of an ordinary jaw?

2. What is the value of the lower jaw in man as a test characteristic of race?

Allen visited every important anatomical collection in Philadelphia and studied over four hundred inferior maxillæ. His results he based on the three hundred and twenty more perfect specimens. He came to the conclusion that the lower jaw is of little value as a test character of race, owing to its wide variations everywhere.

Wilder gives the following summary of Allen's character:

"Pre-eminent among Dr. Allen's many admirable traits was his readiness to recognize the good qualities of others. Even respecting bores or those who wronged him I do not recall an unkind remark. So decided, indeed, was his predisposition to find some extenuating quality in even the most flagitious transgressor that had the devil been objurgated in his presence we may imagine him to add: 'His satanic majesty has doubtless many sins to answer for, but let us not forget his extraordinary ability, activity, and enterprise.'

"I could occupy much time with details of my dear friend's life and nature, but content myself with enumerating what seem to me rare combinations of characteristics. An ardent naturalist and daily handling specimens variously preserved, he was fastidiously neat in person and apparel."

In December, 1869, Harrison Allen married Julia A., daughter of S. W. Colton, of Long Meadow, Massachusetts,

who survived him with a son and a daughter.

Among his other appointments he was: acting assistant surgeon, 1862; assistant surgeon in the United States Army, 1862. He served throughout the war and resigned in December, 1865, with the title of Brevet-major.

Professor of anatomy and surgery at the Pennsylvania Dental College, 1866–78; visiting surgeon to the Philadelphia Hospital, 1874–8; assistant surgeon to Wills' Eye Hospital, 1868–70, and to St. Joseph's Hospital, 1870–78; presidency of the American Laryngological Association, 1886.

In 1865 he was appointed to the chair of comparative anatomy and zoology in the auxiliary department of medicine at the University of Pennsylvania. In 1878, to the chair of the institutes of medicine in the medical department of the University; 1885 saw him emeritus professor of the institutes of medicine, and in 1891 he once more assumed the chair of comparative anatomy and zoology which he held until 1896. He was thus connected with the University of Pennsylvania as a teacher for over thirty years. Among other scientific societies to which he belonged may be mentioned the Natural History Society of Boston, the Philadelphia Pathological Society, the Washington Biological Society, the Association of American Anatomists, of which he was president from 1891–1893, and the Anthropomorphic Society, of which he became president in 1891.

A list of his works is in "Proceedings of the Tenth Annual Session of the Association of American Anatomists held in Ithaca, December, 1897." C. R. B.

Harrison Allen, by Burt G. Wilder. Proceedings of the Association of American Anatomists, December, 1897. A brief biography with portrait and bibliography.

Dr. Allen's Contributions to Anthropology, by D. G. Brinton. Proceedings of the Philadelphia Academy of Arts and Science, December, 31, 1897.

Dr. Allen's Zoological Work, by S. N. Rhoads, same proceedings,

Biographical notes of Harrison Allen and George Henry Horn, same proceedings.

Allen, Nathan (1813–1889).

Dr. Allen was born in Princeton, Massachusetts, April 25, 1813. His parents, Moses and Mehitable Oliver Allen, were both born in Barre, Massachusetts, the great ancestor of this family of Allens having been Walter Allen, one of the original proprietors of Old Newbury, Massachusetts, in 1648.

Nathan Allen graduated from Amherst College in 1836. He received his M. D. from the University of Pennsylvania Medical School in 1841, and settled in Lowell the same year. Here he practised until his death, January 1, 1889, the result of a fall down-stairs.

He received the honorary M. D. from Castleton (Vermont) Medical College in 1847, and LL. D. from Amherst in 1873.

Dr. Allen devoted himself to the study of physical culture, degeneracy, insanity, heredity, hygiene, education, and intemperance. In 1856 he was chosen a trustee of Amherst College, and in 1864 Governor John A. Andrew appointed him a member of the State Board of Charities. He served on the board for fifteen years. In 1872 he visited Europe as a delegate appointed by Governor Washburn to the international congress of prison reform in London.

His published writings comprise over one thousand octavo pages. Some of the more noted are: "Physical Culture in Amherst College," "Intermarriage of Relatives," "Physiological Laws of Human Increase," "Normal Standard of Women for Propagation," "Report on Lunacy to the Massachusetts Legislature," and his most noted work, "Changes in the New England Population."

He was married first, September 15, 1841, to Sarah H. Spaulding, of Wakefield, Massachusetts. She died without children and he was married a second time, in 1858, to Annie W. Waters, of Salem, Massachusetts, by whom he had four children.

He was for a long time connected with St. John's Hospital and always labored to secure a better *ésprit de corps* in the medical profession. W. L. B.

Allen, Peter (1787–1864).

Peter Allen, of Norwich, Connecticut, was born on July 1, 1787, the son of John Allen and Tirzah Morgan. He was descended from Samuel Allen, who came to the Massachusetts Bay Colony from England in 1630. His preliminary education was received at the Academy in Norwich, and he later conducted this school as a teacher for two years, obtaining his medical education with Dr. Phineas Tracy, of his native town. In 1838 Jefferson College conferred upon him her honorary M. D.

Dr. Allen removed from Norwich, Connecticut, in 1808 and became one of the early pioneers in Kinsman, Ohio, having made the journey thither on horseback by way of Philadelphia and Pittsburg. The nearest point at which medicines could be obtained was Pittsburg, and here he secured the supplies with which to begin practice. It was from this source he also ordered medical books.

In 1812, being appointed surgeon in the Western Army, under General Simon Perkins he served in the regiment of Colonel Hays in the campaign on the Maumee River. In passing through Cleveland, General Perkins desired to secure for Dr. Allen a case of instruments belonging to the United States Government. Finding it impossible by any requisition to secure these, he sent a squad of soldiers and seizing them delivered them to Dr. Allen to be used in the campaign.

A necessary result of Dr. Allen's pioneer position was of course the endurance of many hardships, on account of his extended practice. There were no roads, and the paths were often marked only by blazed trees. Sometimes at night he was piloted through the forest by torches made of hickory bark.

His son, who was born in 1811, remembers to have heard him prophesy that the time would come when there would be no grass or stumps in the roads between the wagon tracks.

Dr. Allen in his practice covered twelve townships in Northeastern Ohio and Western Pennsylvania, and he was called largely in consultation and for operation over a much wider territory. Among the operations which he performed without an anæsthetic were ligation of the femoral artery for aneurysm, tracheotomy, amputations of leg, thigh, arm and shoulder-joint, together with operations for strangulated hernia and the removal of tumors. The causalties incident to pioneer life requiring his attention were numerous. Dr Allen kept well up to date, and the position as student under him was much sought, and he had usually three or four with him. It was his custom to assign to them regular reading, and to spend a portion of every evening in questioning them upon what they had studied.

He was a censor in the Medical College at Willoughby, which was the first Medical College in Northern Ohio, and later in the Cleveland Medical College, which was its successor.

In 1835 he was elected first president of the Ohio Medical Convention, which was the parent society of the Ohio State Medical Society. He was elected president of the latter society in 1856.

In his address, delivered at that time, he speaks of having made a journey to Columbus in the latter part of 1826, for the purpose of organizing a state medical society. The journey was made on horseback and required a week in going, another in returning, and a third in Columbus, the journey being made over roads which were well nigh impassable except for a man on horseback.

In 1840 he was elected a member of the state legislature, but absolutely refused further political honors.

Dr Erastus Cushing characterizes him as one of the most prominent medical men in the Western Reserve, and Dr. De Lamater wrote, "I would rather have Dr. Allen's influence with the Cleveland Medical College than any physician in Northern Ohio."

May 13, 1813, Dr. Allen married Charity Dudley, who was born in Bethlehem, Connecticut. She died in 1840.

Their only child was Dudley Allen, who succeeded his father in his practice.

Dr. Peter Allen died in Kinsman, Ohio, September 1, 1864, of cholera morbus.

His writings were confined to addresses and papers read before the various medical societies of the state. D. P. A.

Magazine of Western History. Cleveland, Ohio, January, 1886.

Allison, Richard (1757–1816).

Richard Allison, who was the first physician to practise in Cincinnati, was born near Goshen, New York. Like many practitioners of that day, he was not a graduate in medicine. In 1776 he entered the army of the Revolution, remaining in it until the close of the war, and in 1789, when a corps under Gen. Harmar was organized for the protection of the frontier, was appointed surgeon. In 1790, when a new army was organized, Dr. Allison was made surgeon-general. After the defeat of Harmar's army in 1790, an entirely new organization was effected under Gen. St. Clair. Dr. Allison was made surgeon of the first infantry.

Following St. Clair's defeat in November, 1791, a new "Legion" was formed in 1792, under Gen. Wayne. Dr. Allison was appointed surgeon of the "Legion."

When peace was declared in 1795, he practised in Cincinnati and vicinity, though not mustered out of the army until 1798.

Dr. Allison practised in Cincinnati nearly a quarter of a century. He was the first physician to die in that city, his death taking place on March 22, 1816.

A. G. D.

Almon, William James (1754–1817).

William James Almon was born in New York in 1754, and died at Bath, England, in 1817, after having practised in Halifax, Nova Scotia, for upwards of thirty years. He was found dead in bed. A diary kept during his last illness has been published and is very interesting.

In 1771 he was apprenticed to Andrew Anderson, Physician and Surgeon, of New York. On the outbreak of the Revolutionary War he sided with the Royalists and was employed as a surgeon at the Battle of Bunker Hill. On the evacuation of Boston in 1776, he came to Halifax with Lord Howe's forces, but remained only a short time, as he accompanied the troops to New York and remained in active service for several years. In 1779 he received from Lord Townshend a commission as Assistant Surgeon to the 4th Battalion of Royal Artillery. Before the close of the Revolutionary War he returned to Halifax and received the appointment of surgeon of artillery and ordnance, a position which he held for many years. He was also a justice of the peace for Halifax and surgeon-general of the militia. He acquired an extensive practice and enjoyed, to the fullest extent, the confidence of the community.

He was very absent-minded, a characteristic which gave rise to many amusing anecdotes. Readers of Marryat's "Newton Foster" will readily recall the awkward predicament in which the hero's uncle was placed when he discovered himself unexpectedly in a bedroom with a woman not his wife. The incident is based on a misadventure of Dr. Almon's, which was related to Marryat by the family when the sailor-novelist was on the Halifax station. On another occasion, when paying a professional call on the Hon. Richard Bulkeley, he inadvertently slipped a gold watch and chain, which was lying near, into his pocket, where it was found that evening by his wife, but not before its loss was being proclaimed by the town crier.

In 1785 he married Rebecca Byles, a daughter of the Rev. Dr. Mather Byles, and had a large family. His son, Dr. William Bruce Almon, succeeded to his practice. D. A. C.

Almon, William Johnston (1816–1901).

William J. Almon was the son of Dr. William Bruce Almon. He was born at Halifax in 1816 and died there January 18, 1901.

At King's College, Windsor, Nova

Scotia, he took his arts course, as his father had done before him, and after graduating as B. A. at King's, took his professional course at Edinburgh and Glasgow, graduating from the latter as M. D. in 1838.

He was a member of the Medical Society of Nova Scotia, and its President in 1855, 1856, and 1865. He began practice in Halifax about 1837 and succeeded his father as surgeon of the Provincial Poors' Asylum in 1840. He was elected one of the members to represent Halifax in the Dominion House of Commons in 1872, and was a member of the Dominion Senate from 1879 till his death.

Succeeding his father in 1840, he soon secured a large practice and high social standing. He was a strikingly handsome man, of commanding presence, of great vigor, much of which he retained even beyond his four score years, along with his head of abundant dark curly hair, even then but little streaked with gray. Antiquarian research and relics connected with notable persons and places always greatly interested him, and his home, "Rosebank," on the North West Arm, was a veritable museum of curios. Just a few specimens may be mentioned; a brass mortar captured from the Russians at the Redan the day after the death of the Nova Scotia heroes, Parker and Welsford; a St. Helena medal, such as were given to the survivors of the Napoleonic wars; a Louis XIV chair which had belonged to Governor Wentworth the last of the Royalist governors of New Hampshire; and a vast collection of old walking sticks, including one that had belonged to Major André whom Washington hanged as a British spy; and another, a malacca with gold head owned by Dr. Benjamin Rush. He had also quite a collection of original letters and autographs of distinguished people, such as letters of the poet Pope, Benedict Arnold, Isaac Watts, Benjamin Franklin the Duke of Wellington, and autographs of Queen Anne, George II, and Lord North.

In 1840, Dr. Almon married Elizabeth, a daughter of Judge Ritchie, sister of Sir William Ritchie, chief justice of Canada. He had a familyof six sons and five daughters.

His eldest son, Dr. William Almon, a graduate of Harvard, became a surgeon in the Confederate Army and died of fever in Virginia in 1862.

Another son, Dr. Thomas R. Almon, educated at King's College, Windsor, and at the College of Physicians and Surgeons, New York, was associated in practice with his father, but died April 20, 1901, three months after him.. D. A. C.

Alter, David (1807–1881).

Physician and electrician and discoverer of the principles of the prism in spectrum analysis.

David Alter was born in Westmoreland County, Pennsylvania, in the locality now embraced by Allegheny Township, not far from Freeport. His father was a Swiss from near Lucerne, his mother of German nationality.

At the age of eight or nine he read the life of Benjamin Franklin, and was strongly drawn to the study of electricity. Independently of the labors of Morse and Wheatstone he perfected an electric telegraph in 1836 which consisted of seven wires, the electricity deflecting a needle on a disc at the extremity of each wire. So perfect was his system that he was enabled to transmit messages from his workshop to the members of his family in the house. In 1837 Dr. Alter invented a small machine which was run by electricity and on June 29, 1837, published in the "Kittanning (Pennsylvania) Gazette" an elaborate article on the use of electricity as a motive power under the title of "Facts Relating to Electro Magnetism." This article was widely read and was referred to in Silliman's "Principles of Physics." In 1845 Dr. Alter, in association with Dr. Edward Gillespie and James Gillespie of Freeport entered into the manufacturing of bromine from the mother liquid of salt wells, by a process which he and his partners invented and

patented. A large jar of this then rare substance was exhibited at the World's Fair in New York in 1853, where it excited much wonder. Before the discovery of petroleum he had invented a rotating retort for the extraction of oil from cannel coal. This discovery bid fair to become a profitable industry until the discovery of the natural oil rendered the operation superfluous.

The greatest legacy, however, which Dr. Alter left to posterity was the result of his discovery and application of the principles of the prism in spectrum analysis. The data regarding this discovery are taken from an article published in the "Pittsburg Dispatch" in January, 1882, by Dr. Frank Cowan. That Dr. Alter's discovery antedates that of Kirchoff is proven by the fact that some five years before the latter published his discovery, Dr. Alter's paper appeared in the "American Journal of Sciences and Arts" (Silliman's Journal), second series, volume xviii, November, 1854. It was entitled, "On Certain Physical Properties of Light, Produced by the Combustion of Different Metals in the Electric Spark Refracted by a Prism."

A second article by Dr. Alter appeared in the same journal, May, 1855, entitled: "On Certain Physical Properties of the Light of the Electric Spark within Gases, as seen through a Prism."

A brief abstract of the first article appeared in Europe in the "Chemic Jahresberichte" in 1845 and the second was reproduced in its entirety in the Paris Journal "L'Institute" for the year 1856 and in the "Archives of the Physical and Natural Sciences, of Geneva." It would thus seem proven beyond any doubt that to Dr. Alter belongs the credit of the discovery of the principles underlying spectrum analysis. Dr. Cowan states that the prism with which he made the first experiments was obtained by Dr. Alter from a fragment of a large mass of very brilliant glass found in the pot of a glass-house destroyed in the great fire of Pittsburg April 10, 1845.

Dr. Alter's early educational opportunities appear to have been very meager, so much so that he was largely self taught. His medical education was obtained in New York where he graduated at the Reformed Medical College of the United States in 1831, an institution of the eclectic or botanic school. Definite information regarding his medical education is lacking because of the destruction of the records by fire.

Dr. Cowan says of him: "In his life he was a plain and simple man, gentle and modest in manner, temperate in his habits and careful and patient in his work."

He was twice married: to Laura Rowley by whom he had three children, and to Amanda B. Rowley who bore him eight children, four sons and four daughters. One son, Myron Hale Alter graduated in medicine at the Baltimore Medical College and rose to prominence as a practitioner of medicine.

Dr. Alter died in Freeport, Pennsylvania, September 18, 1881, aged seventy-four. The exact cause of death is unknown but appears to have been a gradual weakening of the vital powers incident to old age.

A. K.

Althof, Hermann (1835–1877).

Hermann Althof was born the eighth of August, 1835, at Horn, in Lippe-Detmold, Germany, and died in New York January 14, 1877, of erysipelas. He was the youngest son of a school teacher in his native town.

In 1847 he accompanied his father on a visit to his elder brother, who had settled in New York City. After his return he began to study medicine, first in Wurzburg, later in Zurich, Vienna, Prague, and Berlin, where he received his diploma in the year 1857. Here Prof. A. von Graefe began to interest himself in the progress of his gifted pupil, with whom he tried to form a closer alliance by offering him a position as one of his assistants. Dr. Althof, however, left Berlin to continue his studies in Paris, where he studied ophthalmology under

Desmarres, and afterwards practised in New York in 1858. Two years later he left the city again for Europe, spending part of a year in Wurzburg, with Prof. Müller, devoting himself to the study of pathological and microscopical anatomy, and part in Berlin with Graefe. After his return he devoted a large portion of his time to those public institutions to which he had become attached, the German Hospital and Dispensary, as well as the New York Eye and Ear Infirmary; in the latter he filled the place of executive surgeon for about eighteen months before his death. He was one of the founders of the Ophthalmological Society of New York and of the American Ophthalmological Society.

His contributions to ophthalmological literature are all of importance. He published in "Graefe's Archiv," Bd. viii. Abthl. 1, Klinische Notizen on—

1. "Intraoculäre Blutungen."

2. "Auflagerungen auf die Lamina elastica anterior."

3. "Caneroid der Conjunctiva bulbi."

Further, a paper on "Canthoplasty: a Clinical Study," in the "Transactions of the American Ophthalmological Society," vol. ii., part 2. Besides these, the "Transactions" of the above-named societies contain a number of valuable communications relating to diseases of the eye. Among these a report of "Eight Cases of Subretinal Effusion," in all of which a spontaneous cure was observed.

Dr. Althof was esteemed by his colleagues for his extensive and well digested information; for his extraordinary powers of diagnosis, wonderful manual dexterity, and sound judgment; for his great, unselfish devotion to the duties of his profession. E.N.

From a biog. by "E. N." in the New York Med. Jour., 1877, vol. xxv.
Tr. Am. Ophth. Soc., New York, 1878, vol. ii.

Anderson, Alexander (1775–1870).

In the death of Anderson, who died on the seventeenth of January, 1870, in Jersey City, the bookmaker's craft and the world of book-readers lost a long-familiar friend.

He was the pioneer engraver on wood in America, the virtual inventor of the art on this side of the Atlantic. His name was familiar to booksellers and readers in America from the beginning of the present century; and the mysterious little monogram "A.A." in the corners of woodcuts in educational books attracted the attention of millions of children in schools and at firesides when experiencing the delight of his pictures.

Dr. Anderson was of Scotch descent, his father being a native of Scotland. He was born near Beekman's Slip, New York City, on the twenty-first of April, 1775, two days after the first bloodshed in the old war for independence had occurred at Lexington and Concord. His father differed in politics from most of his countrymen in America at that time, who were generally distinguished for their loyalty to the king; and at the time of Alexander's birth he was the publisher of a republican newspaper in the city of New York called "The Constitutional Gazette." He continued to publish it in opposition to the ministerial papers of Rivington and Gaine until the autumn of 1776, when the British took possession of New York City. Then the "rebel printer" was compelled to fly, with his books and printing materials, nearly all of which were lost before he reached a place of absolute safety in Connecticut.

At the age of twelve years young Anderson began to use the graver for his own amusement. He was a timid lad, shrank from asking questions, and gained information by silent and modest observation. Peeping into the shop windows of silversmiths he saw the shape and the method of manipulating the graver in the lettering of spoons; and rolled-out copper cents gave him his plates for first efforts. The wonders of general science early engaged his attention, especially that branch which pertains to the economy of man's physical life. Some of his earlier efforts in the engraver's art were in making copies of anatomical figures

from medical books. His father perceived this proclivity with pleasure, and deprecating the lad's manifest love of art, he allowed him to make preparations for the profession of a physician. In May, 1796, at the age of twenty-one years, he received the degree of Medical Doctor from the faculty of Columbia College. The subject of his address on that occasion was "Chronic Mania;" and the theories which he then advanced concerning its cause and cure have now been long-established facts in medical science.

Soon after young Anderson commenced his professional studies, when about seventeen years, his proficiency in art had become so great, notwithstanding the many difficulties that lay in his way, that he was employed by William Durell, a bookseller, to copy the illustrations of a popular little English work entitled "The Looking-Glass for the Mind." The engravings that adorned it were made on wood by Bewick, the father of modern wood-engraving. Up to this time Anderson's engravings had been made on type-metal and he had no idea that wood was used for the purpose. When he had completed about half the illustrations he was informed that Bewick's pictures were engraved on boxwood. He immediately procured some pieces of that wood from a rule-maker's shop, invented proper tools, experimented, and, to his great joy, he found the material much more agreeable to work upon and more easily managed than type-metal.

In the first year of his practice of medicine Dr. Anderson drew and engraved on wood, in a most admirable manner, even when compared with the art at the present day, a full-length human skeleton, from Albinus's "Anatomy," which he enlarged to the length of three feet. This, it is believed, is the largest fine and carefully elaborated engraving on wood ever attempted, and has never been excelled in accuracy of drawing and characteristic execution.

When Dr. Anderson was at the age of twenty-three years his family all died of the yellow fever He was attacked while in attendance upon the physician with whom he had studied, and who had been prostrated by it. Both recovered; and Anderson made a voyage to the West Indies to visit a paternal uncle, Alexander Anderson, who was "the king's botanist" at St. Vincent. On his return he resolved to abandon the medical profession as a business and devote himself to engraving, for which he had conceived an irrepressible passion. At that time John Roberts an eccentric Scotchman and friend of Anderson's deceased father, who painted miniatures, etched and engraved on copper, was a clever musician and mathematician, and a competent draughtsman, became his instructor. Anderson preferred wood-engraving, but the demand for it being small he practised on copper, and, under Robert's instruction, gained great proficiency. His skill was well attested by the frontispiece to Robertson's "History of Charles the Fifth," and a portrait of Francis the First. These he engraved in the year 1800 for an edition published in New York by Hopkins. But Roberts' habits were so irregular that Anderson did not remain with him long, and finally his master's intemperance compelled him to give up the advantages which he might have derived from that artist's practical suggestions.

Anderson established himself as an engraver soon after leaving Roberts, and up to the year 1820 he used both wood and metal, as occasion required. He illustrated the earliest editions of "Webster's Spelling-book," which for about seventy years has been a leading elementary book in the schools of the United States. Its sale has been enormous, and at one time amounted to about a million of copies a year. In 1857 a new and more fully illustrated edition of that work was published, the engravings executed by Anderson from drawings by Morgan, one of his pupils, who was about eight years his junior.

During his long and busy life Dr. Anderson engraved many thousands of subjects. In the year 1799 he engraved sev-

eral large copper-plates for Josephus' "History of the Jews," and in 1808 he executed on wood sixty or seventy illustrations for an American edition of Bell's "Anatomy," copied from the originals, etched by Bell himself. His last engraving on copper was made about the year 1812 to illustrate a quarto Bible. The subject was "The Last Supper," from an English design. From that time he engraved on wood exclusively, and found continual employment until called upon to lay aside every implement of labor forever. Between 1850 and 1855 he engraved forty octavo and forty smaller illustrations of Shakspeare's plays, from original designs, for Cooledge & Brother, then the publishers of "Webster's Spelling-book." They were executed in the substantial and characteristic style of English woodcuts thirty or forty years previously.

In the spring of 1859, when in the eighty-fifth year of his age, Dr. Anderson changed his place of residence, and removed from where he had lived about thirty years. At that time he issued a new business card, drawn and engraved by himself, with the appropriate motto—Flexus Non Fractus—"Bent, but not broken."

Dr. Anderson's reminiscences of the past were extremely vivid, and his relations of them were very instructive. They extended back to the closing scenes of the Revolution. With most of the literary and professional men in New York in the early part of this century he was very familiar, and was beloved by all for his sterling virtues. The writer had heard the late Washington Irving speak of him in a most affectionate manner as one of the earliest friends of his youth, and from whom, when Irving was a lad, he learned to play the flageolet.

At the time of his death, Dr. Anderson was in the ninety-fifth year of his age. In person he was a little below the medium height, rather thick-set, and presented a countenance always beaming with benevolence and kindly feeling. He was extremely regular and temperate in his habits. "I would not sit up after 10 o'clock," he used to say, "to see an angel." He was genial in thought and conversation, and uncommonly modest and retiring. It was not without much persuasion from the writer that he consented, several years ago, to sit for the daguerreotype from which his portrait was copied, and which he himself engraved when he was past the eightieth year of his age.

Med. Register N. Y., 1870.
Harper's Weekly, 1870.
Life and Works of Alexander Anderson by Frederic M. Burr, 1893.

Anderson, Turner (1842–1908).

Turner Anderson, surgeon, was born in Meade County, Kentucky, on August 11, 1842; his people had come over here in 1770, with and were related to Lord Stirling. Turner studied medicine at the Cincinnati College of Medicine and Surgery, graduating there in 1862 and settling to practise in Louisville.

Endowed with the courage which comes from a thorough acquaintance with a subject, he was a bold operator, with admirable technic. His first hundred laparotomies were all successful, and to him is ascribed priority in the subperitoneal treatment of the pedicle in hysterectomy. He promulgated Anderson's modification of Kelly's operation for perineorrhaphy and was the first surgeon west of the Alleghenies to do pneumonotomy for the draining of pulmonary abscess.

During the war he was assistant surgeon at Brown Hospital, Louisville, and afterwards surgeon major to the twenty-eighth Kentucky Infantry. When the fighting was over he married Anna Evans who died three years later, leaving him a daughter. His second wife was Sarah G., daughter of Judge Simrall and three children survived him, Lulie, Cornelia and Simrall who became a doctor.

Anderson senior was a genial, clever but practical man greatly venerated by his students and a favorite with the faculty. His death, on the thirteenth of October, 1908, deprived Louisville of a fine surgeon and a good Christian citizen.

He was president of the College of Phy-

sicians and Surgeons of Louisville; a member of the Louisville Obstetrical Society, the Kentucky State Medical Society and its vice-president in 1874. He occupied the chair of materia medica and therapeutics in the University of Louisville and successively those of obstetrics and clinical gynæcology.

T. L. McD.

Anderson, Washington Franklin (1823–1903).

Washington F. Anderson, forty-six years a practitioner in Salt Lake City, Utah, was born in Williamsburg, Virginia, January 6, 1823, of English, Scotch and Irish ancestry, though his parents and grandparents were Americans. He attended medical lectures at the University of Virginia in 1841–1842, and the University of Maryland in 1843–1844, graduating from the latter in 1844.

He was a resident student of the Baltimore Almshouse Hospital from 1842 to 1844, where he had unusual privileges in dissection, postmortem examination and pathology. Among the latter were studies in remittent fever, made with Dr. Charles Frick of Baltimore and published in the April number of the "American Journal of the Medical Sciences," 1846.

He practised in Mobile, Alabama, until the Mexican War in 1846, when he joined the Alabama regiment and served in the ranks as orderly sergeant of his Company. He finally settled in Salt Lake City and practised there until his death in 1903, doing much, along with two physicians of recognized ability, Dr. John Milton Bernhisel and Dr. William France, an English physician, to maintain the integrity of the medical profession in Utah.

In 1876 Anderson was elected president of the first medical society in Utah.

He had an extensive practice in surgery. Cases of urinary calculi in young and old seem to have been very common; and for many operations the necessary instruments were remodeled or fashioned by crude mechanics, the procuring of medical and surgical appliances from New York meaning months of waiting and uncertain transportation across the desert.

In 1881, when aseptic surgical technic was in its infancy, he performed a laparotomy for the removal of a large ovarian cyst, this being probably the first operation of the kind performed in Salt Lake City, the patient making a good recovery.

In 1862 he married Isabella Evans. Thirteen children, four boys and nine girls, were born, and three daughters received medical degrees from the University of Michigan.

He died in Salt Lake City, August 21, 1903. W. B. E.

"Biographies of Eminent American Physicians and Surgeons," R. French Stone. Whitney's "History of Utah."

Andrade, Eduardo Penny (1872–1906).

The son of José and Eliza Penny Andrade and grandson of Gen. José E. Andrade, Eduardo was born at Maracaibo, February 2, 1872, and educated and brought up there.

He began the study of medicine in the National College of Maracaibo in 1888 and the next year continued them in the University of Caracas, finally graduating from Georgetown University in 1895.

About this time he was appointed a member of the Venezuela Legation at Washington, which post he held for two years, and while there studied bacteriology in the hygienic laboratory of the Marine Hospital Service.

In 1901 he came to New York and entered the clinic of Dr. Knapp, and in 1902 went to Cuba and graduated at the University of Havana. Here it was, in 1902, after fourteen years of preparation of the most searching character, that he first entered upon actual practice, yet, in a few months, when the State Board of Health of Florida opened a bacteriological laboratory in Jacksonville its offered directorship was accepted. Here he remained until his death, September 20, 1906. He married in 1905, Mary Mc-

Laughlin, the youngest daughter of Major McLaughlin of Jacksonville, and was survived by the wife and a little son.

The thoroughness with which he did all his work will best be shown by the fact that he had studied medicine fourteen years before he began to practice and graduated from no fewer than four colleges and attended clinics in five different countries. He was a fluent speaker of, and well versed in, the literature of all modern languages, a classical scholar and had a broad knowledge of the history of the world. He was the first to discover the existence of Malta fever in Venezuela. After returning home from Washington, in 1897, with Dr. B. Mosquera, he worked up a number of cases of Malta fever (Graceta Medica, Caracas, July 15, 1898), thus demonstrating for the first time the existence of this disease on the American Continent. Dr. Andrade furnished the inspiration, and those who knew his enthusiastic and indefatigable zeal can't escape the conviction that he did a liberal share of the work, though in the report he is only ranked as assistant. The custom of the country and his own innate modesty kept him from getting proper credit.

He was the first to find and report a case of filariasis in the state of Florida. Though his practice was chiefly in diseases of the eye, ear, nose and throat, his heart was in bacteriology.

A loyal friend, a genial companion, and a sparkling conversationalist, he had a keen sense of humor and enjoyed a good story.

For months he knew that a disease which held out no hope of cure was slowly but surely killing him, but he nevertheless attended as assiduously to his duties in behalf of suffering humanity as physical pain would permit. H. B.

Andrews, Edmund (1824–1901).

Edmund Andrews, physician, was one of the founders of the Chicago Academy of Sciences and also of the Northwestern University Medical School. In Mercy Hospital, the institution in which he and his two sons did so much earnest and conscientious surgical work, he suddenly passed away on the twenty-second day of January. Edmund Andrews had been engaged in surgical work in Chicago for forty-eight years. He was born in Putney, Vermont, of sturdy New England stock, on April 22, 1824, thence removing in 1840 to Detroit, Michigan, he completed his literary studies in the University of Michigan, graduating in 1849. Three years later he completed his medical course in the University of Michigan and went to Chicago. In 1855 he became a professor at Rush Medical College, which then maintained a course of two years. Dissatisfied with this brief course, he severed his connections with Rush, and with Drs. Hosmer Johnson, N. S. Davis, W. H. Byford, Titus Delville, Ralph Isham and Dr. Rutter established the Lind University Medical School, which eventually became the medical school of the Northwestern University where for forty-six years Dr. Andrews was professor of surgery. At the beginning of the Civil War he was appointed surgical chief at Camp Douglas, and later, becoming surgeon to the First Regiment of light artillery, he served well in Tennessee and Mississippi. In 1854 he founded the Chicago Academy of Sciences. During his long career Dr. Andrews gave to the medical profession a number of valuable surgical instruments and devices, and contributed liberally to the current medical literature, chiefly on statistical, orthopedic and operative surgery.

He married in April, 1853, Eliza, daughter of N. T. Taylor of Detroit, and had five children, two of whom, E. Wyllys and Frank Taylor, worked with their father.

Distinguished Phys. and Surgs. of Chicago, F. N. Sperry, 1904.
The Chicago Clinic, vol. xvii, No. 2, 1904.
Atkinson's Phys. and Surg. of the United States.

Andrews, George Pierce (1838–1903).

George Pierce Andrews was born in Kailua, Hawaii, April 9, 1838, his father Dr. Seth L. Andrews, of Romeo, Michigan,

being there as a medical missionary. Ill health prevented George completing his course at Andover, Massachusetts, but on recovery he studied medicine with his uncle, Dr. Edmund Andrews, professor of surgery in Chicago Medical College, but took his last course of lectures at the College of Physicians and Surgeons, New York, receiving his M. D. in 1861. Settling in Detroit shortly after graduation he was appointed assistant surgeon at the Government Hospital, on Woodward Avenue. In 1866 he aided in founding the "Detroit Review of Medicine and Pharmacy," and continued an editor till 1871. Dr. Andrews was a great lover of plants, keeping a green-house for the study of rare species, under native conditions. He was an expert microscopist for his time; in chemical studies he delighted. He was an expert in fine china, etchings, paintings, and oriental curios. In literature and philosophy he excelled. As a teacher of medicine he ranked with the best, clear, concise, forceful, he exerted a profound influence upon his students. In 1862 he married Sarah Dyar, of Romeo, Michigan, and had three children, only one—Winnifred—surviving. In 1890 failing health induced him to return to the Sandwich Islands, where he practised till his death from heart failure in May, 1903.

He was a founder of the Michigan State Medical Society in 1866; of the Wayne County (Michigan) Medical Society in 1866; of the Detroit Academy of Medicine, 1868; of the Detroit Obstetrical and Gynecological Society. He was active in founding the Detroit Medical College in 1868, and its professor of principles and practice of medicine till 1881. From 1886 till 1890 he was on the staff of several hospitals: the Childrens Free; Harper's; St. Mary's and the Woman's Hospital. In 1876 he was president of the Detroit Academy of Medicine.

Papers:

"Syphilis in its Clinical Relations." ("Detroit Lancet," vol. v.)

"Calomel in the Treatment of Diphtheria." ("Detroit Lancet, vol. viii.)

"Puerperal Pyrexia." ("Detroit Lancet," vol. ix.)

"Continued Fevers in Michigan." ("Transactions, Michigan State Medical Society," 1887.)

"Acute Meningitis." ("Detroit Review of Medicine and Pharmacy, vol. i.")

"Occlusion of the Ileo-cecal Valve by Calculi of Cholesterine." ("Detroit, Review of Medicine and Pharmacy," vol. ii.)

"Hepatic Disease Accompanied with Enormous Pericardial Effusion." ("Detroit Review of Medicine and Pharmacy," vol. iii.)

"Bright's Disease." ("Detroit Review of Medicine and Pharmacy," vol. iv.)

"Acute Pneumonia." ("Detroit Review of Medicine and Pharmacy," vol. v.)

"An Autumnal Fever in Thickly Settled Populated Malarial Districts." ("Detroit Review of Medicine and Pharmacy," vol. v.)

"Electro-therapeutics." "Detroit Review of Medicine and Pharmacy," (vol. vi.)

"Therapeutic Action of Oxygen." ("Detroit Review of Medicine and Pharmacy," vol. vii.)

"Chronic Bronchitis." ("Detroit Review of Medicine and Pharmacy," vol. xi.)

"Functional Diseases of the Heart." ("Detroit Review of Medicine and Pharmacy," vol. x, p. 579.)

"Albuminuria." ("Detroit Review of Medicine and Pharmacy," vol. ix.)

"Clinical Report of Puerperal Pyrexia." ("American Lancet," vol. i.)

"The Development of Starch Grains." ("The Microscope," Detroit, 1881.")

"Calomel in the Treatment of Diphtheria." ("Detroit Lancet," 1884.")

"Puerperal Pyrexia." ("Detroit Lancet," 1885.)

"Syphilis in its Clinical Relations." ("Detroit Lancet," 1881.) L. C.

(Physicians and Surgeons of the United States, William B. Atkinson,

Angell, Anna A. (1844–1906).

Born in New Jersey February 13, 1844. She graduated from the New York Infirmary School in 1871 and soon after became a resident physician at Mt. Sinai Hospital, at the instance of several members of the medical staff. This was the first general hospital in the country to confer a regular hospital appointment on a woman. She served three years very acceptably.

In conjunction with Dr. Mary Putnam Jacobi, she founded a dispensary at Mt. Sinai Hospital, which has since had women on the staff.

Upon leaving Mt. Sinai she studied in Europe for a couple of years and returning took up work in the tenement house districts.

In January, 1877, she became resident physician of the New York Infant Asylum. There during her three years of service the death rate among the children was materially lowered. Soon after leaving the Infant Asylum ill health forced Dr. Angell to retire from practice, to her a blow and disappointment not light to bear, but her many years of invalidism were endured with a fortitude only born of a strong character. She died June 8, 1906. A. B. W.

Mary Putnam Jacobi, in "Woman's Work in America."
Personal information.
Trans. Alumni Assoc. Woman's Med. Col. of Penn., 1907.

Anthon, George Christian (1734–1815).

George Christian Anthon (first surgeon at Detroit under the British flag) was born at Salzungen, in the Duchy of Saxe, Meiningen, August 25, 1734; his father a clergyman and teacher in the Town School for boys; his mother a pastor's daughter. On the death of his father, in 1739 his mother married a surgeon of Salzungen, John Gottlieb Boumbort. Beginning the study of medicine with his stepfather he continued it with Dr. Mackel of Gurnstungen, and in 1750 he passed the examination before the medical authorities in Eisenach, and one in 1754 before the college surgeons at Amsterdam, securing thereby the position of surgeon in the Dutch West India service. On his second trip in the "Vrouw Anna" he was captured by a British privateer and taken to New York. His usefulness as a surgeon being recognized, he was made assistant surgeon of the General Military Hospital at Albany in 1758 and at the end of the year was appointed assistant surgeon to the first Battalion, Sixtieth Regiment, Royal Americans. His commission in the British Army is dated Albany, June 25, 1761 and signed by the commander-in-chief, Sir Jeffery Amhurst, and appoints him "Surgeon's Mate to his Majesty's Hospital in North America." In 1760 he was detached with the party that took possession of Detroit under Major Rogers, November 29, and for the next twenty-six years was the sole medical officer of the Post, for Army, Navy and Indians. During Pontiac's siege of Detroit, Dr. Anthon, desiring to have a look at the enemy, climbed an old tree near by. The Indians began firing on him, but Gladwin unwilling to lose his medicine man made a sortie, and rescued the doctor. In 1765 Sir William Johnson appointed Dr. Anthon surgeon for the Indians and sent him with Deputy Col. Croghan on an expedition to the Illinois country. The Kiccapoos took him prisoner below the mouth of the Wabash, and, released after an imprisonment of three months, he used to tell of the avidity with which he ate the refuse flung him during their repasts. In 1786 he removed to New York City, there finishing his career. In 1802 he was one of the thirteen Governors of New York Lying-in Hospital. From 1796 to 1815 he was a Trustee of Columbia College. He was a strong believer in the non-contagiousness of yellow fever. Dr. Anthon had the massive, severe appearance of Luther, suggesting an origin from the same Thuringian Saxon race, but relieved by mild sympathetic expressive eyes. Though outwardly stern in manner, he was remarkable for tenderness towards his family, kindness towards his patients and benevolence

towards the community in which he lived. Dr. Anthon married on August 13, 1770, Mariana Navarre, who died childless, October 8, 1773. She was a daughter of Robert Navarre, who was appointed by the French Government, Notaire-royal and sub délégué at Detroit. His second wife was Genevieve Jadot, a niece of his first wife, by whom he had eleven children, three being born in Detroit. Of these John, Henry and Charles were renowned as a lawyer, minister and scholar. Dr. Anthon died at his home, 11 Broad Street, New York City, December 22, 1815.

L. C.

Wayne County (Mich.) Pioneer Soc. Biography; Fred Carslile, Detroit, Mich.; Farmer's Hist., Detroit, 1884.
Biog. by a grandson of Dr. Anthon, Charles E. Anthon, Mich. Pioneer and Historical Collection, vol. xxxi.

Antisell, Thomas (1817–1893).

Born in Dublin, Ireland, January 16, 1817. Antisell was the son of Thomas Christopher Antisell of Kings County, Ireland, a barrister and Queen's Counsellor, his ancestry going back to Sir Bertine Entwyssel, who accompanied Henry II to Ireland.

Dr. Antisell was educated at Trinity College, Dublin, and studied at the Dublin School of Medicine, Peter Street, and the Irish Apothecary's Hall, being pupil of, and afterwards assistant to, Sir Robert Kane from 1839 to 1843. He graduated at the Royal College of Surgeons, London, in November, 1839, and spent a semester with J. B. Pelouze in his laboratory. In 1844 he pursued his chemical studies in Paris and Berlin under the most celebrated chemists of the time, Pelouze, Biot, Dumas and Berzelius. He practised medicine in Dublin from 1845 until 1848 and was lecturer on chemistry in the "Original School of Medicine".

As one of the "Young Ireland Party" he was sentenced to exile and imprisonment but a friend procuring for him a position as surgeon on an outgoing vessel, he sailed for America.

Landing at New York November 22, 1848, he began to practise medicine in New York City and continued there until 1854, when he became geologist to the Pacific Railroad survey, on the thirty-second parallel, under Lieut. Parke, Topographical Engineer, U. S. A. He made a geological reconnoisance of Southern California and Arizona Territory, published in the seventh volume of the "United States Reports of Explorations and Surveys," 1856. In 1871, at the invitation of the Japanese government, he became technologist of a government commission to develop the resources of the northern islands of that empire. He returned to the United States in 1876. While in Japan he was offered the position of president of the College of Cairo, Egypt, which he declined. In appreciation of his valuable services to Japan he was decorated by the Emperor with the "Order of the Rising Sun of Meijii."

While on the ocean en route to Japan, an opportunity offered to become president of the College, Lancaster, Pennsylvania, which Dr. Antisell appreciated and would have accepted but had already contracted with the Japanese Government for five years.

From 1856 to 1893, excepting the interval of army service and while in Japan, he lived in Washington. All his life he was a medical teacher, his specialty being analytical and technical chemistry.

Dr. Antisell was twice married; to Eliza Anne Nowlan of Dublin, in 1841, and Marion Stuart Forsyth, of Detroit, Michigan, in 1854. He died in the District of Columbia, June 14, 1893.

Busey, in his "Reminiscences" p. 140, says that Dr. Antisell was a popular teacher. He led a very unobtrusive home life, rarely appearing in public except where his duty called him. He was faithful to duty and conscientious in its performance, unostentatious in manner, and cordial in friendship.

The University of Georgetown, with the medical department of which he was connected for many years as professor of chemistry and toxicology, of military surgery, physiology and hygiene, and emeri-

tus professor of chemistry and toxicology, conferred on him the degree of doctor of philosophy and he was interested in and intimately connected with sanitary matters in the District of Columbia.

Some of his numerous contributions to medical and scientific literature were papers on "Soils of Ireland," Royal Dublin Society, 1840; "On Sanitary Improvement of the City of Dublin," 1847; "Manual of Elementary Geology," Dublin 1846; "Outlines of Irish Geology," Dublin, 1847; Manual of Agricultural Chemistry," Dublin, 1847; "Treatise on the Tea and Coffee Plants," Dublin, 1847; "Addresses on the Philosophy of Manufactures," delivered at Castle Garden, New York City, during the twenty-second annual fair of American institutes, October, 1849; "Relations of Physical Geography to Agriculture," 1850, in "Transactions, American Agricultural Associations"; "Home Cyclopedia of the Arts and Manufactures," New York, 1852; "Applications of Chemical Science to Agriculture," 1859; "Photogenic and Hydrocarbon Oils," New York, 1859; "Geological Reconnoisance of Southern California and Arizona," in "United States, Explorations and Surveys," vol. vii, Washington, District of Columbia, 1856. "Constitution and Source of Bile," "American Journal of Medical Science," Philadelphia, January 7, 1684; "Reports on the Sanitary Condition of Washington," Medical Society, District of Columbia, 1864; "Epizootic of Horned Cattle," "Transactions American Agricultural Association," 1861; "Report of Committee on Medical Education to the American Medical Association," 1865; "Cultivation of Cinchona," 1867; "On the Value of the Sewerage of the City of Washington," included in the "Report of United States Agricultural Department," 1869; Introductory and Valedictory Addresses in Medical Colleges at Washington, six in number, from 1854 to 1871; "The Currents of the Pacific Ocean," 1876."

Among other degrees and appointments were: A. B., Trinity College, Dublin; Ph. D., 1881, Georgetown; M. D., 1839, London and Dublin Lying-in Hospital; surgeon, United States Volunteers; medical director, Twelfth Army Corps. He was extra professor to The Dublin Royal Society, 1845–48; member of the Royal College of Surgeons, England; Royal Dublin Society; Geological Society of Dublin. In 1848 professor of chemistry in Berkshire (Massachusetts) Medical College; in 1854 professor of chemistry at the Medical College at Woodstock, Vermont, and Pittsfield, Massachusetts; brigade surgeon, United States Volunteers, 1861–1865; medical director, Twelfth Army Corps; surgeon-in-charge, Harewood Hospital, Washington, District of Columbia; surgeon-in-charge of sick and wounded officers in Washington, District of Columbia; brevetted colonel for faithful and meritorious services during the war. He was mustered out of service in October, 1865.

From 1866 to 1871 he was chief chemist of the United States Department of Agriculture, and in 1869–70 professor of chemistry to the Maryland Agricultural College. He was a member of the Medical Association of the District of Columbia. D. S. L.

Atkinson's Physicians and Surgeons, 1878, Minutes of Medical Society, D. C., June 15, 1893; Bull. Philos. Soc. Washington, xiii, 1896; Yearbook U. S. Department of Agriculture, 1899; Annual Report Smithsonian Institute, 1904, Journal American Medical Association, 1893, vol. xxi.

Antony, Milton (1789–1839).

Milton Antony was born August 17, 1789, the place of his birth not being recorded, but it is known that his father when young came to Georgia and settled in Jasper County. His family must have been in limited circumstances, as the boy had no more than two and a half years schooling. At sixteen he began to study medicine with Dr. Joel Abbot, presumably at Washington, Wilkes County, Georgia.

At nineteen he went to Philadelphia for medical studies, but lacking means, was able to attend only one course, the

requirments for graduation being two courses, so he returned to Georgia without a diploma. Reaching home without funds, he began his professional life with no other asset than determination and ambition, and shortly after reaching home, moved to Monticello, Georgia, where he began his active professional life, within a short time building up an extensive practice. After the expiration of seven years, desiring a larger field with greater opportunity for study, he moved to New Orleans, Louisiana, staying there however, but a short time, eventually, in 1819, settling in Augusta, Georgia. A man of broad mind and with an earnest desire for the elevation of his profession, he was active in establishing the State Board of Examiners, whose duty it was to examine and license all applicants to practice in the state. In 1828, in connection with the physicians of Augusta, and a few distinguished men in the State, he applied to the Legislature at Milledgeville for a charter to organize a medical academy, its object to make the academy a school to more thoroughly prepare students for the northern universities. The school was opened with three professors and a large class, not long after becoming an institute and allowed to confer the degree of bachelor of medicine.

Its success was so great that in 1833 he and his co-laborers asked the State Legislature for a charter for the Medical College of Georgia, the charter carrying with it full power to lecture, examine, and confer the degree of doctor of medicine upon its graduates. His last effort for a higher standard of medical literature; to accomplish this he established the "Southern Medical Journal," and was for several years its editor. Dr. Antony rapidly made a reputation, becoming highly esteemed and honored, and attracting the attention of the profession outside his state, and receiving the honorary M. D. from two distinguished unversities. In the school which he established he ably filled the chair of the "institutes and practice of medicine," obstetrics and diseases of women and children. As often the case with the general practitioner of long ago, he was equally skilled in the different departments of medicine and was the first gynecologist to adopt and point out the knee-chest posture in the treatment of uterine displacements. It is also to be noted that he perfected the treatment of fractures of the thigh by weight extension. His skill and boldness as a surgeon can be fully realized when it is known that in 1821 he excised the fifth and sixth ribs, and removed a portion of gangrenous lung. This remarkable piece of work is reported in the "Philadelphia Journal of Medical and Physical Sciences," 1823, vol. vi.

The article was so original and bold that it was republished in 1893 by Dr. George Foy of the Royal College of Surgeons of Dublin, Ireland, in the "Medical Press and Circular." Dr. Antony's contributions to medical literature, while numerous and valuable, are not obtainable.

Though the life of this distinguished man began with all the disadvantages consequent to poverty and want of education, his energy and perseverance enabled him to attain a high position in his profession and to maintain it until the fatal epidemic of yellow fever in Augusta, Georgia, in 1839, brought his life to a close. He was editor of the "Southern Medical and Surgical Journal" as far as its first two volumes.

He had done a great work. At the request of his faculty, his body was buried in the college grounds and a tablet to his memory stands in the wall of the principal lecture room of the college which he founded. T. R. W.

Appleton, Moses (1773–1849).

The Appletons, of New Ipswich, New Hampshire, descended from Samuel and Mary Everad Appleton. They left Waldringfield, Suffolk County, England, for religion's sake, and came to Ipswich, Massachusetts about 1635, afterwards to Waterville, Maine.

Moses, the son of Isaac and Mary Adams Appleton, was born May 17, 1773, and graduated at Dartmouth College in the class of 1791 in company with his brother Josiah, who was in delicate health. After graduating, Moses taught school in Medford and Boston, Massachusetts, studied medicine with Governor Brooks, and obtained a fellowship in the Massachusetts Medical Society in 1798.

It happened that Appleton had at Dartmouth a classmate and fellow townsman named Reuben Kidder, who after graduating had studied law and was practising in Winslow, Maine. While teaching, Appleton wrote to Kidder about Waterville as a place for a young doctor, asking him if there were enough business to attract people; if there were any drug shop near, and if the roads were good or bad, for he did not like the idea of riding over rough roads to see patients. Kidder replied that there were six shops, thirty buildings, and about 1000 people living in log houses; that there was no drug shop nearer than one in Hallowell, twenty miles below, and that the roads to the south were fine, those to the north poor, and in the spring and fall, all alike were muddy. Kidder added that there was already one physician on the spot, Dr. Obadiah Williams, but that he wanted Appleton to come and would help him. He determinated his letter by saying that he was just putting up a building and that Appleton could have half of it for a dwelling house and consulting room if he would only come at once, as he had heard of other physicians making inquiries about settling there.

Encouraged by this, Moses went at once to Waterville and remained there the rest of his life. Dr. Williams, who was one of the remarkable pioneer physicians of the Kennebec Valley, was a great aid, became Appleton's first patient, gave him many introductions, and to complete his good works, as some people said, died in less than three years, leaving Appleton as the only physician in a flourishing town. He improved the opportunity and became an expert physician, working hard from the start, had ninety-six patients the first year, rode in every direction for years, and soon became beloved by everyone with whom he came in contact.

He was one of the early members of the Maine Medical Society, founded with the separation of Maine from Massachusetts, and was a frequent attendant at its meetings, although having to ride far to attend them.

Among the items contributing to the life of such a man, we find noted in his books that Dr. Williams sat for him as his first patient and had a tooth extracted for which the good man insisted upon paying a small fee for the sake of good luck. Elsewhere we read of his treating a shoemaker and his family for a year in return for boots and shoes as well as for furnishing a Mr. Matthews with medicines for a year in return for two cords of wood, sawed, split, and piled. After obtaining a competency, Dr. Appleton married Miss Annie Clark, daughter of Col. Clark, of St. Georges, Maine, in 1801.

Dr. Appleton was generous, yet accumulated money, and was founder and president of the first bank in the town. He was religious in his way, and, although not a praying doctor, was not afraid to read prayers in the absence of a regular preacher and to read from a book of printed sermons something appropriate for the day. Much may be said of Dr. Appleton as an excellent physician and surgeon, and as a writer for the infrequent medical journals of that day, but enough has been said to prove that he had a fine field offered him, that a great opportunity came to him, which he grasped and became a great man for the times in which he lived. It is not often that any physician acts alone for so many years as the only man in an emergency, and yet leaves so pleasant memories. He worked hard, labored long, and deserved as his just reward all the gains that came. He died gently at the last, May 5, 1849, aged seventy-six, worn out with

old age, revered and well thought of by his fellow townsmen and brother practitioners.

J. A. S.

Waterville Doctors' Centenary, by Dr. F. C. Thayer.
History of New Ipswich, New Hampshire, 1852.

Archer, John (1741–1810).

The first medical graduate in America, a soldier of the Revolution, medical teacher, statesman, a founder of the Medical and Chirurgical Faculty of Maryland. He was born near the present village of Churchville, Harford County, Maryland, May 5, 1741, his father, Thomas Archer, having emigrated to America from the north of Ireland, and settled in Maryland as a farmer and agent for iron works. He was educated at West Nottingham Academy, in Cecil County. Here he had as classmate Dr. Benjamin Rush. In 1760 he received his A. B. at Princeton College and his A. M. three years later. In 1762 he projected a grammer school in Baltimore, but shortly after abandoned it to enter upon the study of theology under Presbyterian auspices. He progressed so far in this field as to preach his trial sermon, but failed to pass a satisfactory examination. This led him to turn his attention to medicine and in the spring of 1765 he became a pupil of Dr. Morgan, and in November following entered upon the initiatory course of lectures of the Philadelphia College of Medicine, begun then by Drs. Morgan and Shippen. In the summer of 1767, between his second and third course of lectures, he began to practise in Newcastle County, Delaware, staying there two years, taking his degree of M. B. at Philadelphia on June 21, 1768. This was the first occasion in America of the conferring of a medical degree after actual attendance.

Declining an offer of partnership made by Dr. Morgan, he returned to his native county in July, 1769, where he practised nearly forty years. He took active part in the great struggle for liberty, being a member of the local committees from November, 1774, and enrolling, as captain, the first militia company in the county in December of the same year.

In the latter rôle he was forced to use a speaking trumpet on account of a severe throat affection. His sons were wont on every fourth of July to bring down this trumpet from the garret of Medical Hall and make the premises ring, but it has long been lost; his sword is still preserved in the family. In January, 1776, he was commissioned major of one of the local battalions of militia. In August following he was elected a member of the convention which framed the Maryland constitution and bill of rights.

After the Revolution he devoted himself exclusively to his professional work, including teaching. It is said that he trained about fifty students in his stone office near Medical Hall. These young men assisted him in his immense practice and compounded his prescriptions, forming a medical society, the reports of which, in manuscript, are preserved in the library of the Medical and Chirurgical Faculty at Baltimore.

In 1799 he assisted in founding the Medical and Chirurgical Faculty of Maryland and later became a member of its Examining Board and Executive Committee.

In 1800 he was elected a member of Congress and two years later was re-elected for a second term. It was at this time that his health began to fail, and a few years later in consequence of a partial paralysis he abandoned all active pursuits. He expired suddenly in his chair at his home in Harford County on September, 28, 1810.

Dr. Archer married in October, 1766, the daughter of Thomas Harris, of Pennsylvania. The family that founded Harrisburg. They had ten children, four of whom died in infancy. Of the remaining six, all sons, five studied medicine under their father, one of those dying young, the others graduating at the University of Pennsylvania. His young-

est son, Stevenson, studied law, and became chief justice of Maryland, member of Congress and Judge of the Mississippi Territory.

Dr. Archer was not a voluminous writer; several of his papers appeared in the "Medical Repository," of New York. He introduced *polygala senega* as a remedy in croup.

There are several of his portraits extant: one in the court house at Belair, Harford County, Maryland, a second in the Hall of the Medical and Chirurgical Faculty at Baltimore, and a third in the State House at Annapolis.

E. F. C

The Johns Hopkins Bulletin, Nos., 101–102, Aug., Sept., 1899.
Sketch of Harford Med. Soc., J. H. Bul., xiii, Nos. 137, 138, Aug., Sept., 1902.
Cordell's Medical Annals of Maryland.
The Medical and Chirurgical Faculty possesses his academic and medical diplomas and other relics of him.

Armor, Samuel G. (1818–1885).

Samuel G. Armor was born January 29, 1818, in Washington County, Pennsylvania, and soon after came to Ohio with his parents who were of Scotch-Irish descent.

He went first to Franklin College, New Athens, Ohio, which institution in 1872 honored him with the degree of LL. D., then read medicine with Dr. Irvine, Millersburg, Ohio, and graduated from the Missouri Medical College in 1844. Rockford, Illinois, was chosen for his life's work, but the turning-point in his career came in 1847 when he accepted an invitation to deliver a short course of lectures on physiology in Rush Medical College. Later he was tendered the chair of physiology and pathology, but declined because of the previous acceptance of the same chair in the medical department, University of Iowa, at Keokuk. This position was soon exchanged for the chair of natural sciences in the University of Cleveland (non-medical), in connection with which he also engaged in general practice.

In 1853 Dr. Armor was awarded a prize by the Ohio State Medical Society, which held its annual meeting in Dayton, for an essay, "On the Zymotic Theory of the Essential Fevers." This paper focused the attention of the college men of southern Ohio on the talented young author and led to his accepting in the fall of that year, the chair of physiology and pathology in the Medical College of Ohio, where he soon fell heir to the chair of practice, made vacant by the death of Lawson.

In May, 1856, he married Miss Holcomb, of Dayton, and in 1861, having been tendered a professorship in the University of Michigan, he went to Detroit, becoming a member of the firm of Drs. Gunn & Armor. After a service of five years he accepted the chair of therapeutics, materia medica, and general pathology in the Long Island College Hospital, Brooklyn, and in the following year succeeded to the professorship of practice and clinical medicine made vacant by the resignation of the elder Flint.

After years of wandering this peripatetic teacher found himself at last permanently anchored and retained this position until his death in 1885.

Dr. Armor was tall and well-formed, in complexion dark, with hair straight and black as an Indian's.

He was immensely popular in college and one of the finest lecturers to whom I have ever listened. His graceful delivery and modulated voice, the rounded sentences of pure English, and a wealth of illustration enabled him to breathe life and beauty into the driest of medical themes and to enthuse the dullest of students.

Dr. Armor was not a voluminous writer, although his contributions covered a wide range of subjects and were valuable. Neither was he an original thinker. For years he held a position well to the fore among the medical celebrities, and yet he left behind him no lasting imprint upon the doctrines of his day.

Dr. Armor died from cancer of the abdominal viscera in 1885 and sleeps by the side of his first wife in Woodland Cemetery.

W. J. C.

Armsby, James H. (1810–1875).

Armsby was an enthusiastic surgeon, determined that Albany's doctors and students should have everything necessary to advance their interests, and carrying out by hard work and persuasion many of his pet schemes for this end.

He seems to have been born enthusiastic, this boy who came into the world on December 31, 1810, in Sutton, Massachusetts, the son of an impecunious but long-headed farmer; for when twenty the farm had been left and he was studying medicine under Dr. Alden March in Vermont.

After graduating M. D. from the Medical Academy of Medicine there in 1833, he associated himself in Albany with Dr. March as teacher in a "School of Anatomy and Surgery," which school had been originated by Dr. March twelve years before in a garret.

Soon after his arrival in Albany he got up a petition to render dissections of the human body legal and for the establishment of a medical college and hospital. In 1838 he delivered a course of popular lectures illustrated by dissections of the human subject which were attended by some three hundred of Albany's citizens and brought in subscriptions for the projected college, erected in 1839, with Dr. Armsby as professor of surgery and president.

This school founded, he made time from his deep anatomical studies to advance the founding of the Albany Hospital and, that accomplished, he lent his whole energies to those who were interested in obtaining a university, a design which first met with little encouragement but was finally realized in 1873.

Even when in Europe he remembered Albany and brought back a rich collection of models for the college museum, and when United States Consul at Naples for awhile the Neapolitans had their first experience of a scientific lecturer. In Albany he was known as an operator and surgical lecturer without equal. His profound knowledge of anatomy, his mechanical dexterity, and his clearness in elucidating every point made his lectures eagerly sought by students.

He married in 1841, Anna L., daughter of the Hon. Gideon Hawley and had two children, the son, Gideon H., becoming a doctor. By his second wife, Sarah Winne, married in 1853, he had one daughter.

His death, which came very unexpectedly on the night of December 2, 1875, from pulmonary congestion and heart disease, deprived Albany of a most devoted citizen and clever surgeon.

He gave the surgical world an interesting illustrated work. "Photographs of Pathological Specimens from the United States Isa Harris General Hospital," two volumes, and a "History of the Albany City Hospital."

Trans. Med. Soc. N. York, Albany, 1876, W. S. Tucker.
Trans. Am. Med. Asso., Phila., 1876, xxvii.
There is a portrait in the Surg.-Gen. Collection, Wash., D. C.

Ash, John (1823–1886).

John Ash was a native of Yorkshire, England and educated at Guy's Hospital, London, where he obtained his degree and held also the London M. R. C. S. Very little is known of his boyhood or of his ancestry. He married on the eleventh of December, 1875, Adelaide Ann Amelia, daughter of Sir John de Veulle, Knight, High Bailiff of the Island of Jersey. He arrived in Victoria in 1862, during the days of the Cariboo gold excitement.

A man of great force of character, he soon achieved distinction not only in his chosen profession but also in politics. He was a member of the old Vancouver Island Assembly, and after British Columbia joined the Canadian Confederated Provinces, July, 1871, he represented the district of Comox (Vancouver Island) in the Provincial Legislature for four terms, 1871 to 1884.

After retiring from public life he visited England twice, and then quietly settled down in Victoria to renew practice in which as an oculist he specially en-

joyed a more than provincial reputation. Patients from the neighboring states came to consult him, as he was in those days considered a skillful and successful operator.

He died of apoplexy on March 17, 1886, in his sixty-third year.

O. M. J.

Ashhurst, John, Jr. (1839–1900).

John Ashhurst, Jr., surgeon, son of John Ashhurst, merchant and banker; was born in Philadelphia, August 23, 1839. Educated by private tutors, he entered the college department of the University of Pennsylvania at the age of fourteen and made an average the highest ever attained in the University. In 1857 he graduated A. B., and at once entered the medical department of the university, receiving his M. D. in 1860. In the same year the university conferred upon him her A. M. He received the honorary LL. D. from Lafayette University in 1895.

Dr. Ashhurst's studious and industrious habits were formed early. He had been taught to read before he was four years old, and by the time he was sixteen had accumulated a library of some three thousand volumes, which subsequently was more than tripled in size. Throughout life he found his greatest relaxation in solving mathematical problems and in reading his favorite Greek and Latin authors, but was wonderfully proficient as a pianist.

First lessons in practical surgery were learned from Dr. George W. Norris while resident in the Pennsylvania Hospital (1861–62), where he also came under the influence of Joseph Pancoast, whom in after years he still regarded as the most brilliant operator he had ever seen. Abandoning a projected course of European study, on account of threatening rumors of Civil War at home, he was appointed contract surgeon, with the title of acting assistant surgeon, United States Army, and was ordered (August 13, 1862) to the Chester (Pennsylvania) United States American General Hospital, under the command of Surgeon John L. LeConte, United States Volunteer. The board of examiners before whom Dr. Ashhurst appeared on this occasion was composed of his intimate friend Dr. James H. Hutchinson (1834–1889), Dr. S. Weir Mitchell, and Dr. S. D. Gross. Dr. Hutchinson of course declined to ask him any questions. Nor would Dr. Mitchell attempt to examine him. Finally old Dr. Gross said, in his usual deliberate manner, "Doctor, I should be afraid to ask you any questions, for fear you might stump me!" In December, 1862, he was transferred to the Cuyler United States American Hospital, at Germantown, Pennsylvania, where he remained as executive officer until the close of the war in 1865. It was narrated by his colleagues at the army hospitals that Ashhurst always got all the good cases, as at a glance he would detect rare and serious injuries and these always remained under his personal care.

His chief reputation was made as surgeon to the Episcopal Hospital (1863–1880), and he resigned only when increasing duties as professor of clinical surgery in the University of Pennsylvania (1877–1900) necessitated it. There and at the Children's Hospital (1870–1900) he made his studies of bone surgery, and did those early and renowned excisions of the larger joints, for which he was so widely known. He was ranked by Otis, with Billroth, Volkmanu, Gurlt, and Legouest. His friendship for Ollier and Esmarch, and the reciprocal admiration of Adams, Gant, Estlander, Barwell, Sayre, and other great bone surgeons of that day are well known. Later he was noted for his special skill in plastic surgery and in the surgery of the larger blood-vessels. His early recognition of the pathology of concussion of the spinal cord and brain has long been acknowledged and accepted.

He had been called the most learned of American surgeons (Brinton), and the highest authority in the world on medical and surgical bibliography. Practically all the surgical reviews in the "American

Journal of the Medical Sciences" from 1867 to 1877 were from his pen. In 1867 he published a monograph "Injuries of the Spine," which, treating of its subject in the then novel statistical manner, at once drew attention to his ability as a writer. Having edited an American edition of Erichsen's "Science and Art of Surgery" in 1869, he published the first edition of his own "Principles and Practice of Surgery" in 1871—seven years before the first volume of Agnew's work appeared, and while Erichsen and Gross were still popular text-books. Dr. Ashhurst's own surgery very soon obtained an authoritative place, and for years was the most widely studied and quoted work in America. The last (sixth) edition appeared in 1893. As editor of the "International Encyclopædia of Surgery" (six volumes, 1881–1886), his name became as familiar in all parts of Europe as it previously was in this country.

With such a reputation as author, teacher, and hospital surgeon, it is not surprising that the trustees of the University of Pennsylvania elected him Barton professor of surgery, on the resignation of Dr. Agnew in 1888. This position he continued to hold until his death in 1900.

Besides his purely professional interests, Dr. Ashhurst was widely known in religious, charitable, and philanthropic work.

Dr. Ashhurst married, December 8, 1864, Sarah Stokes Wayne. They had seven children: John, William Wayne, Mary, Anna Wayne, Sally Wayne, Astley Paston Cooper and Emma Matilda. Of these, William and Astley became doctors.

Dr. Ashhurst worked with untiring industry. He never took holidays. Although spending the summers at his country home, the Grange, in Delaware County, Pennsylvania, he went every day to the city and continued his usual routine of hospital and literary work the year through. During the night of August 2, 1898, having recently concluded a particularly laborious term of service at the Pennsylvania Hospital, he had, while asleep, a profuse cerebral hemorrhage, completely paralyzing his left side. From this he never recovered. With his intellect unimpaired, but his body helpless, he lingered nearly two years, in unexampled patience and fortitude. His death occurred, in the sixty-first year of his age, at his late residence, 2000 West DeLancey Place, Philadelphia, July 7, 1900. His surgical library, containing numerous exceedingly rare mediæval and classical works, was largely given to the College of Physicians of Philadelphia.

He was a member of the Pathological Society of Philadelphia and its president in 1870–1871; fellow of the College of Phyicians of Philadelphia, its president in 1898–1900; member of the Obstetrical Society of Philadelphia; fellow of the Philadelphia Academy of Surgery, its vice-president, 1897–1900; fellow of the American Surgical Association, and its vice-president, 1896.

Among the duties he fulfilled was that of:

Resident physician, Pennsylvania Hospital, 1861–1862. Acting assistant surgeon, United States Army, 1862–1865. Surgeon to the Hospital of the Protestant Episcopal Church in Philadelphia, 1863–1880; to the Children's Hospital of Philadelphia, 1870–1900; to the Hospital of the University of Pennsylvania, 1877–1900, and the Pennsylvania Hospital, 1887–1900. Professor of clinical surgery in the University of Pennsylvania, 1877–1900. John Rhea Barton professor of surgery in the University of Pennsylvania, 1888–1900.

Besides the reviews and bibliographical notices appearing in the "American Journal of the Medical Sciences," practically all his publications up to 1876 will be found in the pages of that journal, and in the "Proceedings of the Pathological Society of Philadelphia." After that date several series of clinical lectures may be found in the files of the "Philadelphia Medical Times," the "Philadelphia Medical News," the "New

York Medical Record," and more recently in the "International Clinics," the "International Medical Magazine," and the "University Medical Magazine." These clinical lectures are widely quoted in European journals, especially French and Italian.

"On Injuries of the Head." ("American Journal of Medical Sciences," 1864, xlviii.)

"On the Treatment of Gunshot Injuries of the Head." ("Ibid.," 1865, l.)

"Injuries of the Spine, with an Analysis of Nearly Four Hundred Cases." (Philadelphia, Lippincott, 1867.)

"On the Treatment of Carbuncle by Pressure." ("American Journal of Medical Science," 1869, lviii.)

"On Excision of the Hip-joint, with Special Reference to the Treatment of Hip Disease." ("Pennsylvania Hospital Reports," Philadelphia," 1869, ii.)

"The Principles and Practice of Surgery." (Lea, Philadelphia, 1871, sixth edition, 1893.)

"On Laparotomy, or Abdominal Section, as a Remedy for Intussusception." ("American Journal of Medical Sciences," 1874, lxviii.)

"De la Laparotomie, ou Section Abdominale, comme moyen de Traitement de l'Intussusception." ("Traduit par le Dr. Lutaud," Paris, Asselin, 1875.)

"On the Operative and Conservative Surgery of the Larger Joints." I. "Excision of the Elbow." ("Transactions, College of Physicians of Philadelphia," 1875, third series, i.) II. "Excision of the Knee and Amputation of the Thigh for Disease of the Knee-joint." ("Ibid.," 1876, ii.)

"The Clinical History of Chanere and Chaneroid." ("Proceedings, Philadelphia College Medical Society," 1882, iv, "Philadelphia Medical Times," 1882, xii.)

"Excisions and Resections" ("International Encyclopedia of Surgery," New York, 1884, iv).

"Intestinal Obstruction." ("Ibid." 1886, vi.)

"Case of Successful Simultaneous Triple Amputation for Railway Injury, with Remarks on the Technic of Multiple Amputation." ("Transactions, College of Physicians of Philadelphia, 1888, x.)

"A Contribution to the Study of Exeisions of the Larger Joints." ("Transactions, American Surgical Association," 1888, vi.)

"Arthrectomy of the Knee-joint as a Substitute for Articular Excision." ("Transactions, College of Physicians of Philadelphia," 1889, xi.)

"Surgery of the Larger Blood-vessels." ("Transactions, South Carolina Medical Association," 1891.)

"Individual Experience in the Treatment of Vesical Calculus." ("Annals of Surgery," 1893, ii.)

"Personal Experience in the Treatment of Strangulated Hernia." "International Medical Magazine," 1894, iii.)

"Remarks upon Trephining the Cranium." ("International Medical Magazine," 1895, iv.)

"Tubereulosis of the Hip-joint." ("International Clinics," fifth series, 1896, iv.)

"Four Cases of Injury to the Head." (Clinical lecture delivered at the Pennsylvania Hospital. "International Clinics," ninth series, 1899, i.)

"Memoir of James H. Hutchinson, Medical Doctor." ("Transactions, College of Physicians of Philadelphia," 1890, xii, p. 45.)

"The Late Professor Agnew." ("International Clinics," 1892, second series, ii.)

"Surgery before the Days of Anæsthesia." Address delivered at the Semi-Centennial of Anæsthesia, in the Massachusetts General Hospital, Boston, October 16, 1896. ("Boston Medical and Surgical Journal," 1896, exxxv; "International Medical Magazine," 1896, v; "New York Medical News," 1896, lxix.)

"Ruschenberger." ("Transactions, College of Physicians of Philadelphia," 1896, xviii, p. 35.)

"The Late Prof. Wormley." ("Ibid.," 1897, xix, p. 79.)

He edited:

Erichsen's "Science and Art of Surgery." Philadelphia, 1896.

"Transactions of the International

Medical Congress." Philadelphia, 1876–77.

"Transactions of the College of Physicians of Philadelphia," third series, vols. i–v. Philadelphia, 1875–81.

"International Encyclopædia of Surgery," six volumes, Wood, New York, 1881–86, with its French Edition, seven volumes, Paris, 1883–88, and Supplement, vol. vii, New York, 1895.

"Lippincott's New Medical Dictionary" (in collaboration), Philadelphia, 1897.

"International Medical Magazine" (Supervising Editor), Philadelphia, 1893–99.

"International Clinics," (Supervising Editor), Philadelphia, 1899–1900.

A. P. C. A.

"John Ashhurst, Jr.—a Memoir," by Richard H. Harte, M. D., Trans. Coll. Phys. Phila., 1902, xxiv.

Portraits:

College of Physicians of Phila., by John Lambert.

University of Pennsylvania, Medical Laboratories, by Jas. L. Wood.

Alexander, Ashton (1772–1855).

Founder and first secretary of the Medical and Chirurgical Faculty of Maryland, provost of the University of Maryland. Alexander was born about 1772, near Arlington, Alexandria County, Virginia. The town of Alexandria was named after his ancestors, who owned large tracts of land in its vicinity. His father commanded a company of horse in the Continental Army at the commencement of the Revolution. His youth was spent in Jefferson County, Virginia, where he was educated at a private institution and studied medicine under Dr. Philip Thomas, finishing at the University of Pennsylvania, where he obtained his medical degree May 22, 1795.

The positions Dr. Alexander held were the following: Commissioner of Health, Baltimore, 1804–05 and again 1812; attending physician, Baltimore General Dispensary, 1801–03; consulting physician, Baltimore Hospital, 1812; president, District Medical and Chirurgical Society, 1819–20; provost, University of Maryland, 1837–50.

Dr. Alexander is described as being a self-possessed and courteous man, and neat in his dress which included knee and shoe buckles, stockings and gold-headed cane. He died of pneumonia in Baltimore in February, 1855, in his eighty-third year.

He married in December, 1799, a daughter of his preceptor, Dr. Thomas, and had eight children, only three of whom arrived at maturity and all of whom died before he himself did. His first wife dying, he married very late in life Miss Merryman, but had no children.

E. F. C.

Askew, Henry F. (1805–1876).

For many years the extent of his practice was such that he fulfilled its demands only by the aid of a remarkably vigorous constitution. His marked energy, decision and coolness made him an especially successful surgeon. His singular ability in that department was generally acknowledged so that he was more frequently called upon than any of the other physicians in his vicinity. He had large political interests in and out of his state, and was concerned in wide benevolences.

Dr. Askew was born in the vicinity of Wilmington June 24, 1805, in a house which later became a part of St. Mary's College. His family was one of the oldest Quaker families in the state; his father, Sergeant John Askew, being of those who took part in the surrender of New Amsterdam in 1664.

Dr. Askew's first medical study was in Wilmington, with Dr. William Gibbons. He completed his preparation at the University of Pennsylvania, from which he graduated in 1826.

He was president of the American Medical Association, in 1846, and of the Delaware State Medical Society.

His practice was not only the largest in the city, but the largest in his state. In the prime of his work, he was out at least half the night, and beside the immense amount of work he did, was remarkable for his great charm and

cheeriness of manner. It has been said of him that he knocked at almost every portal of usefulness and was adequate to every opportunity of helping those with whom he came in contact. He was, all his life, a member of the Society of Friends. In his last days he united with the Methodist Episcopal Church.

His wife, Mary Hanson Robinson, was like himself of Quaker descent. Their only boy died early in life.

Dr. Askew died at the age of seventy-one of apoplexy. During his last few years both physical and mental powers gradually failed, and on March 5, 1876, in Wilmington, he passed away.

In 1847 he delivered an address before the American Medical Association, as president of the Society. This address is a vigorous exposition of his views on medical ethics and other matters pertaining to the welfare of the medical profession. A. R.

Scharp's History of Delaware (biography and portrait), 1888.

Aspinwall, William (1743–1823).

William Aspinwall was born in Brookline, Massachusetts, May 23, 1743. His ancester, Peter, one of the immigrants from England, settled in Dorchester, Massachusetts, in 1630 and moved to Brookline about 1650. Peter's farm in Brookline has remained in the possession of his descendants to this day, the site being the region about Aspinwall Avenue. William, the sole survivor of three generations, was born in the old house on Aspinwall Avenue near St. Paul's church which was built by Peter in 1660. It was torn down in 1891.

Dr. Aspinwall was fitted for college by the Rev. Amos Adams, a minister of Roxbury, and graduated from Harvard in 1764. He studied medicine with Dr. Benjamin Gale, of Killingsworth, Connecticut, completing his medical education in the Pennsylvania Hospital, Philadelphia, where he spent seven months in study under Dr. William Shippen, who granted him a certificate of proficiency dated May 27, 1769.

He settled to practice in his native town. On the breaking out of the Revolution he was induced by his friend and kinsman, Dr. Joseph Warren, to enter the medical department of the provincial army, although his inclinations led him in the direction of fighting in the ranks. In the beginning he followed his bent and as a volunteer at the battle of Lexington conducted himself with distinction, bearing from the field the body of the commander of the Brookline Company, Isaac Gardner, father of his future wife. Receiving the appointment of surgeon to Gen. Heath's brigade and later deputy director to the Army Hospital in Jamaica Plain, Massachusetts, he rendered valuable service during the war.

After the death of Zabdiel Boylston, the first innoculator for small-pox in America, Dr. Aspinwall took up the business of innoculation and practised it extensively in a licensed private hospital in Brookline. On the introduction of vaccination he was present at one of Dr. Benjamin Waterhouse's demonstrations, and became convinced of the superiority of vaccination. Accordingly he gave up innoculation, although at a great pecuniary loss to himself. "This new innoculation will take from me a handsome annual income, yet, as a man of humanity, I rejoice in it," said he, in a letter to Dr. Waterhouse.

For forty-five years he conducted a very large practice, most of the time going his rounds on horseback, and often covering forty miles in a day.

He lost one eye by an accident in his youth, and late in life was afflicted by a cataract in the remaining one. Dr. Nathan Smith attempted unsuccessfully to remove it and his last years were passed in darkness. He died in the house which he built on Aspinwall Hill, April 16, 1823.

He was elected a fellow of the Massachusetts Medical Society in 1812, and Harvard College conferred on him the honorary M. D. in 1808.

He married Susanna Gardner in 1776, and they had seven children.

Gilbert Stuart painted his portrait,

which was in the possession of his son-in-law, Lewis Tappan, a noted New York abolitionist, at the time when antislavery rioters broke into his home. The portrait so much resembled George Washington that the mob, thinking it a picture of the father of his country, spared it.

The following offices were held by him during his lifetime: Town Treasurer, Warden, Surveyor, State representative, and senator. While studying medicine in 1769 he wrote a sketch of his ancestors, which has been preserved by his deseendants.

W. L. B.

The Aspinwall Gynealogy, 1630–1901, A. A. Aspinwall.
New England Historic Gynealogical Register, 1843.
J. M. Toner, Medical Men of the Revolution.
James Thacher, American Medical Biography.
Ebenezer Alden, in Boston Med. and Surg. Jour., vol. xlix.

Atkinson, Isaac Edmundson (1846–1907).

Isaac Edmundson Atkinson was born in Baltimore January 23, 1846, and took his M. D. from the University of Maryland in 1865, when he was only nineteen.

Dr. Atkinson was a remarkable clinician and a brilliant lecturer, and while he did not devote special attention to dermatology his writings on this subject were authoritative because of his vast experience and intelligent judgment.

In 1881 he had charge of a clinic for internal medicine at the Hospital of the University of Maryland; from 1886 to 1900, was professor of materia medica; from 1890 to 1895, dean of the medical department of the University of Maryland.

He was vice-president and later president of the Medico-Chirurgical Faculty of Maryland.

He was one of the founders of the American Dermatological Association and its president in 1888.

He died in Baltimore November 24, 1907. J. M. W.

Atkinson, William Biddle (1832–1909).

William B. Atkinson, an obstetrician in Philadelphia and who also gathered the lives of well known American physicians into a volume of biography, was the son of Isaac S. and Mary R. Biddle Atkinson and born in Haverford, Pennsylvania on June 21, 1832. His father's people were among the earliest settlers in Burlington, New Jersey.

His degrees of A. M. and A. B. were taken from the Central High School in Philadelphia and his M. D. from the Jefferson Medical College in 1853, after three year's study with Dr. Samuel McClellan. For several years he was correspondent for the "New Jersey Medical and Surgical Reporter," the "New York Medical Times," the "Nashville Medical Journal," the "New Orleans Medical Journal," and others. He also co-edited the "Medical and Surgical Reporter" with Dr. S. W. Butler in 1858, but in another year Atkinson became obstetric editor for S. D. Gross, of the "North American Medico-Chirurgical Review," but the war caused its discontinuation. When secretary of the State Medical Society of Pennsylvania he edited the "Transactions" and did the same to the "Transactions of the American Medical Association" when permanent secretary. The last journal which he edited was the "Medical Register and Directory" of Philadelphia.

His written work included "Physicians and Surgeons of the United States, 1878," which includes the lives of over a thousand medical men, and papers to the various medical journals. Of positions he held many; professor of obstetries and diseases of women in the Harvard Hospital, Philadelphia; the same post in 1859 at the Pennsylvania Medical College where he stayed until the entire faculty resigned and the college became defunct. In 1873 he was president of the Philadelphia County Medical Society. His retiring address "Hints in the Obstetric Procedure" was, in consequence of its popularity, extended and published in book form.

In 1867 he married Jennie R. Patterson of Philadelphia who died in 1871, leaving one child, a boy. He afterwards married

Miss S. J. Hutchinson and had two children, a son and a daughter.

Atlee, John Light (1799–1885).

John L. Atlee was born November 2, 1799, and passed practically all of his active life in Lancaster, Pennsylvania, where he died October 1, 1885. Although he had a very large general practice, it was in the fields of surgery and obstetrics that he won his chief celebrity. He was engaged in active practice for a period of sixty-five years, during which time he performed 2125 important surgical operations, including ovariotomy, lithotomy, amputations, operations for strangulated hernia, trephining, ligation of arteries, tracheotomy, and operations on the eye. He also attended 3,264 parturitions.

Dr. Atlee's chief claim to fame, however, is that he was the surgeon who revised the operation of ovariotomy. This operation had been suggested by William Hunter in 1762, and was subsequently alluded to as feasible by John Hunter and by John Bell.

Ephraim McDowell, of Kentucky, was so impressed with the teaching of the latter that upon his return to the United States in December, 1809, he successfully removed an ovarian cyst by abdominal section. The operation was, however, regarded with such general disfavor that prior to 1843 but five cases were reported. On the twenty-ninth of June, 1843, Dr. Atlee performed his first operation of ovariotomy, removing both ovaries with complete success. During the period from 1843 to 1883, Dr. Atlee performed the operation of ovariotomy seventy-eight times, with sixty-four recoveries and fourteen deaths.

He was held in the highest esteem both within and without his profession. He was president and one of the founders of both the State Medical Association and the American Medical Association, also professor of anatomy and physiology in Franklin and Marshall College, and president of the Board of Trustees of the State Lunatic Asylum at Harrisburg, Pennsylvania. F. R. P.

Address delivered before the Lancaster City Medical Association, November 4, 1885, by J. L. Ziegler.
Med. Rec., N. Y., 1885, vol. xxviii.
Med. and Surg. Reporter, Phila., 1882, vol. xlvii.
Tr. Am. Surg. Ass., Phila., 1888, vol. vi.
Tr. Coll. Phys. Phila., 1886, 3. s., vol. viii (D. H. Agnew).

Atlee, Washington Lemuel (1808–1878).

The work of a pioneer is primarily that of demolition of existent ignorance, and the dust he raises so chokes and blinds those close behind that they see not his good work until able to step safely where he has led, but they revile him meanwhile for the disturbance of hoary ignorances. This was exactly the fate of Washington L. Atlee, the man who did more than anyone in the world to establish ovariotomy as a legitimate practice. Born in Lancaster, Pennsylvania, February 22, 1808, he was the youngest son of William Pitt Atlee, and grandson of the Hon. William Augustus Atlee, one of the early judges of the Supreme Court. The surgeon-to-be was at fourteen placed in a drygoods store, but being the boy he was naturally did not stay there but began to study medicine with his brother John at Lancaster. He took his diploma in 1829 from Jefferson Medical College, Philadelphia, and soon after married Miss Ann Eliza Hoff of Lancaster and settled in the village of Mount Joy, but in 1834 returned to Lancaster and practised there for ten years, always investigating and on the alert for fresh knowledge; 1845 saw him professor of medical chemistry in the University of Pennsylvania, but so many were the demands of private patients that he finally devoted himself wholly to these. While still in Lancaster he was known as a skilful and courageous operator and some of his cases published in the "American Journal of Medical Sciences" caught the attention of his medical confrères. Before leaving Lancaster he did two ovariotomies, the first on March 29, 1844, and his three hundred and eighty-seventh on May 31, 1878. In 1845, after great research, he collected statistics of 101 ovariotomies, and published them

in the "American Journal of Medical Sciences" for April, 1845. Being associated with his brother in an ovariotomy in 1843, he became interested in the subject and in 1844 he writes concerning his own first case:

"In travelling westward on the Pennsylvania central railroad, soon after passing Landisville Station, a small stream is crossed on the opposite banks of which stands a one-story brick tenement. It was here after many days and nights of intense anxiety that I first essayed this operation. It is the text for many, many thoughts. No one can know the mental and moral conflicts of that hour and I can not describe them. . . . . Although this effort was unfortunate I had weighed the matter well and my convictions were on the side of humanity and duty." The next operation was successful and the third, in Philadelphia, took place in 1849. Atlee says: "I found I had raised up a hornets' nest. Ovariotomy was everywhere described. It was denounced by the general profession. . . . I was pointed at as a dangerous man, even as a murderer. . . . A celebrated professor in his published lectures invoked the law to arrest me in the performance of this operation." The call to operate from many in the states who had faith in him alone gave him courage to face an amount of misrepresentation and abuse that would have crushed an ordinary man. But appreciation was coming and so were patients. One came against the positive advice of her doctor and the doctor came too to be with her when she died on the operating-table! Yet she lived and the doctor's opposition was dead long before the patient.

Atlee in 1853 was stirring the medical world again by his methods of heroically attacking uterine fibroids with the knife. Dr. Marion Sims ("New York Medical Journal," April, 1874) writes: "The name of Atlee stands without a rival in connection with uterine fibroids . . . no man has yet dared to imitate him. A generation has passed since he gave to the world his valuable essay on the subject, but it is only within the past five or six years that the profession has come to appreciate the great truths he labored to establish."

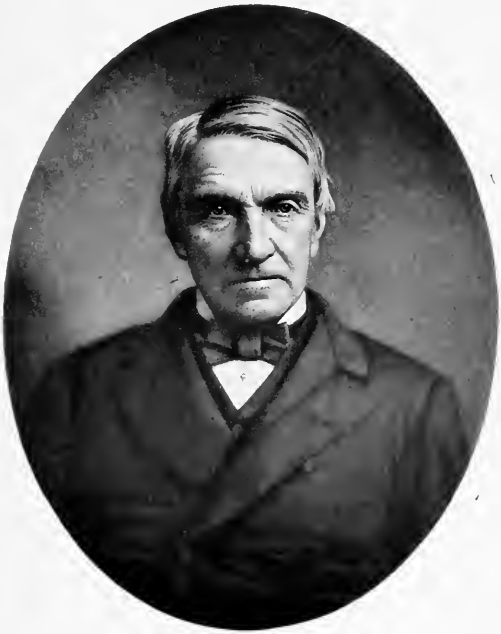
The importance of tapping as a means of diagnosing was clearly demonstrated by him and the true value of the removed fluids. "It is remarkable that with so little leisure he managed to carry on an extensive correspondence; to frequently contribute to medical journals and to write an octavo volume on ovarian tumors and many essays on all subjects connected with gynecology."

One of the founders of the American Gynecological Society, he also took an active part in the organization of the Philadelphia County Medical Society, the State Medical Society of Pennsylvania and the American Medical Association. Of the two former he was one time president and of the latter vice-president, and in the last year of his life when very feeble he journeyed to meet the State Society at Pittsburg. When the final journey of all had to be undertaken he showed no fear but rather welcomed the end as a beginning of certain knowledge of things spiritual and physical.

His wife preceded him by eight years after a happy family life with their ten children.

Among his chief writings were numerous scientific articles to the "American Journal of Science and Arts," the "American Journal of Medical Sciences," and the "Medical and Surgical Reporter"; including: "The Surgical Treatment of Certain Fibrous Tumors of the Uterus;" "A Retrospect of the Struggles and Triumphs of Ovariotomy in Philadelphia;" "The Treatment of Fibroid Tumors of the Uterus, 1876;" Sarcoma of the Ovaries," 1877, and his large work, "General and Differential Diagnosis of Ovarian Tumors with Specific Reference to the Operation of Ovariotomy," Lippincott, Philadelphia, 1872. D. W.

Hist. of Med. in Phila. F. P. Henry, M. D., 1897, Chicago.
Biog. of Ephraim McDowell. M. T. Valentine, New York.



Washington L. Atlee.

(By permission of Dr. J. L. Atlee.)

Amer. Gyn. Soc. Trans., 1878 (portrait). Amer. J. Obstet., N. Y., 1879. xii (port.). Tr. Am. M. Ass., Phila., 1879 xxx (J. M. Toner).

Aub, Joseph (1846–1888).

Joseph Aub was born in Cincinnati and graduated from the Medical College of Ohio in 1866, subsequently studying in Berlin, Vienna, and London, where he devoted himself specially to ophthalmology. He then served as resident physician for three years at the New York Ophthalmic and Aural Institute and in 1870 was elected member of the American Ophthalmological Society. In 1872 he returned to Cincinnati where he became professor of ophthalmology at the Cincinnati Medical College, and acquired a large practice in his specialty. He died at the age of forty-three, in May, 1888, having risen to the highest rank in the profession. His writings are few.

H. F.

Trans. Am. Ophthalmological Soc., vol. v.

Awl, William Maclay (1799–1876).

His parents were natives of Pennsylvania, and both of English descent. He was born May 24, 1799, and began to study medicine in 1817 in Harrisburg under Dr. Samuel Agnew and entered the medical department of the University of Pennsylvania in 1819, but left there without obtaining a degree. In 1834 he received the honorary M. D. from Jefferson Medical College, and in 1837 a like honor from the Medical College of Ohio at Cincinnati.

During the first years of his practice his attention was directed especially to surgery, but, becoming interested in insanity, he abandoned surgery and devoted the remainder of his life to the study of that and allied conditions.

In 1835 Dr. Daniel Drake, Dr. Awl, and other prominent members of the profession assembled in Columbus and founded in 1846 the Ohio State Medical Society under the name of the Ohio Medical Convention. He was also president of the Association of Superintendents of Asylums for the Insane of the United States and Canada from 1838 to 1851.

In 1826 Dr. Awl came on foot, carrying necessaries in a knapsack, from Harrisburg, Pennsylvania, to Lancaster, Ohio. From Lancaster he removed to Lithopolis, in the same county, thence to Somerset, Ohio, and finally, in 1833, to Columbus, where he lived (with the exception of two years at Dayton, Ohio) until 1876.

Dr. Awl was tall and slender, well proportioned and vigorous, with a fair complexion, red or auburn hair, and blue eyes. Owing to an accident sustained in early life, he had persistent choreiform contractions of the sternomastoid muscle of the left side, which gave the appearance of restlessness which did not exist. He was rather fond of relating his adventures, but could never be induced to explain why he came on foot from Harrisburg to Lancaster. He admitted that while "the walking was mostly fair, it was in spots very poor, and the taverns bad" and that, on the whole, he would have preferred a coach and first class hotels! He often boasted that if he could get his eyes fixed on those of even the most violent lunatic, he would have no difficulty in controlling him. Frequently consulted in medico-legal cases and those concerning doubtful sanity; in every one he attempted his favorite maneuver. Some, who knew his infirmity, said the subjects got so weary in trying to follow the movement of the doctor's head, that they became exhausted and resigned to anything that might happen, and that they didn't know how the doctor could expect to fix the eyes of another, when he couldn't fix his own! The performance was certainly amusing to the "looker-on;" but the doctor had wonderful skill in the management of the insane.

He was a fine anatomist, and in the early part of his career inclined to surgery. In 1827, as preliminary (for safety) to the removal of a "tumor, hard and irregular in form, cartilaginous in structure, from the neck of a little girl, he tied the left common carotid artery; the first time the

carotid artery had been tied west of the mountains, and the fourth in the United States." The patient made an uneventful recovery, and the case was reported by the operator in the "Western Medical and Physical Journal" for October, 1827.

The Medical Convention of 1835, which met on the fifth of January in the First Presbyterian Church, discussed the propriety of establishing a hospital for the care of the insane, and a school for the education of the blind, and sent a memorial, embodying their discussions, to the Legislature. Before the close of their session, an appropriation was made for the erection of a hospital for the insane at Columbus, a site purchased, the building completed in 1838, and Dr. Awl became superintendent. In 1837 Dr. Awl headed a movement for the establishment at Columbus of schools for the blind and feeble-minded, and the original resolution (which became a law), in his own writing, properly framed, hangs in the entrance hall of the "School for the Blind" in the southeastern part of the city. The school for the feeble-minded was not established until the "sixties."

Awl was married in January 28, 1830, to Miss Loughey, and had five children, John, Woodward, Mary, Jennie, and Margaret, all of whom, with their mother, survived the doctor who died in Columbus, November 19, 1876, from the consequences of an attack of cerebral hemorrhage sustained some months before.

S. L.

Trans. of the American Med. Association, 1880.
Trans. of the Ohio State Medical Society for 1877, pp. 71–80.
A portrait is in the possession of his daughters.

Ayres, Henry P. (1813–1887).

Henry P. Ayres, born in Morristown, New Jersey, was one of the pioneer physicians of Indiana, having settled in Fort Wayne in 1842, which was then a small but promising village. To practice medicine in a small town then meant arduous work for the doctor. There were no roads worth mentioning, and country clients had to be visited on horseback; the distances were often great and the mud deep when the weather was bad. His reputation for skill in obstetrical cases was quite extensive.

He came of old colonial stock. He was a descendent of the seventh generation of Capt. John Ayres of Massachusetts, who emigrated from England in 1635 and settled in Salisbury.

His mother, Comfort Day, also belonged to the Day family which settled in Newark, New Jersey, during colonial times. His father died when he was seven years old and his mother was left with a large family to care for.

He attended his first course of medical lectures in the University of Louisville, Kentucky, 1841–42, and afterwards located in Fort Wayne, Indiana. In 1845 he went to New York, and in 1846 received the degree of M. D. from the University of New York.

He was one of the organizers of the Allen County Medical Society, also for many years an active member of the Indiana State Medical Society and its president in 1871. In 1860 he contributed quite an exhaustive article of 138 pages to the "Journal of American Medical Association" on "The Education of Imbecile and Idiotic Children." He was an occasional contributor to the "Medico-Chirurgical Review," published in Philadelphia by his friend and former teacher Dr. S. D. Gross, as well as to other journals.

He married Eliza Kate Rowan in 1839 and had six children, three of whom died in childhood. He was very fond of children and had a winning way about him, which made them reciprocate his affection for them.

Their oldest son, S. C. Ayers of Cincinnati, Ohio, became professor of ophthalmology in the Medical College of Ohio. Dr. Ayres died in Fort Wayne, Indiana, December 25, 1887. For nearly twenty years before his death he had suffered from paralysis agitans, involving first the left side, and a few years later the right.

A. G. D.

Personal communication to the writer.

B

Bache, Franklin (1792–1864).

A man who for thirty years ungrudgingly gives a great part of his time to aid in the preparation of a "Dispensatory" of the United States is worth noting for that alone, seeing the amount of drudgery and accuracy required can never be fully estimated.

The boy Franklin, son of Benjamin Franklin and Margaret Markoe Bache, was born in Philadelphia on the twenty-fifth of October, 1792, the great grandson of the Franklin, for his grandfather, Richard Bache, emigrating from Lancashire, England, in 1737, married Franklin's only daughter. At a school kept by a Dr. Samuel B. Wylie young Franklin had his early education, afterwards going to Pennsylvania University and graduating B. A. there in 1810; M. D. in 1814. His accurate and very precise mind attracted him specially to chemistry, but the reception of a treatise written shortly after he left the army in 1813 was not encouraging. More successful was his wedding Aglae, daughter of one Jean Dabadie, a French merchant settled in Philadelphia, though she died seventeen years after leaving him with six children and just as the burden of a narrow income was somewhat lifted by her husband's appointment as professor of chemistry in Jefferson College with an assured income from the "United States Dispensatory." When he became a fellow of the College of Physicans of Philadelphia in 1829 he was appointed a reviser of the "United States Pharmacopœia," Dr. Hewson and Dr. George B. Wood aiding him. "For all this expenditure of time, thought and labor, not only in this revision but in all those with which he had been concerned, he neither expected nor received any other recompense than the consciousness of duty performed and public benefit conferred." In the spring of 1864, just after finishing the revision, he was attacked by a disease, decidedly typhous, which carried him off on the nineteenth of March.

As a writer, during the ten years he co-edited the "North American and Surgical Journal;" he contributed many and valuable articles besides editing three important chemical works and writing largely for the "American Cyclopedia of Medicine and Surgery," edited by Dr. Isaac Hays.

Besides the appointments named he was vice-president of the College of Physicians of Philadelphia, member of the Philadelphia Academy of Natural Sciences and two years president of the American Philosophical Society.

D. W.

Universities and their Sons, vol. ii., 1902, Boston.
Biographical Memoir. Geo. B. Wood, M. D., Phila., 1865.

Backus, Frederick Fanning (1794–1858).

Azel Backus, D. D., was a staunch old divine of Connecticut whose sternness was only equalled by his philanthropy, and his son Frederick Fanning, settling down as a general practitioner in Rochester, then numbering three hundred and thirty-one inhabitants was a chip of the old block and took the burden of woes physical, spiritual and civic on his own shoulders determined to make things better. He was born on the fifteenth of June, 1794, and graduated from Yale College at nineteen, taking his M. D. from the Medical College of New Haven in 1816, and two years later marrying "a lady of cultivated mind," one Rebecca, daughter of Col. William Fitzhugh of Maryland.

His chief merit lay in his indefatigable efforts on behalf of the insane. His reports on their neglected condition laid the foundation for the Asylum at

Syracuse. No one had done much before this and when his efforts had gained some measure of success he retired from the Senate to a damaged practice. In 1858 he had a second attack of paralysis following one two years previously and on November 4 he died, leaving his wife, his daughter and four sons a small competence and a big record of skill and time most faithfully used. D. W.

Tr. Med. Soc. State of N. York, 1860.

Baker, Alvah H. (1806–1865).

Born in Chester County, Pennsylvania, on November 3, 1806. In 1820 he came with his family to Plattsville, and at the age of eighteen opened a school to obtain means to study medicine. While teaching he went on studying medicine, and in 1830–31, attended lectures at Jefferson Medical College, Philadelphia, and in 1833 removed to West Alexandria, Preeble County, Ohio, where he remained about three years, and afterward went to Eaton, Ohio, where he practised until his removal to Cincinnati, Ohio, in 1846. He was one of the founders of the "Cincinnati College of Medicine and Surgery.

In January, 1860, Dr. Baker issued the first number of the "Cincinnati Medical and Surgical News." This Journal was published for three years.

He died in Cincinnati, July 30, 1865. A. G. D.

Bard, Samuel (1742–1821).

Samuel Bard was born in Philadelphia on the first of April, 1742. His grandfather had been driven to this country by the memorable revocation of the edict of Nantes, and, settling in Burlington, New Jersey, became one of the judges of the supreme court of that province. His father was John Bard, afterwards a physician of New York, and memorable for being the first person who performed a dissection and taught anatomy by demonstration on this side of the Atlantic. His mother was a Miss Valleau, a niece of Dr. Kearsly of Philadelphia, and likewise a descendant of the Protestant refugees. At the time of Dr. Bard's birth his father was practising in Philadelphia; but at the urgent solicitation of Dr. Franklin, he shortly after removed with his family to New York. Dr. Bard received the rudiments of education in New York, at a grammar school; and at the age of fourteen years entered King's College under the private pupilage of Dr. Cutting. While at college he gave some attention to the study of medicine and afterwards regularly devoted himself to the profession under his father. About this time he imbided his taste for botany from Miss Jane Colden, daughter of the then lieutenant-governor of the province. She instructed him during his occasional visits to the family and he repaid her attentions by drawing and colouring plants and flowers for her. In the fall of 1760 he sailed for Europe; but being captured by a French privateer he was taken to Bayonne, and confined six months in the castle. Upon his release in the spring of 1761 he immediately proceeded to London. He was now, at the recommendation of Dr. Fothergill, received into St. Thomas' Hospital as the assistant of Dr. Russell, and continued in that capacity until his departure for Edinburgh. He graduated in 1765, after having defended and published an inaugural essay "*de viribus opii;*" and left Edinburgh loaded with honour, in consequence of having obtained the prize offered by Dr. Hope for the best Herbarium of the indigenous vegetables of Scotland.

In 1765 he returned to his native country, and commenced practice in New York in connection with his father. The degraded state of the profession in consequence of the extensive prevalence of quackery, the inconveniences and expense of a journey to Europe, and the recent accessions of talent and respectability to the medical corps, determined a number of public-spirited gentlemen of Philadelphia to establish a school for medical instruction. Under Shippen, Morgan, and Kuhn, a college was organ-

ized. New York soon followed a worthy example; and in 1768 a similar establishment was opened in this city. Dr. Samuel Bard was immediately appointed to teach the theory and practice of physic, the most important branch of all.

On the commencement of hostilities in 1776, Dr. Bard's political principles being odious to the generality of the community, he thought it prudent to retire to Shrewsbnry, New Jersey. He there occupied himself in preparing salt; but not succeeding to his satisfaction, and being unable to support his family comfortably, he returned to New York on its being taken possession of by the British troops. He immediately regained the lucrative practice he had left, and was so successful in business that at the end of the war he possessed a handsome independence. The high character which Dr. Bard maintained at this period cannot be better shown than by the fact that, notwithstanding political differences (and party-spirit was the ruling principle of the day), he was the family physician of Gen. Washington during his residence in New York.

After several abortive attempts by the regents of the university to revive the medical school on the restoration of peace, the trustees of Columbia College resolved to place it upon a permanent foundation, by annexing the faculty of physic to that institution in 1792. Dr. Bard was continued as the professor of the theory and practice of medicine, and was appointed dean of the faculty. His exertions were chiefly instrnmental in the establishment of the city library, and of the New York Dispensary.

In the year 1795 he took Dr. Hosack into partnership; and in 1798 retired into the country, leaving that gentleman successor to his practice.

In the year 1811 he was elected an honorary member of the college of Physicians of Philadelphia; and in 1816, the degree of Doctor of Laws was conferred upon him by Princeton College. Dr. Bard was never ambitious of such distinctions.

He lived to the advanced age of seventy-nine years. In the latter years of his life he was afflicted with several severe attacks of a stricture of the esophagus, which greatly increased the bodily infirmities incident to old age. But to his last days he retained the perfection and vigor of his mind. Sensible of his approaching end, he had made it a business to prepare for death. And after arranging his temporal concerns and spending his last hours in devotional exercises, he died after a few hours illness of a pleurisy, on the twenty-fifth of May at Hyde Park, New York.

In whatever light the character of Dr. Bard may be viewed, it must elicit admiration, and exhibit itself in the commanding attitude of a model. Do we consider him as a professional man? We find him among the first physicians whom his country has produced. Dr. Bard was not one of those physicians who content themselves with the elementary knowledge they acquire in their academic studies, and rest satisfied with the slender attainments which qualify them to maintain a reputable intercourse with their brethren. He viewed medicine as a deep and extensive science, embracing almost every department of human learning; continually enriching herself with the accumulating experience of ages; and requiring of her votaries patient, laborious, and unceasing study. Accordingly, we see him at an early age engaging in the study of medicine with an assiduity of which youth is seldom capable.

His first literary production an "Inaugural Essay" on the powers of opium, would not have been unworthy of his pen in the brightest period of his fame. At the time he wrote this the powers of opium, the mode of its operation, and its various effects upon the body were but imperfectly understood and were matter of much difference of opinion among the profession in Edinburgh.

He shortly after this, in 1771, published "An Inquiry into the Nature,

Causes, and Cure, of the Angina Suffocativa, or Sore-throat Distemper," as it was then called. This disease, it seems, had but lately appeared, and had committed great ravages among the children of the inhabitants. From the description Dr. Bard has given of it, there is no doubt it was a croup of a highly violent and malignant character. In this valuable treatise may be found blood-letting suggested as a remedy, although claimed in later times as a discovery.

Dr. Bard's favorite branch was midwifery. And perhaps no physician in this country has ever enjoyed a larger share of practice in this department or acquired a higher reputation as an accoucheur. After retiring into the country one of the first plans of usefulness contemplated was the publication of a treatise upon this subject. His residence in the country, and the celebrity he had acquired as an obstetrician, afforded him frequent opportunities of witnessing the ignorance of midwives and country practitioners upon this important branch and determined him to issue a treatise with plain, practical directions for the management of natural labours. In the year 1807 he published "A Compendium of the Theory and Practice of Midwifery," intended chiefly for the use of midwives and young practitioners.

The work went through three large editions in its duodecimo form; and was twice published greatly enlarged and improved in octavo. At the time of his death he was preparing for the press a sixth edition.

It was Dr. Bard's desire to be useful. Accordingly in the year 1811 he published "A Guide for Young Shepherds," the best practical treatise then extant upon sheep breeding, the masterly performance of Chancellor Livingston not excepted.

Several fugitive essays by him are preserved in the "American Medical and Philosophical Register;" and other periodical journals are, I believe, enriched by his communications. "The Transactions of the College of Physicians of Philadelphia" contain several documents by him on the subject of "Yellow Fever."

Among his writings should be noted:

"An Inquiry into the Nature, Cause and Cure of the Angina Suffocativa or Sore-throat Distemper," New York, 1771.

"A Compendium of the Theory and Practice of Midwifery," New York, 1807.

"A Discourse on Medical Education," New York, 1819.

Abridged from a biog. by Dr. Henry Ducachet, New York, 1821.
Am. Med. Recorder., Phila., 1821, vol. iv, H. W. Ducachet.
Lives of Eminent American Physicans. S. D. Gross, Phila., 1861.

Barker, Fordyce (1817–1891).

A native of Maine, and a graduate in Arts of Bowdoin College, his medical studies were pursued in Boston, Edinburgh aud Paris; he received his medical degree at Bowdoin where he was made professor of midwifery eight years after receiving his literary degree, holding this position until his removal to New York many years later. For more than thirty years he was a medical teacher in the city of his adoption, occupying the chair of clinical midwifery and diseases of women in Bellevue Hospital College. He had many honorary degrees, amongst them the LL. D. of Columbia College, Edinburgh, Bowdoin College, Glasgow, and Bologna, also honorary fellowship of the Royal Med. Soc. of Athens and the Obstetrical Societies of London and Edinburgh.

Dr. Barker's most valuable contributions to medical knowlege, independently of his teaching, were made in the New York Academy of Medicine and in the American Gynecological Society of which he was one of the founders and first president. Perhaps, however, he is most widely known here and abroad by his "Puerperal Diseases," published in 1874, which ran into many editions, and was translated into Italian and published at Milan and also translated into French and German.

Fordyce Barker.

In 1884 he married Eliazbeth Lee Dwight and had one son who became a doctor. On May 30 Dr. Barker died at the age of seventy-three with eye undimmed, mental strength unabated, remembered for his earnest and zealous seeking to advance the cause of his profession, his kindness to struggling young doctors and students, his generous hospitality and his high abilities.

Among his articles to journals may be noted:

"Remarks on Some Forms of Disease of the Cervix Uteri," 1848.

"Some Clinical Observations on Malignant Diseases of the Uterus," 1870.

"Vaginal Hernia, or Vaginal Enterocele," 1876.

"The Influence of Maternal Impressions on the Fetus," 1887.

"Leucorrhea Considered in Relation to its Constitutional Causes and Treatment," 1882.

"Puerperal Malarial Fever," 1880.

D. W.

Amer. Jour. Obstet., N. Y.,1891. P. F. Mundé.
Glasgow Med. Jour., 1891. N. York Jour. Gynec. and Obstet., 1891-2. J. D. Emmet.
Tr. Am. Gynec. Soc., Phila., 1891.
Tr. N. York Acad., 1891.
Tr. Obstet. Soc., London, 1892.
Med. News, Phila., vol. lviii., 1891.

Barker, Jeremiah (1752–1835).

As pioneer medical writer in Maine, Jeremiah Barker stands almost unique in its medical history. He was the son of Samuel and Patience Howland Barker, and was born at Scituate, Massachusetts, March 31, 1752. After a most excellent common school education, he studied medicine with Dr. Bela Lincoln, Harvard, 1751 ,and Aberdeen, 1788, member of the Massachusetts Medical Society and a surgeon of the Revolution. Soon after beginning practice, Dr. Barker met with an accident confining him to the house for several weeks. During this enforced imprisonment he developed great skill in medical writing, composing a "Vade Mecum" based on several text-books of medical practice, and a hand-book of anatomy with drawings of his own. He first practised in Gorham, Maine, but finding the field well occupied by Dr. Stephen Swett, he moved to Barnstable, Massachusetts, where he practised chiefly between 1772 and 1779. During the revolution he served actively once or twice, and was a surgeon on a privateer, in which he was captured but soon released. He also took part in the ill-fated Bagaduce (Castins) expedition in 1779. Being now near Gorham, again, and his brother-in-law, William Gorham, then living there, Dr. Barker tried the place once more and soon gained an extensive practice all along the coast of Maine including all that district now known as Portland. Ten years later he built a house at Stroudwater, two miles from Portland, practised from that center with great success, and when a little over sixty retired to Gorham for the rest of his life.

Dr. Barker's chief service to medical history consists in a large number of interesting accounts of epidemics of scarlatina, malignant fever, measles and putrid sore throat occurring in Maine between 1790 and 1810. He also published meteorological sketches of great value to the historian. In those days much stress was laid upon the weather in the causation of epidemics, and these papers besides describing such conditions year after year contained hygienic advice of great value. If it were not for this writer we should be without data of former epidemics, and from that point of view his writings are unique. He was exceedingly interested in the use of alkalies in the treatment of disease, and experimented steadily with such substances, chemically and practically, until he had assured himself that in lime-water he had found one of the most valuable remedies ever used in medicine. At one time he planned a history of epidemics in Maine, and strove to interest his fellow physicians in his scheme, but no printed material or even manuscript remains to prove that his work was ever given to the public. He intended also to write the lives of his medical friends, and

we can only regret that he was unable to finish this part of his work.

Besides writing for publication, Dr. Barker corresponded actively with the learned medical men of his time, among whom may first be mentioned Dr. Benjamin Rush, the discoverer of forced feeding, fresh air in phthisis, and the rest cure, afterward developed by other men in later times. Others of his friends were Samuel Latham Mitchill, physician, philosopher and politican, who enriched the world with one hundred and eighty-nine new ideas, Lyman Spalding the founder of the "United States Pharmacopœia," Gov. (and Doctor) John Brooks, Benjamin Waterhouse, and numerous others including the well-known Portland surgeons Nathaniel Coffin, father and son, and at Hallowell, Maine, the exiled member of Parliament, Dr. Benjamin Vaughan, and Maj.-Gen. (and Doctor) Henry Dearborn.

Dr Barker, furthermore, enriched medical history by visiting his medical friends all over New England and writing for posterity most instructive notes of the remarkable cases which they showed to him from time to time. The numerous papers which he contributed to medical literature at a time when American Medical writings were scanty in the extreme and consisted largely of servile imitations of the London and Parisian fashions, prove him to have been a man with something to say. As a surgeon he was surpassed by other contemporaries, but as a physician and writer, historical investigations stamp him as a leader.

He was also an active temperance man and, although at times prescribing stimulants, believed that the doctor should be the one to decide when they were really needed. He was one of the famous "sixty-niners" of the year 1818, with which title he goes down into Maine liquor law history, meaning that he was one of the sixty-nine persons who attended in the Friends' Chapel in Portland, the first temperance meeting ever held in Maine, the purpose of which was to prohibit the drinking of rum sold on the premises. An amusing anecdote is told of his consulting with Dr. Nathaniel Coffin in a case of tetanus in which two clergymen protested personally at the bedside of the patient against the proposal of the doctors to give a mixture of rum and laudanum. The clergy said that it was sinful to the last degree that the dying man should meet his Creator, drunk with rum and poisoned with laudanum. The physicians listened respectfully, but persisted and the patient recovered. The man never forgave Dr. Barker, and as if in perpetual protest was found drowned, ultimately, in a pond of fresh water. Dr. Barker was a member of the Massachusetts Medical Society, a constant student, an omniverous reader of everything medical, read French fluently, and beginning his medical library at the age of seventeen, left nearly two thousand volumes at his death. Of his literary favorites, it is said that he always carried about with him a well-thumbed copy of "Rush on Fevers" and would lecture from it at the bedside. During one epidemic he did not enter his house for more than four weeks, travelling from patient to patient, eating and sleeping where he had the chance. Occupied with his books and his plans for future medical work, he kept on to the last, dying of old age, October 4, 1835.

J. A. S.

Family Records. Personal MSS. "Medical Repository," History of Gorham, Maine.

Barnes, Edwin (1844–1904).

Edwin Barnes was born in Troy, New York, July 28, 1844, his parents moving to Dutchess County, New York, when he was a mere youth.

He began the study of medicine with his uncle, Dr. Hall, of Burlington, Ohio, and matriculated at the Albany Medical College, attending lectures there when Drs. March, Armsby, McNaughton, T. Romeyne Beck and Quackenbush were at the zenith of their fame. While still a young student, yet having passed all examinations, he was appointed to military service in the United States Army, most of which service was rendered in

the Ira Harris Hospital, taking his degree in the meantime.

Directly after the close of the war, he settled in Pleasant Plains, New York, and began civil practice, succeeding Dr. Jesse F. Merritt, a homeopathist.

In 1866 he married Matilda Armstrong and had three children.

He also kept thoroughly in touch with all the latest in medicine and surgery. Nevertheless, he was always slow to discard some well-tried and well-established procedure for one untried.

Among the many valued articles written by Dr. Barnes was one upon "A New Method of Treating Colles Fracture," printed in the "Medical Record," January 21, 1899. This was a gem, and the idea expressed in this paper was original in every respect and called forth favorable expressions from many leaders in surgery in this country.

Dr. Barnes was president of the Dutchess County Medical Society, 1884–1886, and a member of the New York Medical Association, of which he was a loyal supporter to the end.

He died January 22, 1901.

J. E. S.

Barnes, Joseph K. (1817–1883).

Joseph K. Barnes, surgeon-general of the United States Army was born in Philadelphia July 21, 1817, and educated at Round Hill School, Northampton, Massachusetts and at Harvard University. He studied medicine under Dr. Thomas Harris and later attended lectures at the University of Pennsylvania, whence he obtained his M. D. in 1838 and in 1840 entered the army as assistant surgeon rendering notable service during the Mexican War and was present at the battles of Cerro Gordo, Contreras, Cherubusco and Molino del Rey. After the war he was on duty at various military posts of the West and South. At the outbreak of the Civil War he was made medical director of Hunter's army. Later he served in the same capacity in the Western Department and with Halleck's army. In 1862 he was called to Washington, where he gained the friendship of secretary Staunton. When Surgeon-general Hammond was deposed it devolved upon Barnes to perform the duties of surgeon-general and in 1864 he was appointed successor to Gen. Hammond with the rank of brigadier general. As surgeon he worked zealously to advance the medical department of the army, and under his administration the Army Medical Museum and the Surgeon-General's Office Library were established. Under him, too, the "Medical and Surgical History of the War" was compiled. It was his sad lot to attend Lincoln and Garfield, the two martyr presidents, in their last hours. Gen. Barnes retired June 30, 1882, and died in Washington, April 5 of the following year. A. A.

Pilcher, Surgeon-Generals of the Army, Carlisle, Pa., 1905.

Bartholow, Roberts (1831–1904).

Army surgeon, physiologist, sanitary reformer, writer and physician, all these and more was Roberts Bartholow, of Alsatian. English parentage. He was born in New Windsor, Maryland, November 28, 1831. His parents were sufficiently well off to let him go to the New Windsor College, Maryland, where he graduated and took his M. A., afterward earning his M. D. at the University of Maryland.

A spirit of adventure, after he had taken the rank of army surgeon, led to his going with the force sent to maintain order among the Mormons and Indians in the West, in Brigham Young times. Four years camping in that wild country gave him wide experience in fevers and gunshot wounds, and he had no sooner returned home than the Civil War broke out and gave him three more years of military and surgical experience. But a wife and family induced him to settle down to civil practice in 1861 in Cincinnati, Ohio, and he was fortunately made professor of chemistry in the Medical College there. His predecessors had been professional chemists and the appointing of a practising physician was not welcomed.

Moreover, he had strange and disturbing views about sewerage, ventilation, cholera excreta, etc., which disturbed the conservative and rather drowsy Academy of Medicine, but the cholera epidemic of 1866 showed him to be the right man in the right place and as founder and editor of "The Clinic" he had a means of refuting hostile critics of which he took trenchant but dignified advantage.

While engrossed for twenty-two years in many medical duties, he was zealously garnering material for his big book, "Materia Medica and Therapeutics." In 1874 he published an experiment in the "American Journal of the Medical Sciences," made on a dying patient to confirm or modify the conclusions drawn by Hitzig and Ferrier as to the brain being tolerant of injury, his case proving the contrary in the human subject.

When he removed to Philadelphia his widespread reputation and his duties at the Philadelphia and Jefferson Hospital did not give him the leisure he craved to write his "Practice of Medicine," but it was finished and had a second edition in three months. Then he went on the staff of the "Medical News" (Philadelphia), his pen always busy with concise and lucid articles, particularly on medical jurisprudence. With mental powers always in order, he was ready for lecture, consultation, operation or critic, but in 1893 he retired from college work and was made emeritus professor. Tired he was, too, and needed a long rest but the rest came a little too late to restore his early vigor and he had been suffering from diabetes for some time, but, always cool, alert and self-possessed he had kept good hold of himself. When he did die, at Philadelphia, on May 10, 1904, he was seventy-two and had re-edited all his books to the standard he had ever striven for in his professional life and writings.

Among his appointments were:

Professor of medical chemistry and afterwards professor of practice of medicine, Medical College of Ohio; fellow of College of Physicians of Philadelphia; Honorary member of Royal Medical Society, Edinburgh, and the Society of Practice of Medicine, Paris; professor of materia medica, Jefferson Medical College; LL. D., Mount St. Mary's College.

His writings included many critical, sarcastic but fascinating articles for "The Clinic," of which he was founder and editor; also books on "Spermatorrhea;" "Materia Medica and Therapeutics," 1876, the result of twenty-two years' experience, his avowed aim "to stem the tide of therapeutic nihilism;" its editions numbered eleven; its sale 60,000 copies. "A Treatise on the Practice of Medicine" which went through five editions and was translated into Japanese. "The Cartwright Lectures," 1881, on the "Antagonism between Medicines and between Medicines and Diseases." D. W.

Trans. Coll. Phys. Phila., vol. xxvi., 1904.

Bartlett, Elisha (1804-1855).

Born at Smithfield in 1804, Elisha Bartlett was singularly fortunate in his parents, who were members of the Society of Friends, strong, earnest souls, well endowed with graces of the head and of the heart.

At Smithfield, at Uxbridge, and at a well-known Friends' institution in New York, Bartlett obtained a very thorough preliminary education. Details of his medical course are not at hand, but after studying with Dr. Willard, of Uxbridge, Drs. Greene and Heywood, of Worcester, and Dr. Levi Wheaton, of Providence, and attending medical lectures at Boston and at Providence, he took his doctor's degree at Brown University in 1826, a year before the untimely end of the medical department.

In June, 1826, Bartlett sailed for Europe, and writing September 4, he speaks of attending every day at the Jardin des Plantes to hear the lectures of Cloquet and Cuvier.

In 1827, shortly after completing his twenty-third year, Bartlett settled at Lowell, then a town of only 3,500 inhabitants, but growing rapidly, owing to

the establishment of numerous mills. This was his home for nearly twenty years.

In 1832 he held his first teaching position, that of professor of pathological anatomy and of materia medica in the Berkshire Medical Institute, at Pittsfield, and in 1839 was appointed to the chair of practice in Dartmouth College, Hanover, New Hampshire, the school founded by Nathan Smith in 1798.

In 1841 he accepted the chair of the theory and practice of medicine in the Transylvania University, Lexington, at that time the strongest and best equipped school in the West, but became professor of the theory and practice of medicine at the University of Maryland in 1844, and of materia medica and obstetrics in the Vermont Medical College, the session of which began in March and continued for thirteen weeks. Among his colleagues were Alonzo Clark, Palmer and Edward M. Moore, and later, John C. Dalton.

On March 13, 1849, he received the appointment of professor of the theory and practice of medicine in the University of Louisville.

The condition of medical politics at that time in the town was not satisfactory, and a new school had been started in opposition to the University, and among the Bartlett letters are a number from the elder Yandell which show a state of very high tension. Bartlett spent but one session in Louisville. He and Gross accepted chairs in the University of New York. The appointment of the former to the chair of the institutes and practice of medicine is dated September 19, 1850.

Among his colleagues in the University were Draper, Martyn Paine and Granville Sharp Pattison. Things do not seem to have worked very smoothly. In the spring of 1851 overtures were made to him from the College of Physicians and Surgeons of New York, in which Faculty were his warm friends, Alonzo Clark and Willard Parker, and he was elected to the chair of materia medica and medical jurisprudence in the following year, 1852. Here he lectured during the next two sessions until compelled by ill health to retire.

Bartlett began his career as a medical writer with the "Monthly Journal of Medical Literature and American Medical Students' Gazette," only three numbers of which were issued.

Among the articles in these three numbers there are some of special merit. One signed S. N., "On the Claims of Medicine to the Character of Certainty," may have suggested to Bartlett his well-known essay, "On the Degree of Certainty in Medicine."

In July, 1832, he became associated with A. L. Pierson and J. B. Flint in a much more pretentious and important journal, the "Medical Magazine," a monthly publication which continued for three years.

In 1831 appeared a little work entitled, "Sketches of the Character and Writings of Eminent Living Surgeons and Physicians of Paris," translated from the French of J. L. H. Peisse. Of the nine lives, those of Dupuytren and Broussais are still of interest to us, and there is no work in English from which one can get a better insight into the history of medicine in Paris in the early part of this century.

Bartlett's claim to remembrance, so far as his medical writings are concerned, rests mainly on his work on "Fevers" issued in 1842, and subsequent editions in the years 1847, 1852 and 1857. It remains one of the most notable of contributions of American physicians to the subject. Between the time of Bartlett's visit to Paris and 1840, a group of students had studied under Louis, and had returned to this country thoroughly familiar with typhoid fever, the prevalent form in the French capital at that time.

As to the work itself, the interest today rests chiefly with the remarkably accurate picture which is given of typhoid fever—a picture the main outlines of which are as well and firmly drawn as in any work which has appeared since.

"An Essay on the Philosophy of Medicine," 1844, a classic in American medical literature, is the most characteristic of Bartlett's works, and the one to which in the future students will turn most often, since it represents one of the most successful attempts to apply the principles of deductive reasoning to medicine, and it moreover illustrates the mental attitude of an acute and thoughtful observer in the middle of the century.

In 1848 appeared one of Bartlett's most characteristic works, a little volume of eighty-four pages, entitled, "An Inquiry into the Degree of Certainty of Medicine, and into the Nature and Extent of its Power over Disease." The reception of the essay in certain quarters indicates how shocking its tone appeared to some of the staid old conservatives of the day. I came across a review of it in the "Medical Examiner," November, 1848, from which I give the following extract: "This is a curious production, the like of which we have seldom seen from the pen of anyone who had passed the age of a sophomore. What makes it the more remarkable is the circumstance that the writer is a gentleman of education and experience and the author of works which have given him a wide reputation."

The last of Bartlett's strictly medical publications was a little monograph on the "History, Diagnosis and Treatment of Edematous Laryngitis," published in Louisville at the time he held the chair of practice at the University in 1850.

Bartlett was at his best in the occasional address. Perhaps the most characteristic is one entitled, "The Head and the Heart, or the Relative Importance of Intellectual and Moral Education," which is a stirring plea for a higher tone in social and political morality. In the same clear, ringing accent he speaks in his address on Spurzheim of the dangers of democracy. In a lecture on the "Sense of the Beautiful," delivered in 1843, Bartlett appears as an apostle of culture, pleading in glowing language for the education of this faculty.

One of the last of Bartlett's publications was "A Discourse on the Times, Character and Writings of Hippocrates," delivered as an introductory address before the trustees, faculty and medical class of the College of Physicians and Surgeons, at the opening of the session of 1852–53. The three pictures which he gives of Hippocrates as a young practitioner in the Isle of Thasos, at the death-bed of Pericles, and as a teacher in the Isle of Cos, are masterpieces worthy of Walter Savage Landor.

When at Louisville some obscure nervous trouble, the nature of which I have not been able to ascertain, attacked Dr. Bartlett. Against it in New York he fought bravely but in vain, and after the session of 1853–54 retired to Smithfield, his native place. The prolonged illness terminated in paralysis, but, fortunately, did not impair his mental faculties in the slightest degree. He died on the nineteenth of July, 1855.

W. O.

Elisha Bartlett, a Rhode Island Philosopher. by William Osler, Providence, 1900.
An address on the life. . . Elisha Bartlett. Delivered before the Middlesex North District Med. Soc., 1855 (E. Huntington).

Bartlett, Josiah (1729–1795).

Josiah Bartlett, was born in Newbury, Massachusetts, November 21, 1729, the son of Stephen and Mary Webster Bartlett.

At sixteen he began to study medicine with a Dr. Ordury. He soon exhausted the scanty library and resorted to other physicians for a supply.

In 1750, having completed his medical education, he began to practice at Kingston, New Hampshire.

In 1733 and again in 1735 a "distemper" originated in Kingston, which eluded all the powers of the physicians. This was called the "Throat Distemper or Angina Maligna." The disease spread rapidly, and among children was universally fatal.

The depleting and antiphlogistic course

of practice was pursued, but when in 1754 the angina again appeared in Kingston, Dr. Bartlett gave up this method of treatment and used the then new remedy, Peruvian bark, and met with general success.

From his integrity and decision of character Josiah Bartlett was soon appointed a magistrate and in 1765 began his political career as representative in the assembly of the Province.

In February 1775 he was deprived of the commission he had held as justice of the peace, and the command of the militia by Gov. Wentworth. In the September following, he was appointed by the provincial congress, of which Dr. Matthew Thornton was president, to command a regiment and was again chosen a delegate to the continental congress. He accepted both and attended the congress, and when that memorable vote for American Independence was taken the medical colonel's name was first called as representing the most easterly province.

In 1779 Col. Bartlett was appointed chief justice of the superior court and in 1788 chief justice of the state; an active member of the convention for adopting the confederation in 1788 and was chosen a senator in congress in 1789 which position he declined. In 1790 he occupied the station of president of the state of New Hampshire and in 1793 was unanimously elected governor of the state under the new form of government.

Although Dr. Bartlett was actively engaged in politics during these memorable years, he always displayed actively a zealous interest in the welfare of his profession.

He was not only the founder of the New Hampshire Medical Society in 1791, but attended its meetings, taking the time amid the onerous cares of public life. He was the first president of the medical society and was annually elected for three consecutive years, when he resigned.

He married Mary Bartlett, a distant relative, and had three sons, Levi, Josiah and Ezra.

On January 29, 1794, he resigned all public positions on account of increasing infirmities, and died quite suddenly of paralysis on the nineteenth of May, 1795, in his sixty-sixth year. J. F. P.

Biog. of the Signers to the Declar. of Independ., Phila., 1849.

Bartlett, Josiah (1759–1820).

Josiah Bartlett, soldier of the Revolution, promotor of good medical literature and prominent physician, was the son of a sea captain, George Bartlett, who came from Slocum Regis in Devonshire. Josiah was born in Charlestown, Massachusetts August 11, 1759, and during his childhood and early youth attended the local schools and when about fourteen was placed under Dr. Isaac Foster, a local physician. During the period immediately preceding the war of the Revolution young Bartlett studied under Dr. Foster and when Foster was appointed to the medical department of the American Army at Cambridge, on April 20, 1775. Later on the tutor was appointed chief surgeon to the General Hospital at Cambridge, and procured the office of surgeon's mate for his pupil, then sixteen, who served until 1780, when he resigned from his pupilage and gave up his commission. During this year Dr. Bartlett attended one course of lectures on anatomy by Dr. John Warren, at Cambridge, and soon afterwards was engaged for two voyages as surgeon to the ships of war. During these public services Dr. Bartlett manifested a degree of activity, attention and faithfulness which secured to him a high reputation and the approbation of his superiors in office.

In 1789 he became a member of the Massachusetts Medical Society and was its recording secretary from 1792 to 1796. In 1810 he delivered the annual oration before this society on the progress of medical science in Massachusetts. Dr. Bartlett attended a complete course of medical lectures at Cambridge in 1790, receiving the honorary M. D. in 1791 and the honorary M. D. in 1809 from Harvard University.

James Thacher states that "perhaps no man contributed more time and active exertion to improve the state of the Massachusetts Medical Society, and through it, the interests of medical literature, than Dr. Bartlett." He delivered two public discourses of a medical nature, one before the Middlesex District Society and one before the Massachusetts Medical Society, the latter being well known as an interesting historical sketch of medical characters in the early days of the country.

He also published various papers on medical subjects in the communications of the Medical Society and in the "New England Journal of Medicine and Surgery."

Although engaged in extensive practice Dr. Bartlett found time for activity in civil offices and was at various times elected representative, senator and councillor in the state government.

Bartlett was deeply interested in the early history of New England and especially in the development of its educational and literary institutions. Among his researches is the following information: "The Congregational Church was established in Charlestown in 1633, in which the Rev. John Harvard officiated for a short time before his death in 1638; his age is unknown. All that can be ascertained of this gentleman is that he had been a minister in England, and died soon after his arrival in this country, that he preached a short time in this town, and bequeathed about eight hundred pounds to the college. The writer has repeatedly searched for his grave, but can discover nothing to designate it."

He corrected the mistake of Dudley, Mather, Holmes and other colonial writers regarding the year of arrival of Gov. Winthrop at Charlestown with fifteen hundred persons, which had been given as 1630, to the true date, 1629, as shown by the original town records of Charlestown.

Dr. Bartlett's character was remarkable for industry, activity and intelligence. He never declined any duty which was assigned him, and always executed it speedily and thoroughly.

Perhaps no individual in this vicinity delivered so great a number of public orations on medical, political and literary topics. He possessed a physical constitution which promised a long as well as an active life, but he was stricken with apoplexy on March 3, 1820, and died two days later. A. N. B.

Hist. Har. Med. School. T. F. Harrington, vol. i.
Mass. Hist. Soc'y. Proceedings, vol. i.
Memoir by Richard Frothingham.
Oration by Robert T. Davis.

Barton, Benjamin Smith (1766–1815).

One of America's foremost botanists, Benjamin Barton was the son of the Rev. Thomas Barton, an Episcopal minister, and born on February 10, 1776, in Lancaster, Pennsylvania. The boy was only eight when his mother died and but fourteen when left an orphan. He went to live with an elder brother and was a student at the College of Philadelphia, beginning his study of medicine under Dr. William Shippen, Jr. While still a pupil of his he journeyed with his maternal uncle, David Rittenhouse and the other commissioners appointed to survey the western boundary of Pennsylvania, and thus had his attention directed to the study of the Indian tribes, a subject which possessed the greatest interest for him throughout life. In 1786 he went abroad to pursue his medical and scientific studies, first in Edinburgh and London, afterwards going to Göttingen, where he received the M. D. degree.

His reasons for not taking the degree of M. D. to which he was entitled by his studies at Edinburgh University were set forth in a letter to his brother, written in London in 1789, in which he states that he preferred getting his diploma from Göttingen because he was dissatisfied with the discourteous manner in which two of the professors at the University of Edinburgh had treated him. He, however, when in Edinburgh

received several honors, the membership of the Royal Society of Edinburgh and also from that society an honorary premium for his dissertation on "Hyoscyamus Niger." This was the Harveian prize, consisting of a superb quarto edition of the works of William Harvey.

While living in London he published a tract entitled "Observations on Some Parts of Natural History," to which is prefixed an acconnt of some considerable vestiges of an ancient date which have been discovered in different parts of North America. This little book he afterwards characterized as "premature work" and regretted many deficiencies in it. Both Hunter and Lettsom were good friends to him and appear to have appreciated his scientific merits.

Dr. Barton returned to Philadelphia and practised medicine in 1789, being in the same year appointed professor of natural history and botany in the College of Philadelphia, a position held after the union of the College of Philadelphia with the University of the state of Pennsylvania in 1791. On the resignation of Dr. Griffith from the chair of materia medica in Pennsylvania University, Dr. Barton was appointed. When Benjamin Rush died he was appointed professor of the theory and practice of medicine, continuing to hold also the chair of natural history.

His published works inclnde "The Elements of Zoology and Botany," "Elements of Botany, or Outlines of the Natural History of Vegetables;" "Collections for an Essay towards the Materia Medica of the United States;" "Fragments of the Natural History of Pennsylvania;" "Essay on the Fascinating Power Ascribed to Serpents, etc.," "Views of the Origin of the Tribes and Nations of America."

In 1805 he started publishing the "Medical and Physical Journal" and also wrote many short articles on topics connected with medicine, history and archæology, much of his work appearing in the "Transactions of the American Philosophical Society."

During his early years he was much afflicted with hemorrhages and gout. He had only given two courses as the successor of Rush, when he had to seek relief by a sea voyage. He sailed for France in 1815 returning by way of England, disheartened. At New York he was afflicted with hydrothorax. Finally reaching home, very ill, he became rapidly worse and was found dead in bed on the morning of December 19, 1815. Feverishly anxious to work, three days before his death he wrote a paper concerning a genus of plants named in his honor by Nuttall, a young English botanist whom Barton had financed for a scientific tour in the Southern States. The plants were of the class "Icosandria monogynia." found in hilly districts between the Platte and the Andes and named Bartonia polypetala and Bartonia superba.

He was a member of the Imperial Society of Naturalists of Moscow; the Danish Royal Society of Sciences; the Linnaen Society of London; and of the Society of Antiquaries, Scotland.

Barton married, in 1797, a daughter of Edward Pennington of Philadelphia, and named his eldest son after Pennant, the English naturalist. F. R. P.

Bull. of the Lloyd Library. Reproduction Series No. 1, 1900, Cincinnati.
Thacher's American Medical Biography. An account of the Life of B. S. Barton, by W. P. C. Barton, the Portfolio, vol. i, No. iv, April, 1816.

Barton, William Paul Crillon (1783–1856).

William Paul Crillon Barton, a navy surgeon, was descended from a distinguished family of physicians of Philadelphia. He graduated at the University of Pennsylvania in 1808 and entered the navy as assistant surgeon in the following year. A man of untiring energy, with a high sense of dnty, the Medical Department of the Navy owes to him some most valuable reforms. He was also a writer of ability and a noted botanist. Among his more valuable writings may be mentioned: "A Treatise containing a Plan for the Organization and

Government of Marine Hospitals," 1814; "Vegetable Materia Medica of the United States," 1818; "Compendium Floræ Philadelphicæ," 1818; "A Flora of North America" (with colored plates), 1821.

In 1842 Barton was appointed chief of the Bureau of Medicine and Surgery of the Navy Department, which position he held until 1844 when he was retired. He died in Philadelphia, the city of his birth, March 27, 1856. His bust in life size is shown in the Army Medical Museum at Washington. A. A.

N. York J. M., 1856, 1. Bradley, J, Ass. Mil' Surg., Carlisle, Pa., 1901-2, X.

Bartram, John (1699–1778).

In his own words John Bartram shall tell how he was first led to study that science which made him in after years America's leading botanist.

"One day," he says, "I was very busy in holding my plough (for thou seest that I am but a ploughman) and being weary I ran under a tree to repose myself. I cast my eyes on a daisy; I plucked it mechanically and viewed it with more curiosity than common country farmers are wont to do and observed therein very many distinct parts, some perpendicular, some horizontal. What a shame, said my mind, that thee shouldst have employed thy mind so many years in tilling the earth and destroying so many flowers and plants without being acquainted with their structurps and their uses. . . . I thought about it continually, at supper, in bed, and wherever I went, . . . on the fourth day I hired a man to plough for me and went to Philadelphia. Though I knew not what book to call for, I ingenuously told the bookseller my errand, who provided me with such as he thought best and a Latin grammer. Next I applied to a neighboring schoolmaster who in three months taught me Latin enough to understand Linnaeus, which I purchased afterwards. Then I began to botanize all over my farm. In a little time I became acquainted with every vegetable that grew in the neighborhood. . . . By steady application of several years I acquired a pretty general knowledge of every plant and tree to be found on our continent. In process of time I was applied to from the old countries whither I every year send many collections."

So wrote America's earliest botanist and the founder of her first botanical garden who was born on the twenty-third of March, 1699, in Derby, Delaware County, Pennsylvania, son of William and Elizabeth Hunt Bartram the descendants of Richard Bartram of Derby, England, whose son, grand-father of our botanist, came over to Pennsylvania in 1682.

There was not much schooling to be had in the new colony of Philadelphia, but John was given all there was and also studied Latin and Greek. The inheritance from an uncle of a farm in Derby placed him a little above those petty cares which fret the heart of a scientist. Haller in his "Bibliotheca Anatomica" speaks of him as a physician and certainly he devoted much of his time to physic and surgery, obtaining some celebrity in the latter. He bought for his botanical garden a piece of land about three miles from Philadelphia on the Schuylkill and built a house with his own hands. He employed much of his time in specimen hunting and natural history research; no dangers deterring him; summits of mountains were explored; sources of rivers found, and all this at a time when to travel among the aborigines was a tremendous risk. The modern explorer with his air bed, camp furniture, collapsible tent (and hopes), is a pigmy contrasted with this John setting out when seventy years old from Philadelphia to explore in Florida. It was at this time he was appointed botanist to the king and received orders to discover the source of the great river St. John. Four hundred miles he travelled and in the course of this journey made an accurate survey of the river, its lakes and branches, the soil, animals and climate, which survey was published in London.

An enterprising merchant in Philadel-

phia, one Joseph Breintnall, had before this taken some of Bartram's collections to Peter Collinson the London botanist which led to a fifty years correspondence between Bartram and learned men, such as Linnaeus, Sir Hans Sloane and Fothergill and to his election as a member of the Royal Society in London and in Stockholm. Anyone desirous of some pleasant reading about this genial and learned Bartram should take an hour or two with "The Memorials of John Bartram and Humphry Marshall" by Dr. William Darlington, Philadelphia, 1849.

In January, 1723, Bartram married Mary, daughter of Richard Maris, of Chester, and had two sons, Richard and Isaac. Two years after her death in 1727 he married Ann Mendenhall and had nine children, James, Moses, Elizabeth, Mary, William, and Elizabeth (twins). Ann, John, and Benjamin.

His personal character in all records is shown to be that of a genial philanthropist with a capability for righteous wrath when necessary. He seems to have anticipated Tolstoy in the "Simple Life;" his slaves emancipated before the war, sitting at the lower end of the dining-table and the fare plentiful but plain. He loved his Bible too and read it to his boys and girls. Over the windows of his study was carved:

> Tis God alone, Almighty Lord
> The holy One by me adored.
> John Bartram, 1770.

"I want to die" were his last words as, nearly eighty years old, a short illness bore him, still keen-witted to the grave, and this utterance in days when death held great terror, shows the man even better than an inscription which anyone might carve. D. W.

Medicina Britannica. Phila. Biog., by Thomas Short.
Memorials of John Bartram and Humphry Marshall. Dr. Wm. Darlington, Phila., 1849.

Bassett, John Y. (1805–1851).

When looking over the literature of malarial fevers in the South, chance threw in my way Fenner's "Southern Medical Reports," Volumes I and II, which were issued in 1849–50 and 1850–51. Among many articles of interest I was particularly impressed with two by Dr. John Y. Bassett, of Huntsville, Alabama.

Letters lent me by his daughter begin from Baltimore in the last week of December, 1835. He had lost his diploma, for he applied to Dr. James H. Miller, the president and professor of anatomy of the Washington Medical College, for a certificate, which is found among the papers, stating that he is a regular graduate of that institution, but not mentioning the year.

He took passage by the Roscoe, Capt. Delano in command, bound for Liverpool. He sailed on January 6, and in an interesting letter an account is given of the voyage. They reached the English Channel on the twenty-sixth.

The first long letter, descriptive of Manchester, York, and Edinburgh, is illustrated by very neat little sketches.

He was very enthusiastic about the museum of the College of Surgeons, and the Infirmary, where he witnessed in the presence of Mr. Syme, an operation by "Mr. Ferguson, a young surgeon."

In Paris he attached himself at once to the clinic of Velpeau at La Charité. On his first day he says he did not understand more than half he said, but he understood his operations. He says there was a gentleman from Mobile, Mr. Jewett, who had been there for three years. Americans were not scarce; there were four or five from New York, two from Baltimore, and several from Boston and Philadelphia. He does not mention their names, but it is pleasant to think he may have attended classes at La Pitié with Bowditch, Holmes, Shattuck, Gerhard and Stillé. He began dissections at once; subjects were cheap–six francs apiece–and he secured a child on the first day for forty sous.

He had evidently occupied his time to good advantage, as, early in July he received from Velpeau the appointment of externe at La Charité.

His last letter is from Paris, dated October 16, and he speaks in it of his approaching departure.

I have no information as to the date of his return, but his intention was, he states frequently in his letters, to be back by the first of the year, so that after this date he probably resumed practice at Huntsville.

The two papers in Fenner's Southern Medical Reports are the only ones I see credited to him. They are charmingly written and display in every page the wise physician; wise not only with the wisdom of the schools, but with that deeper knowledge of the even-balanced soul "who saw life steadily and saw it whole."

The report in volume I deals with the topography, climate, and diseases of Madison County. Dr. Fenner states that it was accompanied by a beautiful map drawn by the author, and a large number of valuable statistics.

Very full accounts are given of epidemics of scarlet fever and of small-pox, and a discussion on the cold water treatment of the former disease. Dr. Bassett must have had a well-equipped library, and his references to authors both old and new are not very full, but most appropriate.

Bassett developed tuberculosis, and the last letter in the budget sent to me was dated April 16, 1851, from Florida, whither he had gone in search of health. He died November 2 of the same year, aged forty-six.

To a friend he writes on the date of April 5: "This world has never occupied a very large share of my attention or love. I have asked but little of it, and got but little of what I asked. It has for many years been growing less and less in my view, like a receding object in space; but no better land has appeared to my longing vision; what lies behind me has become insignificant, before me is a vast interminable void, but not a cheerless one, as it is full of pleasant dreams and visions and glorious hopes." W. O.

An Alabama Student. Johns Hopkins Hosp. Bull., Balt., 1896, vol. vii (W. Osler).
An Alabama Student and other Biographical Essays. W. Osler, London, 1908.

Batchelder, John P. (1784–1864).

John P. Batchelder was born in Wilton, New Hampshire, August 6, 1784, and studied medicine with Drs. Samuel Fitch and Matthias Spaulding, of Greenfield, New Hampshire. A short time after, young Batchelder took out a license to practice (1807), and continued to practice until enabled to attend a full and practical course of lectures at Harvard University, Massachusetts, whence he graduated in 1815. Armed with his diploma, Dr. Batchelder practised alternately in Charlestown, New Hampshire; Pittsfield, Massachusetts; Utica, New York; and for the last twenty years in New York City.

A college, of good standing and ethical principles, in Middlebury, Vermont, conferred upon him the A. M.

Dr. Batchelder wrote an excellent thesis "On the Disease of the Heart, styled Aneurysm," read before the faculty of Harvard University, Massachusetts, when he took his M. D.

As early as 1818, Dr. Batchelder performed his first operation for lithotomy, and with a satisfactory result. This was at the time when Dr. Kissam, the successful lithotomist, was performing continually his great operations in that locality.

He also had made some excellent improvements in surgical instruments and he invented the first craniotome that could be worked with one hand.

In 1817 he was appointed professor of anatomy in Castleton College, Vermont, and subsequently elected professor of surgical anatomy in the Medical College, Pittsfield, Massachusetts.

Besides many articles appearing in the medical periodicals of the day, he wrote and published a pamphlet on "Cholera." His work on "Compressed Sponge" is replete with learned statements and abounding in excellent hints, and everything the doctor wrote was reprinted abroad.

For many years he made diseases of the eye and their treatment his specialty. In 1825 he tied the carotid artery as a means of cutting off the supply of blood to a large sarcomatous tumor of the lower jaw, which he subsequently removed with success.

He performed the rhinoplastic operation in 1828 for the first time in this country, and a plastic operation for a new under-lip for the first time on this side of the Atlantic. Both of these operations were successful. He was the first in this country to remove the head of the femur.

His writings included:

"A Case of Disease of the Heart," being a letter addressed to Prof. J. C. Warren, dated Charleston, New Hampshire, September 1, 1813, and printed in the "New England Journal of Medicine and Surgery."

"Paper on Fracture of the inferior extremity of the Radius," ibid, May 4, 1818.

"Treatise on Removal of Fragments of Needles from Hands and Feet." Extract from "Surgical Lectures."

"Treatise on the Reduction of the Dislocation of the Upper End of the Radius."

"Case of a tumor in the neck, in which the innominata had been laid bare nearly its whole length; the pulsations of which, with those of the primitive carotid, were felt by several gentlemen who assisted in the operation." 1846.

"Fracture of Patella, Clavical and Olecranon Process of the Ulna," "New York Medical and Surgical Reporter."

"Paper on Removal of the Head of the Femur," "New York Medical Journal."

"Treatment of Cholera," "New York Medical Journal," 1854.

"Practical Observations on Tracheotomy, as a Remedy in Croup," "New York Medical Journal," 1854.

"Dislocation of the Upper End of the Radius," printed in the "New York Journal of Medicine," 1856.

"Pathology and Treatment of the Paralysis of Motion," "Virginia Medical Journal," vol. x., No. 1.

"Pathology of Motion," "Virginia Medical Journal," No. 5.

"Work on Compressed Sponge."

From Biographical Sketches of Distinguished Living New York Surgeons (S. W. Francis). Med. and Surg. Reporter, Phila., 1864, vol. xii.

Bates, James (1789–1882).

This distinguished man descended from one Clement Bates, of Herefordshire, England, who with his wife Ann came with a family of five children from London to Hingham, Massachusetts, April 6, 1635. Most of their descendants settled in Scituate, Massachusetts, later on.

James Bates was born in Greene, Maine, September 24, 1789. His mother's name, Mary Macomber, from Taunton, Massachusetts. At the age of seven his parents moved to Fayette, Maine, where the boy had a common school education. When twenty-one he began to study medicine with Dr. Charles Smith of Fayette, and Dr. Ariel Mann of Hallowell.

The war of 1812 soon breaking out, he was appointed surgeon's mate in the army and towards the close of the war was ordered to the hospital on the Canadian Frontier, where he took care of the sick and wounded, and spent nearly two years in gradually getting them back to New England. Travel in those days was so slow that a journey of four weeks to Maine was considered very rapid. The sufferings of the patients in the hospital being great, and those caused by the journey home being worse, it was considered best to keep the wounded there for a long time, rather than send them home with the probability of dying from the hardships of travel.

Dr. Bates resigned from the army in 1815, and went into partnership with Dr. Ariel Mann, at Hallowell, and on July 27 married Miss Mary Jones, daughter of Captain Sylvester Jones, of Fayette, Maine, with whom he lived happily sixty years, and had a family of two sons and three daughters.

In 1819 Dr. Bates moved to Norridgwock, Maine, where he practised with great skill as a surgeon and physician for twenty-six years. During this time he performed throughout the state all of the capital operations. He was a very remarkable operator, owing his excellent skill in that line to his abundant opportunities for surgery during the war of 1812. He is said to have amputated a leg in twenty seconds. He was early a member of the Maine Medical Society, and contributed to its meetings several excellent papers, one, "On the Use of Artificial Leeches for phlebotomy," and another"on "Encephaloid Tumors." He also wrote for the "Boston Medical and Surgical Journal."

After eleven years of active practice, Dr. Bates was asked to enter the political field, which he did with great reluctance, and was elected member of Congress for two separate terms, returning home during the recesses of Congress. Declining further political offices, he resumed practice until 1845, first in Fairfield, Maine, near his former home, and finally in 1858, at the urgent request of a large number of citizens of Yarmouth, he moved there and worked steadily until over ninety.

Born to be a leader, he led the people toward good things wherever he lived. He spoke often in public and private on temperance, medicine and agriculture. Though not obstinate, he uttered his views with persistence, yet good humor. A great medical man in every way, he may be considered as among the best Maine has ever produced. He died rather suddenly at the last, from the effects of a slight fall and after a short illness on the twenty-fifth of February, 1882, aged over ninety-two years. He said on his death bed, "My father lived to be ninety-three years, his father before him reached the same age, and the only thing that I regret now is that I am afraid I shall not get there myself." J. A. S.

Trans. Maine Med. Assoc., Family Papers.

Battey, Robert (1828–1895).

Robert Battey, son of Cephas and Mary Agnes (Margruder) Battey, was born November 26, 1828, in Augusta, Georgia, and educated in Richmond Academy, Augusta, Georgia, Phillips Academy, Andover, Massachusetts, and graduated from the Philadelphia College of Pharmacy March 17, 1856. He began to study medicine in 1849, at Rome, Georgia, under Dr. George M. Battey (his brother), and later studied under Dr. Ellwood Wilson of Philadelphia; attended two courses of lectures at Jefferson Medical College and the University of Pennsylvania, graduating from the former March 7, 1857, and receiving her LL. D. in 1891; 1859–60 was spent in post-graduate studies in the hospitals of Paris. Dr. Battey commenced practice in May, 1857, at Rome, Georgia, and remained there continuously with the exception of the years 1872–75, when he was professor of obstetrics in Atlanta Medical College, and editor of the "Atlanta Medical and Surgical Journal," 1873–76, Atlanta, Georgia. He was four years, July, 1861–65, in the Confederate service as surgeon of the Nineteenth Regiment of Georgia Volunteers; surgeon of Hampton's Brigade. He was surgeon-in-charge of the Gynecological Infirmary, Rome, and consulting surgeon, treasurer, and business manager of the Martha Battey Hospital, Rome, Georgia, an institution incorporated under the laws of Georgia, the buildings and grounds the gift of Dr. Battey, in grateful recognition of the valuable aid of his wife in his surgical work, and whose name it bears.

What is known as Battey's operation—oöphorectomy—was first done by him in Rome, Georgia, on August 27, 1872, and reported in the "Atlanta Medical and Surgical Journal" for September of that same year. The patient was thirty years old and had been an invalid for sixteen years, having only menstruated twice. Both ovaries were removed by abdominal section and the woman cured. Battey afterwards tried vaginal section but re-

verted to his first method. So far as Battey knew and so far as published cases enabled anyone else to know, his operation had no precedent.

Battey's idea was to remove the ovaries whether diseased or not to do away with painful menstruation and neurotic conditions, whereas Tait's idea was to remove diseased uterine appendages, ovaries and Fallopian tubes because they were diseased. Battey's original conception of the feasibility of removal of the ovaries by the vaginal route had in it much more than he dreamed of and the operation of to-day is the infant thought of Battey grown to great magnitude.

In 1859 he devised an improved apparatus for vesico-vaginal fistula and was the originator of iodized phenol.

His thorough anatomical knowledge gave him confidence so that he was a bold and prudent operator. It must have required courage of a high order to do his first oöphorectomies and he told me how a band of men, among them prominent physicians of his vicinity, awaited the results of his first case, intending, in case of the patient's death, to have him arrested and prosecuted for murder.

He is said to have been the friend of almost every inhabitant of the little town wherein his life was spent. For two years previous to his death which occurred near Rome, November 8, 1895 his health was so broken that he was unable to work.

He was president of the American Gynecological Society in 1899 and of the Medical Association of the State of Georgia, 1876, and honorary fellow of the Obstetrical Society of Edinburgh, fellow of the British Gynecological Society and of other medical societies.

Battey was not a prolific writer, but without circumscription reached the core of the matter in a few words and stated his views lucidly. He contributed to the "Transactions of the American Gynecological Society: "Extirpation of the Functionally Active Ovaries for the Remedy of Otherwise Incurable Disease," vol. i. "Is There a Proper Field for Battey's Operation?" vol. ii. "Intrauterine Medication by Iodized Phenol," vol. iv. "What is the Proper Field for Battey's Operation?" vol. v. And to the "Transactions, Medical Association of Georgia, Atlanta, 1886: "Antisepsis in Ovariotomy and Battey's Operation; Seventy Consecutive Cases with Sixty-eight Recoveries." "Normal Ovariotomy," "Atlanta Medical and Surgical Journal," 1873.

He married on December 20, 1849 Martha B. Smith of Rome, Georgia, and had fourteen children, eight of whom, Grace, William Cephas, George McGruder, Henry Halsey, Anderson Redding, Bessie and Mattie survived him. Henry became a doctor. T. A. R.

Am. Gyn. and Obstet. Jour., N. Y., 1890, vol. ix.
Tr. Am. Gynec. Soc., 1896, vol. xxi.
Atlanta Med. and Surg. Jour., 1884, n. s., vol. i.
Brit. Med. Jour. Lon., 1895, vol. ii.
There is a portrait in the Surg-Gen. Library, Wash., D. C.

Baxley, Henry Willis (1803–1876).

Henry Willis Baxley, a founder of the first dental college in the world, was born at Baltimore in June, 1803, and educated at St. Mary's College in the same city, afterwards attending medical lectures in the University of Maryland and receiving his M. D. from that institution in 1824. From 1826 to 1829 he was attending physician to the Baltimore General Dispensary and from 1831 to 1832 held the same post at the Maryland Penitentiary. He was appointed demonstrator of anatomy at the University of Maryland in 1834. In 1837 he became professor of anatomy and physiology in the University of Maryland (Trustees' School), succeeding Prof. Eli Geddings, who had resigned. In 1840 he held the same chair in the Baltimore College of Dental Surgery, then founded. From 1842 to 1847 he was professor of surgery in the Washington University of Baltimore; from 1849 to 1850 he was physician to the Baltimore Almshouse; in the latter year he moved to Cincinnati.

having accepted the Chair of Anatomy in the medical College of Ohio; in 1852 he was transferred to the Chair of Surgery in the same institution; in 1865 he was Government Inspector of Hospitals, and the following year went to Europe where he remained until 1875 when he removed to Baltimore, and on March 13, of the following year he died there.

Dr. Baxley, was a thorough anatomist, and an able teacher and surgeon. Among his operations was entire removal of the lower jaw for osteosarcoma (reported 1839). Among his more important writings were two works written while he was abroad, "What I saw on the West Coast of North and South America and at the Hawaiian Islands," New York, 1865, 632 pages, illustrated; "Spain, Art Remains, Art Realities, Painters, Priests and Princes, being Notes of Things seen and Opinions formed during nearly Three Years Residence and Travel in that Country," two volumes, London, 1875.

Dr. Baxley incurred the enmity of the Medical Faculty of the University of Maryland, who thought that he sided with the Trustees in the differences that arose between the two bodies, and it was his election to the chair of anatomy in that institution by the latter in 1837 that led to the disruption of the school, to the two medical faculties, to the famous suit of Regents *vs.* Trustees, and to the restoration of the institution to the Regents by the Court of Appeals of Maryland in 1839. Baxley left one son, Claude, who followed his father's profession. (Cordell's History, 1907, for portrait.) E. F. C.

Baxter, Jedediah Hyde (1837–1890).

Born in Stafford County, Orange, Vermont, Jedediah Hyde Baxter, surgeon-general of the United States Army, received his education at the University of Vermont and graduated in medicine at the same institution in 1860. When the Civil War broke out he at once offered his service to his country and was commissioned surgeon in the twelfth Massachusetts Volunteers June 26, 1861. Appointed brigade surgeon of volunteers in 1862, he was shortly afterwards put in charge of Campbell General Hospital at Washington and in 1863 was made chief medical officer of the Provost Marshal General's Bureau. In this position he compiled the "Medical Statistics of the Provost Marshal General's Bureau." This work, which includes a valuable anthropometric treatise, contains the results of the examinations of more than a million of men enrolled in the Union Army during the great war and was published in two large volumes in 1875. In 1867 Baxter was appointed medical purveyor with the rank of lieutenant colonel and promoted to chief medical purveyor with the rank of colonel in 1874. August 16, 1890, he was appointed surgeon-general of the army but his career was suddenly cut short four months later. He died of an attack of uremia December 7, of the same year. A. A.

Pilcher, Surgeon-Generals of the Army, Carlisle, Pa., 1895.

Bayard, William (1814–1907).

William Bayard was born in Kentville, Nova Scotia August 24, 1814, the son of Dr. Robert Bayard, a professor in medcine in New York at the time of the war of 1812, and who at that date returned to his former home in Kentville, Nova Scotia.

When twelve years of age, William was sent to Fordham, New York. Subsequently he attended medical lectures in New York City and had private instructions from Dr. Valentine Mott. From New York he went to Edinburgh University, where he received his M. D. in 1837. After this he spent some time in the hospitals of the Continent, then became associated with his father in practice in St. John, New Brunswick.

It is seldom that any man has commanded the esteem of both his medical brethren and the general public to such a degree as did Dr. Bayard.

He was instrumental in establishing

the St. John Public Hospital and was chairman of its Board of Commissioners for forty years. He was also chairman at different times of the St. John and Provincial Boards of Health. He was elected president of the Council of Physicians and Surgeons in 1881, and was the president of the Canadian Medical Association in 1895.

In 1900 he received the honorary LL. D. from the University of New Brunswick, and in his seventieth year, after he took his M. D., the University of Edinburgh conferred upon him a similar honor.

In 1848 Dr. Bayard married Susan M. Wilson, but had no children. He died on December 17, 1907. A. B. A.

Bayley, Richard (1745–1801).

This New York physician, who was far ahead of his time in the study of croup and fevers, was born at Fairfield, Connecticut, in 1745, of French-English descent. He studied medicine under Dr. Charlton of New York but went, after marrying Charlton's daughter, to London where he had the good luck to gain the friendship of William Hunter and permission to work in his dissecting-room. On returning to New York he practised with Dr. Charlton, and at this period he began to study the then prevalent and fatal croup, a disease of which little was known. His opinions on this complaint and his successful practice in consonance to them were published in "Richter's Surgical Repository" several years antecedent to his own letter on croup because conveyed in the letters of Michaelis, chief of the Hessian Medical Staff to that journal. Michaelis, with that love of truth characteristic of a scientific man, yielded up his own opinion of the croup to adopt those of a comparatively unknown young American.

In 1781 Bayley published his letter to Dr. William Hunter on "Angina Trachealis" and subsequently a "History of the Yellow Fever in New York in 1795," attempting in the latter to differentiate between contagion and infection.

But a serious blow had befallen Bayley in the loss of his wife. He had gone for a winter to London in 1776 and scanty means rather than inclination led him to take a surgeoncy on board a British man o'war coming over here. He found himself established with the troops on Rhode Island after it had been taken by the English and with no chance, except by resigning, of seeing his wife then ill in New York. When, finally, he threw up his commission, he only arrived in time to see her die.

Bayley's attention to morbid anatomy and pathology made him the subject of injurious criticism from some of his narrow-minded contemporaries who accused him of experimentation on sick soldiers. Nevertheless, Bayley, anxious to share his advance in knowledge, delivered lectures in an unoccupied house to students while his son-in-law, Wright Post, lectured to them on anatomy. But the students of 1788 were no wiser than those of to-day and by their imprudence unintentionally roused the people, and the celebrated "Doctors' Mob" broke into the building and unfortunately wreaked their vengeance on Bayley's rare collection of morbid anatomy which they threw into carts, took away and buried, thereby losing to anatomists many delicate and dexterously prepared specimens.

When the faculty of Columbia College thought it wise to constitute a medical faculty Bayley and Wright Post became professors respectively of Anatomy and Surgery. Bayley was specially good as a lithotomist, and also in 1782 successfully removed an arm from its glenoid cavity by the operation of the shoulder-joint, this being, as far as can be ascertained, the first time it was done in the States.

Although devoted to surgery and delighting in pathological work, Bayley's orderly mind was always upset by the slowness of his fellow townsmen to work for urgent reforms. He and a few others got the New York Dispensary established and when yellow fever came he slaved day and night for the sick and proclaimed everywhere that the fever was "a

murderer of our own creating," and due partly to a filthy harbor. He noticed it was worse when the West India ships came in the summer and did not rest until he had obtained moderately good quarantine laws.

Like many another of our fraternity his life was forfeited to duty. In 1801 he found fever on an Irish emigrant ship and ordered the passengers to go on shore to the tents and rooms provided but to leave their baggage on board. In the morning he found the well and the sick with all baggage huddled together in one big room. The atmosphere into which Bayley walked can be imagined. He stayed a while directing matters but was soon after seized with intense pain in the stomach and head. He had to go home to bed in the afternoon and died seven days after, a most serious loss in every way to his city. Thacher says he was a perfect gentleman; inflexible in attachments, invincible in his dislikes, in temper fiery, but a busy surgeon fighting opposition in his own branch and dull ignorance in health officers may perhaps have had some of that "fiery temper" put to his credit as righteous anger. D. W.

Allibone, vol. i.
Thacher, Med. Biog.

Baylies, William (1743–1826).

William Baylies, physician, was born at Uxbridge, Massachusetts, December 5, 1743, the son of Nicholas Baylies, a native of Shropshire, England, who emigrated to Uxbridge and later moved to Taunton, a town which he represented several years in the General Court. William graduated from Harvard College in 1760 and studied medicine with Dr. Elisha Tobey, of New Bedford, at the completion of his course marrying a daughter of the Hon. Samuel White, of Taunton, speaker of the House of Representatives, and settling as a physician in the town of Dighton.

Dr. Baylies' activities in life were many. He represented Dighton in the Legislature, and in three Provincial Congresses, was a member of the State Convention that adopted the Federal Constitution; a judge of the Court of Common Pleas, and for a long time register of probate, but chiefly he was a doctor, and he was much in demand as a consultant, being particularly noted for his acumen in prognosis. He read much and was prudent and cautious but not timid.

He was one of the original members of the Massachusetts Historical and Massachusetts Medical Societies and a member of the American Academy of Arts and Sciences. In 1807 Harvard conferred upon him the honorary degree of M. D.

He died June 17, 1826. He was the author of "Ulcerated Sore Throat in Dighton, 1785–6," Communications, Massachusetts Medical Society, vol. i, series 1. W. L. B.

Hist. Har. Med. School, T. F. Harrington.
Ulcerated Sore Throat in Dighton, Med. Com. Mass. Med. Soc., vol. i, series 1.
Williams, S. W. Amer. Med. Biog., 1845.

Bayly, Alexander Hamilton (1814–1892).

Alexander Hamilton Bayly was born in Cambridge, Maryland, on March 3, 1814, the son of the Hon. Josiah Bayly, at one time attorney-general of Maryland, and of Anne Hack Waters of Somerset County, Maryland. He received his early education at the High School, Cambridge, and at fourteen entered St. Mary's College, Baltimore, completing his education at Washington College (now Trinity), Hartford, Connecticut, in 1832. He then began to study medicine under Dr. Vans Murray Sulivane of Cambridge, Maryland, and in 1833 worked under Prof. Samuel Baker of Baltimore, graduating from the University of Maryland in 1835. He became a member of the Medical and Chirurgical Faculty and president of the State Board of Lunacy. During the Civil War, Dr. Bayly was the surgeon-in-charge of the Military Hospital in Cambridge.

Dr. Bayly was specially efficient as a surgeon, and as early as 1839 did an excision of the tibia, and in 1846 was the first to employ the horse-shoe magnet to remove a piece of metal from the cornea.

For forty years or more, Dr. Bayly was mayor of Cambridge and he did much to beautify the town by planting many trees. He was artistic in many directions, being a fine musician and was specially fond of botany, the garden in the rear of his old home in Cambridge being one of the most beautiful to be found anywhere. His personal characteristics were lovely, he was charitable and kind, his affection and care for his children was almost womanly. Dr. Bayly's wife was Delia Byus Eeeleston by whom he had eleven children, none of whom studied medicine. Dr. Bayly loved his native town, the "Old Sleepy Hollow" as he called it, and it was there that he died on March 14, 1892, from rheumatic gout.

B. W. G.

Baynham, William (1749–1814).

William Baynham, anatomist, was the son of Dr. John Baynham of Caroline County, Virginia, and born the seventh of December, 1749. After serving a laborious apprenticeship of five years under Dr. Walker, an eminent physician of Caroline County, he was sent to London to complete his medical education.

In 1769 he entered St. Thomas' Hospital as a student and by his diligence soon attracted the attention of the professor of anatomy, Mr. Else. Between the two a mutual attachment arose which lead Baynham to direct his attention specially to the study of anatomy and surgery. In the former he soon became so proficient that in 1772 he was engaged by the professor of anatomy at Cambridge as his prosector, which position he held for several years. During those months in which he was not occupied at Cambridge, he practised at Margate as a partner of Mr. Slater, a surgeon of that place. This he found to be a pleasant and profitable connection, but was induced by Mr. Else to return to London and become his assistant demonstrator. In this work he acquired that intimate knowledge of anatomy for which he was so justly celebrated. During the five years in which he held this position he prepared for the museum many valuable and beautiful specimens.

He had now acquired a reputation as an anatomist and surgeon for, though a stranger to the governors, he failed by one vote only of election as successor to Mr. Else, who died suddenly without having made a promised arrangement that Baynham should be advanced to the professorship after his death. So, on June 7, 1781, he became a member of the Surgeon's Company of London and began to practise in that city. Membership in the Surgeons' Company gave him equal rank with the first English surgeons of the day, men such as Pott, Cooper, Abernethy and John Hunter.

After a residence of sixteen years in England he returned to Virginia and settled in Essex County, where he continued to live until his death. The remainder of his life was spent in the service of his fellow creatures. He soon had an enormous practice which was largely surgical, and it was said that there was scarcely any known operation that he did not perform with success, and he particularly signalized himself by his operations for stone, cataract and extrauterine gestation. His biographer truthfully said of him that he probably had no superior as a surgeon, and certainly none as an anatomist; that Physick and Baynham were the only men he knew of in America who had done anything towards the improvement of their calling. He was an excellent physician as well. He was frequently called to large cities, sometimes to other states, to perform operations, and his advice was often sought by persons from a distance. He is known to anatomists as the discoverer and demonstrator of the vascularity of the *rete mucosum*.

He discharged his duties to society in a most exemplary manner, and while he had excentricities of temper, and was somewhat gloomy and austere, he had a kind warm heart and was ever a friend and benefactor to the poor and needy. Somewhat indistinct in speech and entirely unostentatious of display, he talked

only to be understood and never for effect. His career in Virginia furnishes one of the very few instances in which a surgeon with a large and successful practice has left behind him an enduring reputation, though his work was done in a remote country district. Virginia has furnished another still more remarkable instance in the career of Dr. J. P. Mettauer. Dr. Baynham married a daughter of the Rev. John Mathews of Essex County. He died on the eighth of December, 1814, on the day after he had completed the sixty-sixth year of a useful and laborious life.

He did two successful operations for ectopic pregnancy, one in 1790, the second in 1799, and he is supposed to have been the first surgeon who did this successfully. His account of these operations was published in the "New York Medical and Physical Journal and Review," vol. i. Several posthumous accounts of surgical cases were published in the "Philadelphia Journal of Medical and Physicial Sciences." R. M. S.

Phila. Jour. Med. and Phys. Scs., vol. iv, 1822.

Beard, George Miller (1839–1883).

George M. Beard, neurologist, was the son of the Rev. S. F. Beard, Congregationalist minister, and was born at Montville, Connecticut, in 1839; prepared for college at Andover, Massachusetts. He entered Yale, graduating in 1682. As an undergraduate he was prominent as a scholar, writer and debater and received the Townsend premium. He graduated at the College of Physicians and Surgeons in 1866. Between his first and second course of lectures he served for one year as Assistant Surgeon in the United States Navy. In 1866 he became associated with Dr. A. D. Rockwell, for the study of nervous diseases, and especially for the development of electricity in its relations to medicine and surgery. At the time when Dr. Beard began with Dr. Rockwell his researches in electro-therapeutics, electricity had not been used to any extent by physicians in this country, and very little abroad, except among a few specialists, and only by local methods. Their first systematic contribution to the subject was a series of five articles "On the Medical Use of Electricity," with special reference to general electrization, and in which the constitutional tonic effects of electricity were first enunciated and demonstrated. These articles were not only quoted, but reprinted in full in various journals both in England and Germany. In 1872 he published with Dr. Rockwell the first edition of their larger work on "The Medical and Surgical Uses of Electricity," which was translated into German, and had there a very large circulation. The methods of "general faradization" and "central galvanization," to the consideration of which the book is in part devoted, have been introduced into Germany through its translation, and have long been incorporated into its scientific literature. The study of medical electricity led naturally and inevitably to the study of psychology, and in 1867 he published a paper on "The Longevity of Brain Workers," which demonstrated that those who live by brain live longer than those by muscle; that great men live longer than ordinary men. Following this came papers on the "Cosmic Law of Intemperance;" "A Plea for Scientific Reform," "Atmospheric Electricity and Ozone, Their Relations to Health and Disease;" "The Relation of the Medical Profession to the Popular Delusions of Animal Magnetism, Clairvoyance, Spiritualism, and Mind Reading;" "The Physiology of Mind Reading;" "Are Inebriates Automatons?" "The Asylums of Europe;" "Trance and Transoidal States in Lower Animals;" "How to Use the Bromides;" "Current Delusions Relating to Hypnotism;" "The Study of Trance and Muscle Reading, and Allied Nervous Phenomena in Europe and America, with a Letter upon the Moral Character of Trance Subjects;" "The Case of Guiteau, a Psychological Study;" "On the Moral Responsibility of the Insane," etc. etc. Beard gave much attention for many years to the reconstruction of the principles of evidence on

the basis of psychology, and his outlines appeared in various papers in the "Popular Science Monthly." This reconstruction applies especially to the phenomena of living human beings, and to the sources of error in our reasoning, and the misapprehensions that come from those errors. He maintained that it was a most important defect in the Baconian philosophy that these sources of error were not formulated. This he attempted to do, maintaining that human testimony as such is, in matters of science, of no worth; that neither honesty nor quantity of non-experts in the special matter in hand can establish any scientific fact. He affirmed, therefore, that in science the rejection of average human testimony is the beginning of all wisdom. In his work on "American Nervousness," he treated of the causes of nervous disorders, and of nervousness in general, and of their greater prevalence in America, demonstrating that the great cause of nervous diseases is civilization, other accredited causes being secondary and stationary, and that the cause of the great prevalence of nervous diseases in America is dryness of the air and extremes of heat and cold. Mr. Herbert Spencer, in his visit to America in 1882, made a speech substantially repeating many of the thoughts and some of the language of Dr. Beard's writings on this latter subject. In his work on "Neurasthenia," he brought the professional attention to a large number of symptoms of nervous and functional diseases, which he contended were of immense importance scientifically and practically. In his treatise on sea-sickness, Dr. Beard brought into prominence these two facts: That sea-sickness was a functional disease of the nervous system, induced mechanically by concussion, and that it could be in many, and perhaps in the majority, of cases entirely prevented. The plan of treatment suggested by his work has now been successfully carried out on every sea and for the longest voyages. When the inventor Edison thought he had discovered a new force, the "Etheric Force," Dr. Beard spent much time in experimenting both with Mr. Edison and independently, reaching the conclusion that the phenomena represented an unnoticed phase of induced electricity. Beard's writings were essentially philosophical in character. He accepted the principle of evolution. All of his writings on the nervous system were based upon the development theory. He contended that it was impossible to obtain sound and philosophical ideas of the nervous system in health and disease, except on the basis of that theory. He, therefore, carried the evolution theory into the study of insanity and all functional diseases of the nervous system and of trance and allied states, and aimed at a radical reconstruction of insanity on that basis. He was the first who clearly and prominently demonstrated that the facts of the phenomena of delusions belong to psychology instead of to physics or physiology, and should, therefore, be brought into science exclusively by psychologists. It was in this field that Dr. Beard was laboring when the summons came on January 23, 1883.

He married, in 1866, Elizabeth Ann Alden, of Westville, Connecticut.

Among other appointments he was lecturer on nervous diseases in the University of New York; physician of nervous disorders to the Demilt Dispensary; fellow of the New York Academy of Medicine; member of the New York County Medical Society, of the New York Society of Neurology; and founder and editor of the "Archives of Electrology and Neurology" which came out for two years. A full list of his writings can be seen in the "Surgeon-general's, Catalogue" Washington, District of Columbia.

Tr. Med. Soc. of the State of N. York, 1883.
Jour. Nerv. and Ment. Dis., N. Y., 1883, n. s., vol. viii (with portrait).
Med. News, Phila., 1883, vol. lxii.
Med. Record, N. Y., 1883, vol. xxiii.
Med. Leg. Jour., N. Y., 1883-4, vol. i.

Beardsley, Hezekiah (1748–1790).

The first to describe congenital hypertrophic stenosis of the pylorus in infants, Hezekiah Beardsley deserves a short

note, although the facts of his life are scanty. He was born in Stratford, Connecticut, in 1748, and became a druggist and physician, and practised in Southington, Connecticut, as early as 1778, so far as health would permit. Two years later he appears to have removed to Hartford. An advertisement of his firm, Beardsley and Hopkins, is to be found in the "Connecticut Courant" for June 26, 1781. In it we learn his drug store was situated "a few rods east of the Court House." In 1782 he removed to New Haven, where he had a similar store on Chapel Street, between Church and Orange Streets. At the time of his death, in 1790, from consumption, he had taken his brother-in-law in partnership with him.

He was one of the original members of the New Haven County Medical Association, and served on the committees of correspondence and examination. In April, 1788, he reported a case of "scirrhus in the pylorus of an infant," which was the first case on record of congenital hypertrophy of the pylorus in an infant. It was printed with the papers of the society, which appeared in their transactions entitled: "Cases and Observations." In this paper Beardsley noted practically every feature of the disease we now know. He had attended the patient for three years at Southington, and when her death, at the age of five years, "closed the painful and melancholy scene" he performed the autopsy. He speaks of the "constant puking," which was first noted during the first week of life. Every thing in the shape of food, the child took was almost instantaneously rejected and very little changed. The feces were small in quantity. He comments upon the leanness and wizened old look of the child, and states he had "pronounced a scirrhosity in the pylorus months before the child's death," although he first attributed the condition to a deficiency of bile and gastric juices joined with a morbid relaxation of the stomach. Unfortunately, Beardsley did not know of the child's death "until the second day after it took place. This late period, the almost intolerable stench, and the impatience of the people who had collected for the funeral, prevented so thorough an examination of the body as might otherwise have been made." At the autopsy Beardsley noted that the stomach was unusually large and distended. "The pylorus was invested with a hard compact substance or scirrhosity, which so completely obstructed the passage into the duodenum as to admit with the greatest difficulty the finest fluid. He concludes, "the necessity of interring the body that evening put a stop to any further examination," and so forbade a more particular and accurate description of this very "singular case."

W. R. S.

Bronson H., N. H. Colony Hist. Soc. Papers' ii, 59–61. Beardsley's paper, above referred to, was reprinted by Dr. Osler in Archives of Pediatrics, xx, 1903, as the volume," Cases and Observations," is so extremely scarce.

Beaumont, William (1785–1853).

William Beaumont, surgeon and physiologist, was born at Lebanon, Connecticut, November 21, 1785, son of Samuel Beaumont, a Puritan New England farmer. His early education was such as to qualify him on attaining his majority for teaching school at Champlain, Clinton County, New York. At the same time he began to study medicine with Dr. Seth Pomeroy of Champlain, New York, and continued it with Dr. Benjamin Chandler of St. Albans, Vermont. He secured a license to practise from the Third Medical Society of Vermont, but on December 2, 1812, enlisted as surgeon's mate in the Sixteenth Regiment Infantry, United States Army. During April and May, 1813, he saw something of war surgery at the taking of York (now Toronto) where the retreating English exploded hundreds of barrels of powder under the feet of the advancing Americans, at the storming of Fort George May 27, 1813, and at the battle of Plattsburg, New York September 11, 1813. During the latter the physicians were compelled to pass and

repass from fort to fort and block houses, exposed to a cross fire of round and grape shot in dressing the wounds of the injured, but none failed to exhibit a soldier-like bravery. Dr. Beaumont stood actual test of facing death in caring for the injured. In 1815 he resigned and engaged in general practice at Ogdensburg, New York. On November 4, 1819, he re-entered the army as post surgeon and was assigned to Mackinac Island, Michigan, reporting to Gen. Macomb, June, 1820. While surgeon's mate he won the confidence of Dr. Lowell, the first surgeon-general, and was offered but refused a thousand dollar clerkship in his consulting-room at Washington and many favors were given him during his army service helpful in his investigations of stomach digestion. On June 6, 1822, occurred the accident to Alexis St. Martin, which left the walls of the stomach open by a valve, permitting a complete study of the processes of stomach digestion in both normal and abnormal conditions. In a memorial to the United States Senate, Beaumont describes the wound as "being under the left breast made by the accidental discharge of a shot gun at about two feet. A large portion of the side was blown off, ribs fractured and openings made into the pleural cavity and the abdomen, through which protruded portions of the lungs and stomach, much lacerated and burnt. The diaphragm was lacerated and a perforation made directly into the cavity of the stomach through which food was escaping when first seen." At the end of ten months the wound was partially healed, but he was altogether helpless. The Civil authorities refused to longer provide for his needs and proposed to send him to his home in lower Canada more than fifteen hundred miles distant. Knowing that such a journey would be fatal to St. Martin, Dr. Beaumont took him into his own home, and for two years clothed, fed, nursed, doctored, and sheltered the helpless, suffering, and destitute invalid. In May, 1825, St. Martin was able to walk and help himself a little, though unable to provide for his necessities. Now Beaumont kept him for the purpose of making observations and experiments. Two years later (1827) Beaumont communicated his studies to the Michigan Medical Society, of which he had been an honorary member since June 4, 1825. In 1900 the Michigan Medical Society erected a monument of stone, hard by the spot where these immortal studies were begun, and in a memorial meeting expressed its appreciation of Beaumont's contribution to the world's progress. In June, 1825, Beaumont was ordered to Fort Niagara, New York, taking St. Martin with him and continuing his studies. In August they visited Plattsburg, New York, and Burlington, Vermont, where St. Martin took "Dutch" leave of Beaumont. While at Fort Niagara, June and July, 1825, Beaumont was principal witness in the court martial trial of Lieut. E. B. Griswold, for trying to shirk duty by feigning sickness. Beaumont, suspecting a fraud, prescribed a mixture of 20 grains of calomel with 6 grains of tartar emetic. On hearing the nature of the prescription ordered for his illness, Griswold returned to duty. The court found Griswold guilty but the president reversed the decision and criticised Beaumont. The doctor's reply to the president is a model (General order No. 9 of February 18, 1826). "Whether the plan adopted be justifiable or not I leave to medical men and candid judges to decide. It had the intended effect of returning Lieut. Griswold to his duty without prejudice to his health. Neither is it of very great moment to me whether a successful experiment be of more or less doubtful propriety, that speedily returns a soldier from a sick report to effective service of the government, be he private, non-commissioned or commissioned officer; neither do I think it of very great consequence whether it be done *secundum artem*, *secundum naturam* or *terrorem*, provided it be well done." In May, 1826, Beaumont was transferred to Fort Howard on Green Bay, and in 1828 to Fort Crawford, on the upper Mississippi. After nearly two years of constant search, Beaumont

finally located St. Martin in lower Canada, two thousand miles from Fort Crawford. He had married, was the father of two children and had supported himself by service as a voyageur. At great expense he secured his return and continued the experiments on him from August, 1829 to 1831, when he was allowed to take his family and return home. St. Martin's condition may be inferred when it is considered that this journey was made in an open canoe and traversed the Mississippi to the mouth of the Ohio, up the Ohio, across the (now) state of Ohio, down Lakes Erie and Ontario and the River St. Lawrence, the trip taking six weeks. In August, 1832, Beaumont was granted leave of absence and met St. Martin at Plattsburg, New York. From November, 1832, to March, 1834, they were in Washington conducting experiments. In the fall of 1833 was issued the first edition of "Experiments and Observations of the Gastric Juice and the Physiology of Digestion," by William Beaumont, M. D., surgeon of the United States Army, Plattsburg, New York. Printed by F. P. Allen, 1833. In all there were about two hundred and forty experiments, besides the microscopic examinations and observations. Early in 1834 he was ordered to Jefferson Barracks, a military post now fourteen miles below St. Louis, Missouri. Scarcely had he started for this new post when Lewis Cass, the secretary of war, received through Edward Everett, a petition signed by two hundred members of Congress, asking that Beaumont and St. Martin be sent to Boston, for study by Dr. Charles Jackson. The secretary of war replied that under existing arrangements it was impossible for Dr. Beaumont to visit Boston. Mr. Everett now sought to have Congress appropriate $10,000 to send Beaumont and St. Martin to Europe for study by the best physiologists and chemists of human gastric digestion. The appropriation failed. On July 1 Dr. Beaumont reached Jefferson Barracks, but one month later he was sent to Fort Crawford. In 1835 he was made purveyor of medical supplies for the western district and surgeon to the St. Louis Arsenal. The light duties of these positions permitted him to engage in private practice in which he promptly took a conspicuous position. In 1839 he was ordered to proceed at once to Florida for duty. This order being maintained in spite of his protests, he resigned and continued practice in St. Louis. During the cholera epidemic of 1849, though sixty-four years old, Dr. Beaumont labored day and night in caring for the sick. In 1844, in conjunction with Dr. S. W. Aredon, he was sued for $10,000 damages by a Mrs. Mary Dugan. The claim was that the doctors had treated an inguinal hernia as an appendicitis; verdict for the defendants, though the pamphlet war lasted many months with great virulence. Of Beaumont's apt perception of strangers, Dr. Reyburn says:

"You might introduce him to twenty strangers daily, and he would give an accurate estimate of each; his peculiar traits, disposition, etc., and not a few would receive some fitting sobriquet. Before his time there were recorded many cases of permanent fistula of the human stomach, but Beaumont was the first to embrace the opportunity to study the gastric juice. His daughter, Mrs. Keim, says he once cured a hypochondriacal army officer by horsewhipping him. A wealthy, domineering man, the despair of many doctors, sought Beaumont's aid. He hesitated, but finally yielded to importunity on condition that what he prescribed would be done. His prescription was a large supply of bread pills and a trip to the Pacific coast—a cure resulted. Among his warm friends was Gen. Robert E. Lee, who from the age of sixteen was quite deaf, due to standing nearer a fourth-of-July cannon than any other boy of his set, on challenge. Not the least of his trials with St. Martin was the settling of his fights with the teasing crowds, who called him "the man with a lid on his stomach" and otherwise sought his annoyance. The practice was not checked till many blows and not a little

blood was shed. It is difficult to realize the dense ignorance of the medical profession of stomach digestion in 1832, the date of Beaumont's publication, Dunglison's "Human Physiology" quotes five theories, concoction, putrefaction, trituration, fermentation and maceration. He also quotes with approval William Hunter's remark, "some physiologists will have it that the stomach is a mill; others that it is a fermenting vat, but in my view of the matter it is neither a mill, a fermenting vat, or a stew pan, but a stomach, gentlemen, a stomach." Dr. V. C. Vaughan ("Transactions of Michigan State Medical Society, 1896, p. 1.) says that, considering the conditions under which he labored and the results he left behind, Beaumont is one of the great historic characters of the world. In the nearly three-fourths of a century that have passed his discoveries are still approved by both chemists and physiologists. So exact was his study of the physical and chemical nature of gastric juice that excepting pepsin, the closest investigation of modern times with modern physics and chemistry has added little to Beaumont's work. Practical physicians during all these years have utilized Beaumont's studies in prescribing the diet of their patients. In 1833 the Columbian University of Washington, District of Columbia, gave Dr. William Beaumont the degree of M. D. *honoris causa*. In 1837 he was appointed professor of surgery in the medical department of St. Louis University. In 1838 he was vice president of Missouri Medical Society and in 1841 its president. Many medical societies elected him honorary member.

In 1821 Dr. William Beaumont married Debora Platt of Plattsburg, New York, a descendant of Gen. Greene of revolutionary fame. She was a strong woman full of sympathy with her husband's work. When a young girl she voluntarily went to the "pest house" and took small-pox that she might be able to nurse smallpox patients during the war of 1812.

Dr. Beaumont died at his home in St. Louis, Missouri, April 25, 1853, from a carbuncle on his neck following a fall.

The first published account of St. Martin's case appeared in the "Philadelphia Medical Recorder," January, 1825.

The unpublished records of the Michigan Medical Society," 1819–1848, show that in August, 1827, a report of the case of Alexis St. Martin was made to this society. The report was accompanied by a statement of observations on the behavior of the stomach during digestion and experiments on its digestive powers. Dr. C. G. Jennings of Detroit possesses these records, to whom the writer is indebted.

Beaumont's paper of 1825 was published in German at Hamburg, in 1826; also in Paris in 1828 in the "Archives Générales de Medecine."

In 1833 was published in Plattsburg, New York, by F. P. Allen, "Experiments and Observations on Gastric Juice and the Physiology of Digestion," by William Beaumont, M. D., surgeon in the United States Army.

In 1834 copies of the Plattsburg edition of the above were issued by Lilly Wait & Company, of Boston, Massachusetts.

In 1834 a German edition was issued of the above.

In 1837 a second edition was issued from Burlington, Vermont, minor defects being corrected by Dr. Samuel Beaumont, a cousin of William.

L. C.

1854. Dr. T. Reyburn, St. Louis Medical and Surgical Journal.
1887. Story of William Beaumont's Life, by Dr. A. J. Steele (told at the first Commencement of Beaumont Medical College, St. Louis, Mo.).
1896. "William Beaumont and His Work." "Trans. Mich. State Med. Soc.," p. 1, 26, by Victor C. Vaughan, Press. Address.
1900. The Phys. and Surg., Dec., 1900, Ann Arbor, Mich., three papers on Beaumont; 1. by Dr. John Read Bailey on "Beaumont, Army Surgeon;" 2. by Dr. Frank J. Lutz, on "Beaumont the Practitioner," and 3. by Chas. S. Osborn, Esq., on "Beaumont the Citizen." These papers were read at the celebration of the erection of a monument to William Beaumont on the site of his

first work on Alexis St. Martin, by the Michigan State Medical Society.
1902. "A Pioneer Physiologist," an address before the St. Louis Med. Soc., Oct. 4, 1902, by William Osler, Jour. Amer. Med. Association, Nov., 1902.

Beck, John Brodhead (1794–1851).

John Brodhead Beck, medico-jurisprudentist, was born at Schenectady, New York, September 18, 1794. His father, one Caleb Beck, his mother, Catherine, only daughter of Theodric Romeyn, D. D., one of the founders of Union College. He was a brother of Lewis C. Beck, professor of chemistry at the Albany Medical College, and Theodric Romeyn Beck, perhaps one of the greatest medico-jurisprudentists America has produced.

At the age of seven, John Brodhead went to live with his uncle, the Rev. John B. Romeyn, at Rhinebeck, New York and under his personal guidance entered upon a study of the liberal arts and sciences. In 1804 the uncle removed to New York City, taking the young man with him. In 1813 young Beck graduated from Columbia College, with the highest honors of his class, going soon after to London, where he took up the study of Hebrew, with the firm intention of eventually entering the ministry. Shortly afterward, however, he forsook theology for medicine, as better suited to his tastes and abilities.

Returning to New York, he studied the medical sciences for a time with Dr. David Hosack, then matriculated at the College of Physicians and Surgeons in the same city. At this institution he received his degree in 1817. His graduation thesis, entitled, "On Infanticide," was a most remarkable production for one of Dr. Beck's years and experience. In the words of a recent writer, "It may be truly said that, in this treatise, the subject was so thoroughly presented that subsequent writers have done little more than reproduce copies, more or less imperfect, and that it is still the standard work on infanticide in the English language." The little work was subsequently incorporated by its author's brother, the famous Theodric Romeyn Beck, into the latter's monumental and enduring "Elements of Medical Jurisprudence."

Dr. John B. Beck was the author of other noteworthy books and papers, among which were the celebrated "Infantile Therapeutics" and "History of American Medicine Before the Revolution."

In 1826 he became professor of materia medica and botany in the College of Physicians and Surgeons and later was appointed professor of medical jurisprudence in the same institution, holding these two professorships for many years. He was one of the founders of the "New York Medical and Physical Journal" and of the New York Academy of Medicine, also president of the New York Medical Society, and for ten years one of the physicians to the New York Hospital.

A man of great energy and enthusiasm, he communicated these two qualities to his students to a very remarkable degree. He was also a very courteous man, and would spend long hours with some of his dullest students, resolving their individual perplexities, and at the close of the interview insisting that they should come to him again whenever they found themselves confronted by matters which they did not understand.

He enjoyed occasionally a bit of quiet fun. To him one day in the hospital, surrounded by a number of students, came a mother and her eight-year-old son. The fond parent was complaining loudly that she feared that her son was about to be sick. "His skin is just the color of ashes, doctor," she declared. "It *is* ashes," responded the doctor. Calling for a sponge and a basin of soap-suds, he removed the ashen-gray "complexion," revealing the ruddiest of boyish faces. He was an earnest and consistent Christian, maintaining that reputation though his latter years were troubled by sickness and unremitting pain. Though often urged by his friends and attendants

to relieve his suffering by means of opiates and anesthetics, he would very seldom do this. "I do not wish to die," he would almost invariably answer those about him, "either stupified or insane." When finally the grim and dreadful messenger came to summon him, the doctor passed away "not like the galley-slave," but calmly and smilingly, as one reliant upon his glorious faith and supremely confident of a better life hereafter.

He died at Rhinebeck, New York, April 9, 1851. T. H. S.

Gross's American Medical Biography. 1861.
New York Journal of Medicine, 1851 (C. R. Gilman).
American Universities and Their Sons, vol. ii.

Beck, Lewis C. (1798–1853).

After taking his M. D., when less than twenty years old, he began, after a little practice in medicine to gather materials for a "Gazetteer" of Illinois and Missouri.

He was the third doctor in the Beck family, and was born at Schenectady, New York, on the fourth of October, 1798, the son of Caleb and Catherine Romeyn Beck. The Schenectady Grammar School furnished his boyish education, and he took his M. A. from Union College in 1815. In 1821 he gave up his roving habits for a while and settled down to practise in Albany, New York, where he finished three years labor on his "Gazetteer," spending a good deal on engravings for it. His marriage, too, moderated the "travel fever," and Hannah Maria, daughter of Israel Smith of Albany, further moderated it by making him the father of seven children. Lecturing on natural sciences, writing papers, editing books, studying always, especially botany and general practise of medicine, he ran through life too quickly for health, but of course went on working, and when an act was passed providing for a geological survey of New York State he was quite ready, and from June to October, 1836, he travelled over 2,112 miles. For nearly six years he continued these investigations, continuing his college lectures as far as he could. He never failed to enter up observations daily, so that anyone could take up the survey from where he had left off. The report comprised economical mineralogy and descriptive mineralogy with some 533 wood cuts, and was prettily prefaced by his saying "and if the work which was the result of so much solicitude shall be in any degree useful to my fellowmen, to God's sustaining power must all the merit be ascribed." From this period up to his death in 1853, he was constantly engaged in scientific writing, and one of his most important works was the detailed report on cholera made for the governor of New York in 1832.

A list of his many writings can be seen in Gross' "American Medical Biography" under Beck's name. They number over forty and include: "A Gazetteer of Illinois and Missouri," 1823; "On the Geographical Botany of the United States," 1828; "Botany of the Northern and Middle States," 1833; "Mineralogy of New York," 1842; "Views Concerning Igneous Action," 1844; "Elementary Lectures on Chemistry, Electricity and Magnetism," 1834, which volume won a prize of $120 from James Wadsworth of Monroe County, New York.

His appointments included:

Junior professor of botany, mineralogy and Zoology, Rensselaer School and the same in the Vermont Academy of Medicine; professor of chemistry and natural history, Rutgers College, New Jersey; professor of chemistry, Albany Medical College. D. W.

Tr. Med. Soc. N. York, 1854 (J. V. P. Quackenbush).
Ann. Med. Soc. County Albany (1806–51), 1864.
Eminent Amer. Phys. and Surgs., Dr. S. D. Gross.

Beck, Theodric Romeyn (1791–1855).

Theodric Romeyn Beck, alienist, was born at Schenectady, New York, August 11, 1791. His mother, a daughter of the Rev. Dr. Derick Romeyn, principal of the Academy of Schenectady, was a lady of rare attainments and great force of character.

Theodric Romeyn Beck entered Union College in 1803, graduated in 1807 at the age of sixteen, and at Albany began the study of medicine under Drs. Low and McClelland. Shortly afterwards he entered the New York College of Physicians and Surgeons, receiving there his medical degree in 1811 and thence returning to Albany to practise. He was, however (by reason of too great sympathy with the sick), not so highly successful in practice as he was in authorship, hence at the end of six, years he gave up practice entirely and forever.

He married, in 1814, Harriet Caldwell.

In 1815 he was appointed professor of the institutes of medicine and lecturer on medical jurisprudence in the College of Physicians and Surgeons for the Western District, at Fairfield, New York, and in 1817 became principal of the Albany Academy, afterwards, in 1826, lecturer in medical jurisprudence, occasionally holding both the chair of practice and that of materia medica in the same institution.

1829 saw him president of the New York State Medical Society—an honor held for three successive years, and in 1840 he held the professorship of materia medica in the Albany Medical College, and in 1842 became one of the managers of the New York State Lunatic Asylum, at Utica; in 1854, its president. The "American Journal of Insanity" was edited by him for several years and he was also a copious contributor to medical journals, chiefly on insanity.

His most justly celebrated book was his "Elements of Medical Jurisprudence," a monumental work which appeared in 1823. At once it attracted the attention of the medico-jurisprudential world and has not ceased to be an authority both at home and in Europe. An English edition appeared in 1825—two years after the first American edition, and by the time of the author's decease, four English, one German, and five American editions had been issued. Since the author's death, another American, and even a Swedish, edition, have been brought forth. At the present moment, copies of Beck's "Medical Jurisprudence," when they appear on the bookseller's shelves, which they do but seldom, are snapped up eagerly Traill, the great Scotch legal physician, called this very remarkable treatise "the best work on the general subject which has appeared in the English language." The famous Guy "acknowledges his obligations in a special manner to Beck's learned and elaborate "Elements of Medical Jurisprudence;" and at the present day, Prof. Rudolph A. Witthaus declares this scientific classic *"facile princeps* among English works on legal medicine . . . as admirable for scholarly elegance of diction as for profound scientific research."

Dr. Beck was a man of massive build, dark skinned, dark haired, and dark eyed. He possessed an extremely gentle and sympathetic manner.

He was a voluminous reader, not only of scientific publications, but also of history, poetry, fiction, and, in fact, of every sort and variety of literature that was sound, sensible, and interesting. He delighted, when at work, to surround himself with great piles of books, whether he happened to need those particular volumes at the time or not, merely from the joy of having his darlings stacked about him.

He was an earnest and active Christian, nor did his ardent faith forsake him when, after a long and painful illness, he died on the nineteenth of November, 1855, at the age of sixty-four.

Portraits of Theodric Romeyn Beck are to be found with all the following biographic sketches, excepting the first three.

T. H. S.

Gross' "American Medical Biography," Phila., 1861. Stone's "Biography of Eminent American Physicians and Surgeons," Indianapolis, 1894. Ann. Med. Soc. County Albany, 1864, (Mrs. C. E. Van Cortlandt). Amer. Jour. Insanity, Utica, N. Y., vol. xii, 1855–6 Amer. Med. Gazette, N. Y., vol. vii, 1856. Med. and Surg. Rep., Burlington, N. J., vol. ix, 1856. N. Y. Jour. of Med., n. s., xvi, 1856 (E. H. Van Dusen). Tr. Med. Soc. N. Y., 1856 (F. H. Hamilton). Med. Leg. Jour., 1883–4, i.

Bedford, Gunning S. (1806–1870).

Gunning Bedford, born in Baltimore, Maryland, 1806, was an author and physician and the great nephew of the famous Gunning Bedford, of Delaware, of revolutionary distinction.

Dr. Bedford graduated in 1825 at Mount St. Mary's College, Emmetsburg, Maryland, and after graduating his first idea was to study law. With that resolve he left Baltimore with letters of introduction to Daniel Webster, intending to study with him. However, he met an enthusiastic acquaintance who had just commenced the study of medicine. This acquaintance persuaded him before going to visit Mr. Webster to go with him and hear Dr. John D. Godman lecture. They went. Bedford was charmed and carried away with the eloquence of Godman, and determined at once to become his pupil.

He graduated at Rutgers' Medical College, in his twenty-third year. Shortly after (1829) he married and made an extended visit to Europe, where he remained two years, visiting the hospitals, and shortly after his return to America was appointed, in 1833, professor to the Charleston Medical College, South Carolina, and subsequently professor at the Medical College in Albany. Remaining there but a short time, he determined to visit New York City and make that place the field of his future exertions.

He was the first to start the idea of founding the University Medical College. He was aided in this by one of his former preceptors—afterwards his colleague—Valentine Mott. The faculty consisted of Patterson, Paine, Draper, Revere, Mott and Bedford.

He was professor of obstetrics, which chair he held with great distinction till 1862, when he was compelled, on account of ill health, to resign, and the first professor who ever held in the United States an obstetric clinic.

His works, which were among the most popular of the day, were "Diseases of Women and Children" (1855) and the "Principles and Practice of Obstetrics" (1861). The former went through ten editions, the latter through five, and have been translated into French and German and were adopted generally as text-books throughout the United States and Europe. His earliest effort was the translation of Baudelocque's "Treatise on Puerperal Peritonitis" into English (1831), and in 1844 Chaillé's "Treatise on Midwifery."

He died 3.30 A. M., Monday, September 5, 1870, leaving a widow and three sons, two of whom followed the profession of their father.

Med. Reg., New York, 1871, vol. ix.
N. Y. Med. Rec., 1870, vol. v.

Beech, John Henry (1819–1878).

John Henry Beech, surgeon, was born September 24, 1819, at Gaines, Orleans County, New York, where his father, Dr. Jesse Beech, had practised many years. John Henry had his early education at Gaines' Academy, New York, afterwards attending lectures at Albany Medical College, and receiving his M. D. April, 1841, immediately afterwards beginning practice in Gaines, but in 1850 removing to Coldwater where he stayed till his death, except for time spent in the army during the Civil War. He aided in resurrecting the Orleans County Medical Society, New York; was active in reviving the Michigan State Medical Society in 1866 and its president in 1856. At once, on hearing of the disastrous battles of Shiloh Church, Pittsburg Landing, Tennessee, Dr. Beech took the first train for the field of battle. He was made acting assistant surgeon under medical director Surgeon Murray, and assigned to the care of Michigan and Ohio batteries of artillery. Though in feeble health he was made surgeon of the twenty-fourth regiment of Michigan Volunteer Infantry. In 1862 he was appointed one of the operating surgeons of the first brigade, first division, first army corps. In 1863 he acted as surgeon pro tem for the same brigade, the appointment being made permanent at the opening of 1864. At the battle of

Gettysburg, Dr. Beech continued work in the express office building, while the tide of battle swept through the town, leaving him and his fellow surgeons prisoners. As the enemy did not molest them, they continued operating for three days, with an occasional meal. After this battle Surgeon Chamberlain, chief of the division, requested the operating surgeons to submit cases of injuries at or near the shoulder joint to Dr. Beech because of his skill and good judgment in their management. Dr. Beech was opposed to amputating in such cases because of the excellent results following resection. In February, 1865, the twenty-fourth Michigan Volunteers were sent to Camp Butler, near Springfield, Illinois. Surgeon Beech remained behind to transfer brigade supplies to his successor. On reaching Camp Butler, he found his regiment quartered in filthy barracks with no hospital accommodations, and the survivors of twenty battles rapidly sinking under the bad conditions of living. An hour later he had the ridge boards torn from the roofs and the banking boards removed from the foundations. In a few days the commandant directed Dr. Beech to inspect the entire camp and supervise making the needed improvements. This completed, Dr. Beech resumed private practice, though limiting it to consultations and surgery. Dr. Beech was below the average size, never of robust health, so that his father did all he could to prevent his studying medicine, but such was his love for it that neither poor health, his father's financial reverses, the protestations of friends, availed to dissuade him. He led a most strenuous life, had refined and elevated tastes, never wavered in what he regarded as duty, but was ever courteous and strong in attachment to his friends. Dr. Beech married three times but left no children, first, Eliza C. Crownse in January, 1842, who died in 1859; in January, 1861, Mary Jane Parry, who died June 24, 1872; and on August 26, 1875, Mrs. Sarah E. Skeels of Coldwater.

He died of acute pneumonia at his home in Coldwater, October 17, 1878.

Among his writings were:

"Drainage." ("Transactions of the American Medical Association," vol. xxv.)

"Diseases of Branch County, Michigan." ("Transactions of the American Medical Association," vol. ii).

"Topography and Diseases of Michigan." ("Transactions of the American Medical Association," vol. xii.)

"Removal of Abnormal Uterine Growths." ("The Physician and Surgeon," Ann Abor, vol. i.)

"Puerperal Peritonitis Treated Hypodermically with Morphine." ("Detroit Review of Medicine and Pharmacy," vol. ii.)

"Proper Method of Using a Barrel in Resuscitating Persons Asphyxiated by Drowning." ("Detroit Review of Medicine and Pharmacy," vol. vii.)

"Reduction of Backward Dislocations of the Proximal End of the Ulna or Ulna and Radius." ("Detroit Review of Medicine and Pharmacy," vol. vii.)

"Treatment of Dissecting Wounds." ("Detroit Review of Medicine and Pharmacy," vol. vii.)

"Death From Calcareous Degeneration of Arterial Tunics." ("Detroit Lancet," vol. i.)

"The Postpartum Binder." ("Detroit Review of Medicine and Pharmacy," vol. ix.)

"Scrofula and Struma." ("Detroit Review of Medicine and Pharmacy," vol. ix.)

"Diseases of the Vesicular Seminales." ("Peninsular Medical Journal," vol. i.)

"Successful Use of Belladonna Externally in Obstipation Caused Probably by Lead Poisoning." ("Peninsular Medical Journal," vol. iv, p. 113.)

"Report on Diseases Prevalent in Coldwater, Michigan, in 1857." ("Peninsular and Independent Medical Journal," vol. i.)

"Use of Antimon. et Potass. Tartrat. in Hyperemic Hysteria." ("Peninsular Medical Journal," vol. v.)

"New Apparatus for Dressing Fractured Clavicles." ("Medical Independent," vol. iii.)

"The Physiology and Pathology of the Duodenum." ("Peninsular Medical Journal," vol. xi., p. 106.)

"Anesthesia During Sleep." ("Peninsular and Independent Medical Journal," vol. ii.)

"Congenital Clonic Spasm of the Adductor Muscles of the Thighs and Extensors of the Feet." ("Michigan University Medical Journal," vol. ii.)

"Delivery of the Extrauterine Fetus." ("Michigan University Medical Journal," vol. ii.)

"On Turning of the Fœtus in Utero by External Manipulation." ("Peninsular and Independent Medical Journal," vol. ii.) L. C.

(The Physicians and Surgeons of the United States, by W. B. Atkinson, Philadelphia, Pa., Charles Robson, 1878.) (Representative Men in Mich., West. Biographical Publishing Company, Cincinnati, O., 1878, vol. iii., (Trans. Mich. State Med. Soc., 1879.) (Trans. Amer. Med. Ass., vol. xxx,) (Mich. Med. News, Nov. 10, 1878.)

Bell, John (1796–1872).

John Bell, a Philadelphia surgeon, was born in 1796, died on August 19, 1872, and graduated M.D. from the University of Pennsylvania in 1817. There are not many details of his life available, but he was elected to the College of Physicians of Philadelphia in 1827; was a member of the Philadelphia Medical Society; lecturer on the institutes of medicine, Philadelphia Medical Institute; professor of the same in the Medical College of Ohio, and physician to the City Hospital.

He did some good work as a writer and editor, his first book being "A Treatise on Baths and Mineral Waters;" a history of the chemical composition and medicinal properties of the chief medical springs of the United States and Europe. "A practical Dictionary of Materia Medica." "Dietetical and Medical Hydrology" and, with Dr. D. L. Condie, "A Report of the College of Physicians to the Board of Health," which contained all the material facts in the history of epidemic cholera. He also edited "Stokes' Lectures on the Theory and Practice of Physic" and Dr. Andrew Combe's "Treatise on Children."

Communication from Dr. Francis R. Packard.

Bell, Luther Vose (1806–1862).

An alienist and army surgeon, he was born December 30, 1806, a son of Samuel Bell, who filled the offices of Chief Justice of New Hampshire, Governor, and United States Senator; a descendant of Scotch-Irish stock who settled the town of Londonderry.

When twelve years of age he entered Bowdoin College and graduated in 1823, receiving his medical degree at Dartmouth College in 1826 and afterwards pursuing his medical studies in Europe. The degree of LL. D. was conferred upon him by Kings College, Nova Scotia in 1844, and by Amherst College in 1855.

He first practised in the towns of Brunswick and Derry, New Hampshire, and in 1834 gained the Boylston prize medal for a dissertation on "The Dietetic Regimen best fitted for the Inhabitants of New England," and in the following year published an essay on the "External Exploration of Diseases" ("Library of Practical Medicine," vol. ix). He subsequently issued a small volume entitled "An Attempt to Investigate some Obscure and Undecided Doctrines in Relation to Small-pox and Varioliform Diseases."

About this time, influenced by the success that had attended the establishment of the State Lunatic Hospital at Worcester, Massachusetts, he sought to ameliorate the condition of the insane in New Hampshire, and to that end entered political life as a member of the general court, placing himself at the head of a propaganda which led eventually to the establishment of the New Hampshire Asylum for the Insane. While attending his second session of the Legislature and still pressing that object, he was appointed, late in 1836, physician and superintendent of the McLean Asylum for the Insane, at Somerville, near Boston. In 1845, yielding to the solicitation of the trustees of the Butler Hospital for the

Insane at Providence, Rhode Island, an institution then in contemplation, the trustees of the Massachusetts General Hospital gave him leave of absence to visit hospitals and asylums in Europe that he might devise a plan which should embody the best-known construction of that period. The Butler Hospital stands to-day as a monument to his taste and judgment.

He was one of the founders, in 1844, of the Association of Medical Superintendents of American Institutions for the Insane, now the American Medico-Psychological Association. At a meeting of the Association of the Medical Superintendents of American Institutions for the Insane, held in May, 1849, he read a paper. "On a form of disease resembling some advanced stages of mania and fever, but so contradistinguished from any ordinarily observed or described combination of symptoms as to render it probable that it may be an overlooked and hitherto unrecorded malady." This is the malady to which his own name has been given as "Bell's Disease," which others have called typhomania, and upon his description and study of which much of his fame as an alienist rests.

He was frequently called as an expert in insanity in the courts. In 1850 he became a member of the Executive Council of Gov. Briggs, serving for one year. While acting in this capacity he passed upon the famous case of Prof. Webster of Harvard University, who was executed for the murder of Dr. George Parkman.

In 1856 he resigned the superintendency of the McLean Asylum, on account of ill health, to retire to private life in Charlestown, Massachusetts, but on the outbreak of the Civil War he was among the first to offer his services to the government; enlisted as surgeon with the Eleventh Regiment of Massachusetts Volunteers, but soon promoted to the position of brigade surgeon to Gen. Hooker's division on the lower Potomac. He died in camp at Budd's Ferry, Maryland, suddenly, from pulmonary disease, February 11, 1862. Less than a month before his death he wrote to a friend: "'Sudley Church,' with its hundred wounded victims, will form a picture in my sick dreams so long as I live. I never have spent one night out of camp since I came into it, and a bed and myself have been practically strangers these seven months. Yet I never have had one beginning of a regret at my decision to devote what may be left of life and ability to the great cause. I have, as you know, four young motherless children. Painful as it is to leave such a charge, even in the worthiest hands, I have forced myself into reconciliation by the reflection that the great issue under the stern arbitrament of arms is, whether or not our children are to have a country. My own health and strength have amazed me. I have recalled a hundred times your remark that 'a man's lungs were the strongest part of him.' It has so proved with me. Had I another page, I should run on with a narrative of my exploits on horseback, excursions, reviews, etc., which sometimes make me question whether, in the language of our 'spiritualistic' friends, I have not left the form; and certainly I have entered on another sphere."

It has been said of Luther Vose Bell that nature was lavish to him in physical as well as in mental gifts. He was much above the common stature, and the grace of his carriage was perhaps heightened by a certain negligence in his dress.

G. A. B.

Memoir of Dr. Bell. American Journal of Insanity, Utica, October, 1854. Ibid., April, 1862.

Association Reminiscences and Reflections, Andrew McFarland, M. D. Ibid., January, 1878.

Bell, Theodore S. (1807–1884).

Theodore Bell was born of obscure parentage in Lexington, beginning life as a newsboy and later, after a six years' apprenticeship, working as a tailor. While so doing he studied medicine and in 1832 graduated at the Transylvania University, the same year moved to Louisville and began practice.

He was largely instrumental in the creation of the Medical Institute in 1837, which afterwards became the University of Louisville. He wrote voluminously in behalf of the development of the city, and especially public improvements. He was a liberal contributor to the editorial and correspondence department of the "Louisville Journal," made famous throughout the Union by the gifted George D. Prentice. In 1838, in connection with Dr. L. P. Yandell, Sr., he launched the "Louisville Medical Journal," and later, 1840–41, the "Western Medical Journal." In 1857 he was made professor of the science and art of medicine and public hygiene, a position held until death.

Bell was a voracious reader on almost all subjects and his memory was phenomenal. He was accustomed to insist that for a student four hours of sleep was enough to meet the requirements of nature. In his later years, after the death of his wife, he was accustomed to keep even his bed piled with books and to read in bed late at night.

He was extremely positive in his views and with him every notion seemed to have the tenacity of a firm conviction. When once he had reached a conclusion, his convictions were so intense that it was well nigh impossible for him to find anything in a new fact that did not have to bend to his formed opinion.

In medicine he set great store on a theory he held that malaria owed its origin to vegetable decomposition with heat and moisture, and it embraced all forms of ague, bilious fever, dysentery, cholera and yellow fever. A certain definite measure of heat with vegetable decomposition produced progressively quartan, tertian and quotidian agues, then followed in order, bilious fever, dysentery, cholera and yellow fever.

So positively and plausibly did he urge this theory, that in 1852 a committee of the British Medical Association under the chairmanship of Lord Shaftsbury, sought his views on the probable date of the appearance of cholera in that year. In the yellow-fever epidemic of 1873, Bell persuaded the people of Louisville that it was impossible for yellow fever to exist in the city, and induced them to invite there all of the Southern refugees. Grateful for being led to a move so generous and popular, the citizens voted him a medal of honor, but scarcely had it been conferred, when a virulent epidemic of yellow fever broke out in the city, and only an early frost prevented disaster. Despite the assertion of his theories and his profuse invectives in controversy, Dr. Bell was most kindly in his personal relations and full of charity and benevolence. He was passionately concerned for the welfare of the state institutions for the blind, and it was through his influence and labor as president of its board of visitors from 1871–80 that it was made one of the foremost institutions of its kind in America.

In 1861 he was made president of the Kentucky branch of the United States Sanitary Commission. It was while assisting this work at Shiloh, caring for the sick and wounded, that his wife, who was Susanne Hewitt, a woman of many charms whom he had married in 1833, contracted a sickness from which she never recovered. They had only one son, Hewitt, who died a year before his father.

Dr. Bell was strongly antagonistic to calomel. At first he was a follower of his teacher, Prof. John Esten Cooke, the originator of the famous Cooke's pills, but having lost some of his patients in a horrible condition of salivation, he turned against mercury with all his ardent nature and afterwards sent out many a class of students sharing his aversion.

His writings included:

"(On) E. S. Gaillard, M. D.," editor of the "Richmond and Louisville Medical Journal," professor of general pathology and pathological anatomy in the Kentucky School of Medicine.

A lecture upon the "Pre-historic Ages of Scandinavia and of the Lacustrine Dwellers of Switzerland, in Connection

with the Progress of Mankind under Divine Guidance," Louisville, 1869.

"A Pseudo-critic Unmasked," in a review of the writings of E. S. Gaillard, Louisville, 1869. Reprinted from "Nashville Journal of Medicine and Surgery," 1869.

Memorial address upon "The Life and Service of Lunsford Pitts Yandell, M. D.," Louisville, Kentucky, 1878.

D. T. S.

Am. Pract., Louisville, 1885, vol. xxxi.
Louisville Med. News, 1885, vol xix.
Gaillard's Med. Jour., N. Y., 1885, vol. xxxix.

Bellinger, John (1804–1860).

John Bellinger was born in St. Bartholomew's Parish, South Carolina, in 1804. His father, Dr. John Bellinger, a worthy and esteemed physician, was the descendant of an old English family, which settled at an early date, under the proprietary government, in Charleston. He began the study of medicine in this city, under the elder North. His first two courses of lectures on medicine were followed at the then recently established medical college of the state of South Carolina; but his preparatory training was completed in Philadelphia, where he enjoyed the private tuition of the late Dr. Physick, and attended at the University of Pennsylvania, from whose medical department he received his diploma in 1826.

In 1848, when Dr. S. H. Dickson accepted a call to the University of New York, Dr. Bellinger's high reputation at once singled him out as the fittest successor as professor of surgery. In 1846 he did a deliberate hysteromyomectomy on a colored woman, using "animal ligatures."

The patient died of peritonitis on the fifth day.

As a teacher of medicine, he was ready, full and erudite. As a writer, his style was terse, direct and chaste; his expression forcible and idiomatic, and his thought always characterized by independence, originality and vigor.

He died in Charleston, South Carolina, on the thirteenth day of August, 1860, in the fifty-sixth year of his age.

Charleston Med. Jour. and Review, 1860, vol. xv.

Bellisle, Henry (1675–1717).

(The first physician at Detroit Post under the French flag.) Nothing is known of his ancestry or exact date of birth except that he was born in France and received such general and professional education as would induce the French government to place him in Cadillac's expedition to found Detroit. In the records of St. Anne's Church in Detroit he first appears as god-father at the baptism of a daughter of Margaret Roy, a Huron Indian, April 27, 1704. From that date till April 4, 1711, he is occasionally recorded as god-father at baptisms or witness at marriages and then he disappears from the records. It is quite likely that in 1715 he was transferred to another French military post, for his successor appears first in the church records of that year. While we have no definite information of his equipment for practice he must have ranked above the average of the profession in France.

Dr. Bellisle was married three times, once before coming to Detroit, once in Detroit, and once at Poine Aux Trembles. His second wife died in Detroit. Three children were born after leaving Detroit.

L. C.

Belt, Edward Oliver (1861–1906).

Edward Oliver Belt was born May 19, 1861 at Rock Hall, near Dickerson, Frederick County, Maryland, the son of John Lloyd and Sarah Elenora (McGill) Belt. His father was a farmer. The Hon. William Burgess, an ancester, had brought a colony to Maryland and founded the town of South River. He attended public schools and Frederick College, Maryland, and studied medicine with his brother, Dr. Alfred M. Belt, of Baltimore, attending three sessions at the University of Maryland School of Medicine, Baltimore, taking his M. D. there in 1886. He practised medicine a few months in Frederick

County, then for two years was resident physician, Presbyterian Eye, Ear and Throat Hospital, Baltimore. Afterwards he studied ophthalmology and otology at the University of Vienna and in hospitals of Paris, Berlin and London, next taking a post-graduate course in histology and pathology at Johns Hopkins University, Baltimore and acting as visiting surgeon. In October, 1889, he removed to Washington and practised his specialty and married, on May 18, 1899, Miss Emily Walker Norvel. But after seven years of wedded life a great catastrophe overtook the family.

Dr. Belt, with his two sons, aged six and seven years, lost their lives in the railroad wreck at Terra Cotta, District of Columbia, December 30, 1906.

Belt was the originator and one of the organizers of the Episcopal Eye, Ear and Throat Hospital, Washington, and was surgeon and executive officer there. Also opthalmologist and otologist, Freedmen's Hospital, District of Columbia, and consulting ophthalmologist to the City and Emergency Hospital at Frederick, Maryland. He was professor of ophthalmology and otology at Howard Medical School, District of Columbia. He was president of the Society of Ophthalmology and Otology, Washington; Surgeon, Episcopal Eye, Ear and Throat Hospital, Washington, and published in the medical journals many papers upon his specialty. D. S. L.

Amer. Med. Biog. Dict.
Minutes of Medical Society, D. C., January 16, 1907.
Washington Medical Annals, vi, 1907–8.
Lamb's History of Medical Department, Howard University, D. C.

Bernays, Augustus Charles (1854–1907).

Augustus Charles Bernays was born in 1854 and was not yet eighteen when his remarkable career of scientific study and achievement commenced. He matriculated at the University of Heidelberg in 1872 and graduated there. He also took the membership of the Royal College of Surgeons of England and was intimately associated in his surgical training with Simon, Lister, Marion Sims, Lossen and von Langenbeck, the last of whom he always characterized as the prince of surgeons.

It was his original investigations on the anatomy of the knee-joint and of the heart which first made his name known everywhere where medical science is taught. His papers included:

"Ideal Cholecystotomy, a Successful Case; with critical remarks on the pathology and the different operative procedures practised on the system of gall vessels," 1885.

"Chip No. vii. Kolpohysterectomy. Successful cases of total extirpation of the uterus through the vagina," 1885.

"Chip No. viii. A case of cystic tumor of the jaw in a negro, and some new observations on the pathological histology of this disease," 1885.

"The Complete Method of Operation in Cases of Cancer of the Breast," 1885.

He died May 22, 1907, at the age of fifty-two, from the rupture of a cardiac aneurysm. He had been endowed with an intuitive diagnostic ability which was so marvelous at times as to be termed by those near him almost a gift of second sight, and now we are struck by the recollection that at various times in recent years he had discussed with us the possibility of an aneurysm of the aorta in his own case, although no physical evidences of the same were ever apparent. W. B.

Med. Mirror, St. Louis, 1894, v, port. (I. N. Love).
St. Louis Medical Review, June, 1907. (W. Bartlett.)

Best, Robert (1790–1830).

A native of Somersetshire, England, and born in 1790 he came to America in 1803. As a child he had but three months' schooling being early trained in the watch and clock-making trade, but he devoted his leisure to the study of mechanical sciences, and extended his skill to the manufacture of various kinds of scientific instruments. In 1818 the Western Museum of Cincinnati

was founded, and Best was appointed curator and artist. In the autumn of 1820, he delivered a course of experimental lectures on electricity. At this time he was appointed assistant to the professor of chemistry in the Medical College of Ohio, and in 1823 removed to Lexington, Kentucky, having been appointed lecturer on chemistry in Transylvania University. While there he published a number of papers entitled: "Tables of Chemical Equivalents, Incompatible Substances, and Poisons and Antidotes," with an explanatory introduction. In 1826 he graduated at Transylvania and began practice immediately after, rising rapidly in the profession, but was unfortunately cut down by consumption in the beginning of his career, and died in 1830. A. G. D.

Bigelow, Jacob (1787–1879).

A great educational reformer, and one of America's most learned botanists. Jacob Bigelow was connected in every way with the leading scientists of the world. He was of New England ancestry, his people coming over about 1640 and settling in Watertown, Massachusetts, and Jacob was the son of Jacob Bigelow, congregational minister, who married a daughter of one Gershom Flagg. Jacob the younger was born on the twenty-seventh of February, 1787, and his childhood was passed in the country at farm-work, with scanty schooling. Painfully his father managed to send him to Harvard where he graduated in 1806, and in 1808 attended the medical lectures there while acting as pupil under Dr. John Gorham and teaching in the Boston Latin School. Then on to Philadelphia for the lectures of Rush, Wistar, Barton and Cove and the doctor's degree. To bring himself early before the professional public he took to writing and secured the Boylston prize four successive years. So promising seemed his career that the elder James Jackson chose him as associate in practice. He was a born artist, craftsman, and inventor. When occasion came for illustrating his "Medical Botany" (1817–20) with engravings and before photography or lithographing were invented, he devised a means of illustration which proved both practical and beautiful and furnished sixty plates and 6,000 colored engravings for this monumental and now rare work. He speaks laughingly of his first lesson in botany given when as a little boy he asked a learned gentleman the name of the plant Star of Bethlehem. "That? Why that's grass, you little fool." When he wished for drawings and models for his lectures as Rumford professor he knew how to make them. In 1812 his interest in the study of botany led him to give a course of public lectures in Boston.

Botany was his great hobby, and "Florula Bostoniensis" (1814) was a charming book well known to our grandfathers. In 1815 he was appointed lecturer on materia medica and botany and two years later when he was thirty they changed his title to professor. Then, too, as first Rumford professor it is pleasant to believe that Rumford left behind him in his native state a young disciple who fulfilled all his desires. But the work which brought Bigelow into closest contact with European savants and gave him honor in his own country was the elaborate series published under the title "American Medical Botany," which for finish and beauty and avoidance of technical terms makes it desirable to-day. In 1820, when thirty-three, he was associated with Spaulding, Hewson, Ives and Butts in editing the "United States Pharmacopœia." He followed up this labor by adding Bigelow's Sequel, a perspicuous commentary on current remedies.

Three years previously he had married Mary, daughter of Col. William Scollay of Boston and they had five children, one son, Henry, becoming adoctor.

When the great cholera epidemic of 1832 in New York carried off some 3,000 victims, Boston's death roll numbered only one hundred owing to the authorities being wise enough to adopt the stringent sanitary precautions urged

by Bigelow, who, with Ware and Flint, offered his services as investigator of the conditions in New York.

Bigelow at middle age was visiting physician to the Massachusetts General Hospital, professor of materia medica at Harvard, had an enormous consulting practice, and wrote frequently for the press and keenly worked for reform in the practice of medicine. Bigelow had clear vision and for many years, in season and out of season, demonstrated the self-limited character of disease. In 1835, when he read an address with this title before the Massachusetts Medical Society, the effect was instantaneous and immense. O. W. Holmes says, "this remarkable essay had more influence on medical practice in America than any other similar brief treatise." This paper is bound up in a little volume entitled "Nature in Disease and Other Writings," 1854.

His educational pamphlets caused widespread discussion at home and abroad. Lecky wrote a strong letter of dissent, but Lyell, Huxley and Spencer were vigorous in commendation, and the Massachusetts Institute of Technology with its splendid curriculum and strong staff is a monument, in part at least, to his untiring energy.

He did many other things in his declining years and became a most distinguished, most approachable old-man oracle. He was blind at the last for nearly five years; bed-ridden, but with mind undimmed at ninety-two. "His religion, not for speech, discussion or profession, was that of a serious man living very near the realities of life!" Unforgotten to the end, thought long inactive, he died January, 1897, and was buried in the beautiful Mount Auburn Cemetery, which he himself had originated.

Abridged from Surgical Memoirs and Other Essays. Dr. J. G. Mumford, N. York, 1908.
Memoir of Jacob Bigelow. G. E. Ellis, Cambridge, 1880.
Boston M. and S. Jour., 1879, 3 s., xvii.
Am. J. Sci. and Arts, 1879, New Haven, 3 s., xvii.

Bishop, Galen E. (–1899).

It has been difficult to get details concerning the life of Galen E. Bishop, save that he came to St. Joseph, Missouri, from New Market about 1870 and had a very large practice and a private hospital. That he was a booklover is known from the fact that his collection numbered some thousands of volumes. These included the largest collection of law books in the West, which it is said Bishop bought and studied because of the many suits brought against him. He had a habit of writing his name on the fiftieth page of his books. I have a fine first edition of Pettigrew's "Medical Portrait Gallery" which belonged to him. After his death a dealer purchased the entire library and in 1911 had disposed of nearly all except a collection of Bibles and Testaments of which Bishop had a great many early editions in various languages.

H. A. K.

Black, John Janvier (1837–1909).

John J. Black, United States surgeon and resident physician to the Blockley Hospital, was born in Delaware City on November 6, 1837, the son of Charles H. and Anne Janvier Black, the mother coming of an old Huguenot family. He graduated in 1859 from Princeton, New Jersey and was given its honorary A. M. in 1907. His M. D. was from the University of Pennsylvania.

He settled in practice in New Castle, Delaware and was specially interested in the antituberculosis crusade and the care of the insane and was president of the Delaware Insane Asylum and energetic in instituting the Delaware State Hospital. As a surgeon he eagerly studied all that was new, yet on his long country rounds of thirty to forty miles he did successful operations with the poorest accessories, a scrupulous cleanliness the only available antiseptic in those days. His skill as an obstetrician was well known in the country round. One day I hurried with him to a case which demanded Cesarean section for the patient, a deformed, rachitic negro dwarf; he devised

an operating-table out of some chairs and boards, the cooking stove furnished us boiling water, and a piece of fishing line, sterlized, served for ligatures when he found a complication in subperitoneal fibroid tumors which obliged him to remove the uterus *en masse*. The mother did not long survive but the child grew up.

An interesting writing from his pen was: "Forty Years in the Medical Profession" also "Consumption in Delaware" and "Snakes in Delaware."

Black was a member of the College of Physicians, Philadelphia, and the State Medical Society. In 1872 he married Jeanie Groome Black and had two children, Elizabeth Groome and Armytage Middleton. He died of uremia at New Castle on September 27, 1909.

R. R. T.

Black, Rufus Smith (1812–1893).

Rufus Smith Black was born in Halifax, Nova Scotia in 1812, and died in California, 1893. He practised in Halifax for nearly half a century, but, his health failing in 1887, he removed to California where he lived the remainder of his days.

He took his regular medical course at Edinburgh University, from which he graduated M. D. in 1836. He also won the degree L. R. C. S. (Edin.). Taking a post-graduate course in Paris, under distinguished professors, he became acquainted with the teachings of Laennec, and subsequently became the first practitioner in Nova Scotia who regularly used the stethoscope as an aid to diagnosis. After leaving Paris he spent about a year in Spain, and thus to a good classical education added an intimate knowledge of French and Spanish.

Returning to Halifax, he soon secured a large practice.

Dr. Black was for many years one of the physicians of the Victoria General Hospital. He was a member of the Medical Society of Nova Scotia, and five times its president, and president of the Halifax Medical College from 1875 to his retirement in 1887.

His addresses and papers, on various subjects, before local societies, were marked by much literary skill, but they are not known to have been printed. One, "Value of Tartar Emetic in Rigid Cervix," appeared in the "Edinburgh Medical Journal" for 1865, and for a time he made translations from Spanish medical periodicals, which were published in the "Maritime Medical News," Halifax.

He married Miss Ferguson, of Halifax, and had five daughters and one son, John F. Black, who studied medicine in New York and graduated from the College of Physicians and Surgeons in 1882.

D. A. C.

Blackburn, Luke Pryor (1816–1887).

A surgeon during the Civil War, Luke P. Blackburn was born in Fayette County, Kentucky, June 16, 1816 and graduated from Transylvania University, Lexington, Kentucky in 1834, in 1835 beginning to practice in that city, but on the outbreak of cholera in Versailles he offered his services gratuitously to the sufferers and afterwards made that place his home.

In 1846 he removed to Natchez, Mississippi, which he effectually quarantined against the yellow-fever epidemic which occurred in New Orleans in 1848, and at his own expense built a hospital for the marines who were suffering from the fever, an act that aroused Congress to establish ten similar institutions. In 1854 he again protected Natchez from yellow fever by rigid quarantine. He visited the hospitals of England, Scotland, France and Germany in 1857, and on his return resumed practice in New Orleans.

He was made surgeon to the staff of Gen. Sterling Price on the outbreak of the Civil War, and was commissioned by the governor of Mississippi to proceed to Canada to superintend the furnishing of supplies by blockade runners and in 1864, at the request of the governor-general of Canada, he visited the Bermuda Islands to look after the suffering citizens and soldiers, but in 1867 returned to the United States and became a planter in

Arkansas, later, in 1873, returning to Kentucky and resuming practice in Louisville, doing good service in the epidemics of 1875 and 1878 as an organizer of physicians and nurses. In 1879 he was elected governor of Kentucky.

Prior to his election as governor, the penitentiary became crowded to double its capacity. This he promised to relieve if elected and this he did by pardoning the lesser criminals until the number was reduced in keeping with the capacity of the penitentiary, a practice that forced his state to build another prison to accomodate its criminals.

His first wife was Ella Guest Boswell, by whom he had one son, Cary Blackburn, who afterwards became a practitioner in Louisville. His second wife was Julia M. Churchill, whom he married in 1857. A. S.

(Biographical Encyclopedia of Ky.
(Biography of Eminent American Physicians and Surgeons, by R. French Stone, M. D.)

Blackford, Benjamin (1834–1905).

Benjamin Blackford, army surgeon, was the son of Dr. Thomas T. Blackford, of Luray and, later, of Lynchburg, Virginia, and was born in Shenandoah County on September 8, 1834. His father removing to Lynchburg while he was a youth, he attended a private school in that town conducted by his uncle, William M. Blackford, then editor of the Lynchburg Virginian. Afterwards he obtained a clerkship in the post-office, and by hard work and close economy, saved enough money to go to the University of Virginia, and later to the Jefferson Medical School in Philadelphia, from which he graduated in 1855. After serving a term as an interne in Blockley Hospital, he began to practice in Lynchburg.

He was a member of the American Association of Superintendents of Hospitals for the insane, and the Medical Society of Virginia. Of this latter society he was several times a vice-president, president in 1887, and was elected an honorary member in 1888. He was also an ex-president of the Lynchburg Medical Association.

At the outbreak of the Civil War he was elected surgeon of the Lynchburg Home Guard, Company G., Eleventh Virginia Infantry, and went to the front with that command. He was soon put in charge of the hospital at Culpeper, and later was placed in command of the military hospital at Liberty (now Bedford City), where he remained until the end of the war, when he resumed practice in Lynchburg. He gave considerable attention to eye affections without, however, becoming a specialist. He was one of the ninty-two charter members who founded the State Society in 1870. In 1890 he was elected superintendent of the Western State Hospital for the Insane at Staunton, and filled this position until his death.

Dr. Blackford was a Virginia gentleman of the true type, polite, gentlemanly, courteous, mindful of the feelings of others. As superintendent of the hospital, he filled the position with marked ability and success, adding many improvements to the institution, and ever looking most carefully after the well-being of his unfortunate charges.

He married, in 1871, Mrs. Emily Neilson Byrd, and was survived by six sons.

He died of pneumonia at his home in Staunton on December 13, 1905, just two weeks after the death of his wife from the same disease.

Among his valuable contributions to medical literature are:

"Report on the Advances in Surgery." ("Transactions of the Medical Society of Virginia," 1876.)

"Presidential Address." (Ibid., 1888.)

"Gonorrheal Ophthalmia." ("Virginia Medical Monthly," vol. i.)

"Suppurative Keratitis." (Ibid., vol. iii.)

"The Bedford Iron and Alum Springs." (Ibid., vol. iv.)

"Historical Sketch of the Western State Hospital." ("Annual Report for 1903–04.") R. M. S.

Trans. Med. Soc. of Va., 1906

Blackie, George Stodart (1834–1881).

This professor of botany and chemistry came, like many another of his kind, from Scotland, a land which sent over many of America's earliest botanists.

Alexander Blackie, banker, of Aberdeen was the father, and the eccentric, erudite John Stuart Blackie the brother of John Stodart, who was born in Aberdeen the tenth of April, 1834. After a capital education at Aberdeen University and in medicine at Edinburgh he went to Germany and France, taking his A. M. and M. D. from Edinburgh.

He seems to have moved about a great deal at first; to the Mowcroft Private Asylum, London, as physician, then back north, to Kelso, as a local practitioner, finally coming over to Nashville in 1857 and remaining there for the rest of his life.

Besides being co-editor for twelve years of the "Nashville Medical Journal," he contributed largely to the "London Botanical Gazette" and the "North American Surgical Review." Three of his publications were "Cretins and Cretinism," 1855, "The Medical Flora of Tennessee," 1857, and "History of the Military Monkish Orders of the Middle Ages."

He held many appointments: professor of botany in the University of Nashville; professor of botany, Tennessee College of Pharmacy; professor of chemistry, Nashville Medical College; member of the Medico-Chirurgical Society, Edinburgh, and fellow of the Botanical Society of Edinburgh. D. W.

Am. Pub. Health Assoc. Rep., 1881. Boston, 1883, vol. vii.

Blackman, George Curtis (1819–1871).

The second child of Judge Thomas Blackman, of the Surrogate Court of Newtown; he was born the twenty-first of April and had his preliminary education at Newtown, and Bridgeport, Connecticut, and Newburg, New York, afterwards entering Yale College and graduating in medicine at the College of Physicians and Surgeons, New York, 1840, immediately after practising in the dispensaries in that city. Devotion to work so impaired his health that, at the suggestion of his friends, he went to Europe, acting as ship's surgeon, in which capacity he made many trips across the ocean and spent much time in London and Paris. In the former city he had to contend with great poverty.

In 1845 he spent some months in the London hospitals, living on seventy-five dollars, the sum-total of his means.

He was well acquainted with Liston, Astley Cooper, Sir Benjamin Brodie, Sir William Fergusson, and many more eminent London doctors.

By invitation he read a paper before the Royal Medico-Chirurgical Society of London, which so impressed the members by its depth of research and profound knowledge of the science and art of surgery that he was at once elected a member.

He practised some time in Newburgh, New York, and in 1854 went to Cincinnati, where he was appointed professor of surgery in the Medical College of Ohio, which position he held at the time of his death.

Although a brilliant and fascinating lecturer at all times, it was in the hospital theater he was in his native element; there he was great. Outside of his own field he was a timid speaker and it is told of him that at a large gathering of medical men he refused to speak, although urged, until one of those present referred to an operation that is classical, giving the credit of its initiation to an English surgeon. Blackman was on his feet in an instant. For ten minutes he blazed forth like a meteor.

The roar of applause that greeted him when he sat down showed how neatly he had been entrapped.

In October, 1861, he was appointed brigade surgeon on Gen. Mitchell's staff, being present at the battles of Shiloh and Pittsburg Landing. He was for a short time on the Ohio State Medical Board for the army and was present at the battle of the Wilderness.

Dr. Blaekman was a large contributor to medieal literature. At one time he was editor of the "Western Laneet," and afterwards one of the editors of the "Cincinnati Journal of Medieine."

He translated and edited "Vidal on Venereal Diseases" and "Velpeau's Operative Surgery." He was author, in connection with Dr. C. A. Tripler, army surgeon, of a "Hand-book on Military Surgery." He did not leave any original work of great importance, although for several years he was engaged on a work on the "Prineiples and Practice of Surgery." At the time of his death he was engaged with the Hon. Stanley Mathews on a work entitled "Legal Liability in Surgieal Malpraetiee." For many years he was on the staffs of the Commereial (now Cineinnati) and the Good Samaritan Hospitals.

In the spring of 1856 Dr. Blaekman did an ovariotomy at my father's house, in Covington, Kentucky, removing a twenty-two pound eyst whieh had previously been repeatedly tapped. Forty years later the lady was still sounding his praises as the greatest of surgeons.

In the following year (session of 1866–7) he twiee did Amussat's operation—artificial anus—for eaneer of the reetum. One of these patients lived several months.

In 1855 he married Agnes Addington of New York and had two sons and a daughter. He died at Avondale, Cincinnati, July 17, 1871. A. G. D.

Cinn'ti Medical Observer, xiv, 1871.
Cinn'ti Medical Observer, xv, 1872.
Transactions Ohio State Medical Society, 1872.
Boston Med. and Surg. Journal, vol. lxxxv, 1871.
Transactions American Medical Association, 1873.

Blackwell, Elizabeth (1821–1910).

Elizabeth Blaekwell, the first woman to receive a medieal degree, was born in Bristol, England, February 3, 1821, the daughter of Samuel Blackwell, a sugar refiner of progressive ideas and prepossessed in favor of the Ameriean institutions. In 1832 he settled in New York with his family, and being the only man in Amerieа who then understood the process of refining sugar by the use of vaeuum pans, he was in a fair way to make a fortune. But his refinery was burned, and in 1838 he moved to Cineinnati, partly with the hope of introdneing the eultivation of beet sugar, and thereby dealing a severe blow at slavery by making the slave-grown eanesugar unprofitable. But he died soon after, leaving his family dependent upon their own exertions. The mother and the three oldest daughters opened a school, and Elizabeth's uneommon strength of character showed itself in her good diseipline. The family continued their antislavery work and threw themselves ardently into the movement for the higher education of women.

When the brothers were old enough to go into business the school was given up, and Elizabeth went to Henderson, Kentucky, to teaeh a distriet school. She astonished the southern ladies by her eourage in taking long walks through the woods when they were afraid of negroes and the savage dogs which abounded.

She was led to turn her attention to medieine through the severe illness of a woman friend. Medieine in itself was not attractive, but she believed there was need of women physicians. She wrote to several physieians about her plan and their replies were that the idea was good, but impossible. In 1845 she went to teach at Asheville, Nova Scotia, in the school kept by the Rev. John Diekson, who had previously been a doctor. Here she studied medieine privately, earning money by teaching. In 1847 she went to Philadelphia, studied anatomy under Dr. Allen, and applied for admission to eaeh of the four medieal colleges of that eity, but in vain.

Applications to the large medieal schools of New York also proving unsueeessful, she sent requests to twelve of the eountry colleges. Geneva consented. The medieal elass there of 150 students was eomposed of a riotous, boisterous,

and unmanageable set, who had given the faculty and town much trouble. The letter was referred to the students for decision, and the announcement was received with most uproarious demonstrations of favor and extravagant speeches. The faculty received the unanimous vote of approval with evident disfavor, but admitted the lady student. On Miss Blackwell's appearance in the lecture-rooms some weeks later the class was transformed by magic into an orderly body of students, and this continued throughout the term. Professors and students showed her every courtesy, and she was never molested after a few unsuccessful practical jokes. The outside public, however, greatly disapproved of her, and she was considered by them to be either a bad woman or insane.

She graduated in 1849. The event caused a considerable stir in England as well as in America and "Punch" gave her some complimentary verses. In London and Paris where she next studied Dr. Blackwell made many valued friends including Lady Byron and Florence Nightingale. While a resident at La Maternité in Paris, Dr. Blackwell had the misfortune to contract a purulent ophthalmia, which cost her six months illness and the sight of one eye. In 1851 she returned to America and began practice in New York with her sister Emily who had gained her medical diploma in 1854 at the Cleveland Medical College. But it was still considered highly scandalous for a woman to be a doctor. Patients came slowly and socially she was ostracized. She even had difficulty in renting a respectable consulting-room. One landlady who sympathized with her lost all her other lodgers by taking her in and Elizabeth finally had to buy a house with borrowed money. The first time she called in consultation a man physician—a man eminent in the profession—he walked about the room exclaiming it was an extraordinary case, that he was in great difficulty; at first she was puzzled, for though the case of illness was severe, it was not unusual. At last she comprehended that he referred not to the patient but to the situation: could he without loss of professional dignity act as a consultant to a woman physician! He finally decided he could and became a firm friend of the woman physicians.

Not being allowed to practice in the existing dispensaries, she started a little one of her own in 1857, and, with her sister, Emily, and Dr. Marie Zakrzewska, founded the New York Infirmary for Women and Children. This was the first hospital conducted wholly by women, and met with strong opposition.

When the Civil War broke out Dr. Blackwell called a meeting to discuss the providing of trained nurses, and from this meeting grew the National Sanitary Aid Association. She also anticipated modern developments by organizing the services of sanitary visitors in the slums of New York.

In 1865 the Woman's Medical College of New York Infirmary was founded, Dr. Blackwell occupying the chair of hygiene. When Cornell opened its medical department, the college was merged with that at Cornell.

After having established the New York Infirmary and College, feeling that perhaps she could do more for the effort in England she returned there in 1869. She took a house and began practice in London where she identified herself with the Medical Woman Movement, Woman's Suffrage and with Mrs. Josephine E. Butler in her seventeen years war against state regulation of vice. In a short time her health failed, she could not stand the London climate, she travelled on the continent for a year or two and they bought a house at Hastings, living there until her death May 31, 1910, at the age of eighty-nine.

During her life at Hastings she kept up her London connections and interests and by her pen aided the movements in which she was interested.

Her most important book was "Counsel to Parents on the Moral Education of Children," 1876, which has been translated into French and German.

Elizabeth Blackwell.

(Photo by Elliot & Fry.)

Other important writings were:

"The Laws of Life," 1852.

"Medicine as a Profession for Women," 1860.

"The Religion of Health," 1869.

"Wrong and Right Methods of Dealing with the Social Evil," 1883.

"The Human Element in Sex," 1884.

"Pioneer work in Opening the Medical Profession to Women," 1895.

A. B. W.

London Times, June 2, 1910.
N. Y. Evening Post, June 1, 1910.
Mary Putnam Jacobi, in "Women's Work in America."
Personal information from Dr. Emily Blackwell.

Blackwell, Emily (1826–1910).

Emily Blackwell, a pioneer woman physician and dean of the Woman's Medical College of the New York Infirmary, was born in Bristol, England, in 1826. A younger sister of Dr. Elizabeth Blackwell,

In 1848 Emily began a course of medical reading with Dr. Davis, demonstrator of anatomy in the Cincinnati College. Like Elizabeth she brought perfect health and indomitable energy to her work. Earning as teacher the required funds she worked hard in both capacities and in 1851 applied for admission to the Medical School at Geneva, New York, where her sister had graduated in 1849. To her surprise she was rejected. The same faculty which had testified the presence of her sister "had exercised a beneficial influence upon her fellow students in all respects and the average attainments and general conduct of the students during the period she had passed among them were of a higher character than those of any class which had been assembled in the college since the connection of the president with the institution, they were not prepared to consider the case of Elizabeth as precedent." She applied in vain to several other colleges, but the Rush Medical College at Chicago accepted her as a student for a year; for this permission the college was censured by the State Medical Society and the second term was refused her. She was however received by the Medical College of Cleveland, Medical Branch of Western Reserve University, Ohio, and graduated thence in 1854. During one summer vacation she was allowed to visit in Bellevue Hospital, New York, when Dr. James Wood was just initiating the system of regular clinical lectures. After graduating Emily went to Europe and became the private pupil and assistant of the celebrated Dr. (afterward Sir) James Simpson of Edinburgh. His testimonial to her would be worth quoting at length.

Many such complimentary letters Miss Blackwell received from great physicians in London and Paris in whose hospital wards she faithfully studied. Thus equipped she returned to New York in 1856 to join her sister Dr. Elizabeth, who had secured her charter to open the New York Infirmary for Women and Children —the first women's hospital in America —with the double object of furnishing free aid by women physicians and of giving women medical students a chance for study and practice. The Legislature gave $1,000 a year to each dispensary in New York, and Dr. Emily obtained it without opposition for their dispensary. She was identified with her sister in the Sanitary Aid Association and in the establishment of the college of the New York Infirmary for Women and Children, of which she was dean for many years, and after Elizabeth Blackwell's return to England in 1869, the burden of the hospital fell upon her shoulders.

She was for years an officer of the New York Committee formed to oppose the state regulation of vice. She wrote and read papers on the medical aspect of the question and in every way helped to defeat the bill.

She had a large practice in New York City until 1900, when she retired, removing to Mont Clair, New Jersey.

Dr Emily Blackwell was a woman of high character, of wide reading and information, and delighted in everything beautiful. She had a warm heart,

though a reserved manner made her rather awe-inspiring to strangers.

She lived to see her views, which had been scouted half a century earlier, accepted as commonplaces and the reforms for which her youth had been given growing and flourishing.

She died of an enterocolitis, September 8, at her summer home at York Cliffs, Maine. A. B. W.

Mary Putnam Jacobi, Women in Medicine, in Woman's Work in America.
A. S. B. Woman's Journal, Boston, Sept. 10, 1910.
New York Evening Post, Sept. 8, 1910.
Personal information from colleagues.

Blanc, Henry (1859–1896).

Henry William Blanc was born in Louisiana, 1859, and died in New Orleans July 25, 1896. After graduating in medicine from Tulane University he spent two years in Europe studying dermatology in Vienna, Hamburg and Paris, then became lecturer in dermatology at the Tulane University and visiting dermatologist to the Charity Hospital, New Orleans. He was the founder of the New Orleans Polyclinic; associate editor on The "New Orleans Medical and Surgical Journal" staff and a frequent contributor to medical journals on dermatology, his writings on leprosy showing rare knowledge in one so young, and, had he lived, he would, undoubtedly, have been one of the world's best-known authorities on this disease.

J. M. W.

Blatchford, Thomas Windeatt (1794–1866).

Thomas W. Blatchford was born in Topsham, Devonshire, England, on the twentieth of July, 1794. His father, the Rev. Samuel Blatchford, removed to this country in the year 1795, when Thomas was an infant, and first settled in Bedford, New York.

Blatchford's early studies were prosecuted under the direction of his father, in Lansingburgh Academy, of which his father was the principal. In October, 1810, he began to study medicine in the office of Dr. John Taylor, of Lansingburgh, and in November, 1813, matriculated at the College of Physicians and Surgeons. In August, 1814, he was appointed resident physician, for one year, of the New York State Prison, in Greenwich Street, then a suburb of New York. At the end of the year he received an offer to travel in Europe as physician to a gentleman, a purser in the United States Navy, who during the War of 1812 had become suddenly wealthy and thereby lost the balance of his mind But the patient attempted to kill Blatchford, so upon landing at Liverpool the engagement was concluded, and he went to London, where he attended two courses of lectures at the united schools of Guy's and St. Thomas' Hospitals, given by Sir Astley Cooper and Prof. Cline. In the spring of 1816 he returned to New York, and after attending another full course of lectures at the college at which he had previously matriculated, he graduated in 1817. His graduating thesis was upon "Feigned Diseases," being the result of his observations and experience during his residence as physician at the New York State prison. Immediately after receiving his degree he practised at No. 85 Fulton Street, New York, for one year. At this time he was induced to remove to Jamaica, Long Island, and in February, 1819, married Harriet, the daughter of Thomas Wickes, a descendant of one of the original patentees of the town of Huntington in 1666.

After nine years, in consequence of arduous duty, he was attacked with fever which brought him very low, and in 1828 he began practice in Troy.

Dr. Blatchford was favorably known by his published papers and essays, which are as follows: "Inaugural Dissertation on Feigned Diseases," in 1817; "Letter on Corsets," in 1823; a work entitled "Letters to Married Ladies," about 1825; "Homeopathy Illustrated," 1842; "Report on Hydrophobia," 1856, read before the American Medical Association and published in their transac-

tions; "Report on Rest and the Abolition of Pain, as Curative Remedies," 1856, besides many papers to the medical and surgical journals.

He kept a meteorological journal from the year 1824 and the testimony of his record on these subjects was regarded as conclusive in the community.

Once a party at the West had forwarded in the winter a quantity of apples in barrels. Upon their arrival in New York they were found to have been frozen. The owner sued the company for damages alleging that they were left out, and exposed to injury by freezing, on a certain night. The doctor's register, produced in court, proved that it did not freeze on that night, and the amount was saved to the company.

He was connected with the Marshall Infirmary of Troy from its foundation. The Lunatic Asylum connected with the infirmary was projected by him, and will remain as a monument of his tender regard for the unhappy ones who shall be its occupants in the long future. He left his valuable medical library of over six hundred volumes to the institution.

His reputation as a man of science was recognized in the degree of A. M. by Union College in 1815; in his election as fellow of the Albany Medical College in 1834; president of the Rensselaer County Medical Society 1842–3; president of the Medical Society of the State of New York, 1845; corresponding fellow of New York Academy of Medicine, 1847; vice-president of the American Medical Association, 1856; fellow of the College of Physicians and Surgeons, New York, 1861; honorary member of the Medical Society of New Jersey, 1861, and of the Medical Society of Connecticut, 1862.

The doctor's labors in relieving the wants of those who suffered by the great fire of 1862 were so severe that his health was thereby seriously impaired. His last illness developed itself into an attack of typhoid pneumonia which continued for fifteen days, when, having finished his work, he fell asleep on the seventh of January, 1866.

Tr. Med. Soc. State of N. Y., Albany, 1866 (Dr. Stephen Wickes.)

Bobbs, John Stough (1809–1870).

The first cholecystotomy was performed by John Stough Bobbs of Indiana June 15, 1867, a surgeon, born in Green Village, Pennsylvania on December 28, 1809, of American-German descent. He was a man well educated in the fundamental branches and had given attention to philosophical writings. When eighteen he read medicine with Dr. Martin Luther of Harrisburg and after this attended one course of medical lectures, then settled in Middletown, Pennsylvania, where he practised for four years. His final location was Indiana, following on a course of lectures in Jefferson Medical College in Philadelphia where he graduated in 1836 after two courses of lectures and study with a preceptor, as required in those days.

He soon took high rank both as a physician and surgeon. When the Medical College of Indiana was organized he was elected professor of surgery and later dean of the faculty. As a practitioner one of his contemporaries states there was less sham about Dr. Bobbs than any physician he ever knew. Up to his death he had never given a placebo and always based his treatment on rational lines. Once when called to see a patient suffering from acute malady he suspended all medical treatment, saying "why give medicine here without reason or purpose?" He believed strongly in an organized and united medical profession and labored to that end. He was first in the work of establishing the Marion County Medical Society in 1847, and prominent in helping to organize the State Society of Indiana in 1849, being elected president of the latter, when his inaugural address was upon "The Necessity of a State Medical Journal and College." His paper on lithotomy of the gall-bladder was published in the same volume as his presidential address.

The latter part of Bobb's life was devoted mainly to surgery, and as an operator he was bold and original. Dr. Jameson, whom I quote, mentions an operation in which he assisted in which Bobbs removed the superior maxillary bone together with the eye of the affected side for extensive carcinoma. The operation lasted several hours but the patient made a good recovery. The hemorrhage was so well controlled that little blood was lost. He also mentions a successful operation for extrauterine pregnancy and an unsuccessful one for umbilical hernia. He certainly performed all the usual major operations of the surgery of his day.

During the Civil War Bobbs was a brigade surgeon and medical director for the state of Indiana. He distinguished himself when with Gen. Morris of Indianapolis by bringing a soldier off the field under fire.

He must be remembered also as a public-spirited man intensely interested in civic and state affairs, for one year serving as senator and organizing the Indiana Hosiptal for the Insane. He may truly be considered as one of the founders of scientific medicine and surgery in the middle west.

In person, we learn, he was slender, of medium height, with striking features, high forehead, dark gray eyes, large nose and prominent chin. He was generally dressed in black broadcloth. He married, in 1840, Catherine Cameron of Pennsylvania and at his death on May 1, 1870, left $2,000 to establish the Bobbs Dispensary to be managed by the Medical College of the Indiana Faculty. He also founded the Bobbs Library which is under the same direction and contains a most valuable collection of medical works.

D. W.

The First Nephrectomy and the First Cholecystotomy. M. B. Tinker, Johns Hopkins Hosp. Bull., Aug., 1901, vol. xii.
Jameson P. H. Memoir of the Professional Life of J. S. Bobbs. Tr. Indiana, M. Soc., Indianapolis, 1894, xlv.

Bodley, Rachel L. (1831–1888).

Pioneer in the professional education of women, Rachel Bodley, eldest daughter of Anthony R. Bradley and Rebecca W. Talbot Bodley, was born in Cincinnati December 7, 1831, of Scotch-Irish and Quaker English strain. Deep religious principles were her birthright. Her mother's private school and the Wesleyan Female College completed her early education and in 1860 she entered the Polytechnic College of Philadelphia for a special course in chemistry and physics and in 1862 she returned to Cincinnati and accepted a professorship of natural sciences in the Cincinnati Female Seminary, and while there mounted and catalogued an extensive herbarium of native and foreign plants, the gift of Joseph Clark to the seminary, a work of considerable magnitude. In 1865 the Woman's Medical College of Philadelphia appointed her to the chair of chemistry and toxicology, and she was elected dean of the faculty in 1874 and held both positions to the time of her death. In 1879, as a further tribute, the honorary M. D. was conferred by the Woman's Medical College. With Ann Preston, Rachel Bodley shares the distinction of guiding to successful issues this medical college for women. Ann Preston waged the battle for its existence, Rachel Bodley steadily and comprehensively developed it.

In medical missionary work her religious zeal found fullest expression, and help and sympathy were always readily given. Dean Bodley undertook the business affairs connected with the publication of Pundita Ramabai's book, "The High Caste Hindoo Woman," also an introduction to it. Her correspondence was world-wide and brought her in touch with the illustrious minds of many lands.

In 1880 she delivered a series of lectures before the Franklin Institute, of which she was a member. Her topic being "Household Chemistry," but suddenly in the midst of her activities Dean Bodley died of heart failure.

The following list of memberships and dignities speak eloqnently of her attainments.

1864. Corresponding member, State Historical Society of Wisconsin.

1871. Member, Philadelphia Academy of Natural Sciences.

1871. Degree of Artium Magister conferred by her Cincinnati Alma Mater.

1876. Corresponding Member, New York Academy of Sciences.

1876. Member, American Chemical Society of New York City.

A. B. W.

Woman's Journal, Boston, vol. xix.
Papers read at the Memorial Hour Commemoration of the late Prof. Rachel L. Bodley, M. D., Oct. 13, 1888. Phila.

Boerstler, George W. (1792–1871).

George W. Boerstler was born in 1792 and died October 10, 1871. He was born in Funkstown, Maryland. He was of German descent, his father a Lutheran clergyman. Very little is known of his mother; nor is it known whether there were other children. After three years of preliminary instruction, he received in 1820 his B. M. from the University of Maryland, and, with his diploma, a flattering certificate from Professor Potter of the University.

He began to practise at Hagerstown, Maryland, in 1833, but in that year changed his residence to Lancaster, Ohio, where he remained in practice until his death.

He had no specialty, but practised both medicine and surgery, according to the custom of the time, and attained a fine reputation in both departments.

He became a skilful diagnostician, and made few mistakes. His opinion was valued by the laity and equally by the profession, with whom he was very popular; his practice was consequently very large.

He married, in 1833, Elizabeth Sinks at Hagerstown, Maryland. She died in 1838, and in 1843 he married Elizabeth Schur, of Lancaster, Ohio. He had children; a daughter by the first wife, and by the second marriage there were two or more children. George W. Boerstler, one of them, engaged in medical practice in the office occupied by his father.

Dr. George W. Boerstler, Sr., died at Lancaster, Ohio, October 10, 1871, his death being attributed to senility.

He wrote a number of general and professional addresses of which latter several were published in the medical journals of Columbus and Cincinnati.

So far as is known, no previous sketch or biography has been published; and portraits, if any, are in the possession of Dr. George Boerstler of Lancaster.

Among his published writings are the following:

"Cases Illustrating Thoracic Pathology." ("Western Lancet," ii, 1843.)

"On the Use of Letheon and Chloroform in Obstetrics." ("Transactions of the Ohio Medical Convention," 1849.)

"Cholera, its Contagiousness." ("Transactions of the Ohio State Medical Society," 1851.)

"Report on Practical Medicine."

"Uterine Polypus." ("Western Lancet," xviii, 1857.)

"Veratrum Viride." (Ibid.)

"Eruptive Disease." ("Transactions of the Ohio State Medical Society," 1861.) S. L.

Cincinnati Med. Observer, xiv, 1871.
Trans. Ohio State Med. Soc'y., 1872.
Trans. Am. Med. Assoc., 1880.

Bohune, Lawrence (— 1622).

The exact date of the arrival of Dr. Lawrence Bohnne, first physician-general to the colony of Virginia, is not known, but it was within the first half of the year 1610, and he was the first physician-general of the London Company appointed for service in the colony.

Of the one hundred and five settlers who reached Jamestown Island on the thirteenth of May, 1607, after one hundred and forty-six days out from London, Thomas Wotton, William Wilkinson and Post Ginnet were listed as "Chirurgeons," and Thomas Field and John Harford as apothecaries.

Wotton was the fleet's physician, and

the first doctor in the American Colonies. His stay in the new world must have been a short one, since the ancient archives contain but little regarding him.

A letter to the company under date of July 7, 1610, signed by Lord Delaware and the members of the Council, reads in part:

"I only will entreate yee to stand favourable unto us for a new supply in such matters of the two-fold physicke, which both the soules and bodies of our poor people heere stand much in need; the specialties belonging to the one, the phisitions themselves (whom I hope you will be careful to send to us) will bring along with them the peculiarities of the other we have sent herein, inclosed unto us by Mr. Dr. Boone, whose care and industrie for the preservation of our men's lives (assaulted with straunge fluxes and agues), we have just caused to commend unto your noble favours; nor let it, I beseech yee, be passed over as a motion slight and of no moment to furnish us with these things, so much importuning the strength and health of our people, since we have true experience how many men's lives these physicke helps have preserved since our coming in, God so blessing the practice and diligence of our doctor, whose store is now growne thereby to so low an ebb, as we have not above three weekes physicall provisions."

The colonists were as yet unacclimated, and much sickness prevailed, so that Dr. Bohune's pharmacopœia was enlarged by the use of sundry new vegetables and minerals, rhubarb being found "to be of service in cold and moist for the bodies purginge of fleame and superfluous matter."

Dr. Bohune was a share-holder in the Londou Company and a member of the General Court which met on January 26, 1619 and February 2, 1620. At the former session he was joint claimant with James Swift for such lands as were patentable to those "who have undertaken to transport to Virginia great multitudes of people with store of cattle," and they gave the number of immigrants so transported by them as three hundred. He subsequently purchased Swift's interest and received an indenture in his own name on November 15, 1620.

At a session of the General Court held on December 13, 1621, it was ordered: "Mr Doctor Bohune havinge desired yt hee might be a Phisition generall for the Company according to such conditions as were formerly set downe by way of Articles unto which place they had allotted five hundred acres of land and twenty Tenants to be placed thereuppon att the companies charge."

The confidence extended to Dr. Bohune in this new precedence seems fully carned, but he was not long spared to enjoy its benefits and honors. Near the end of the year he was again in England arranging for new medical supplies, new colonists, and the introduction of the silk worm into Virginia.

Early in the next year he embarked with eighty-five immigrants on the "Margaret and John." At Gaudaloupe they took on six Frenchmen, raising the number of passengers, including the crew, to one hundred and three "soules"—men, women and children. While off the West Indies, on March 19, 1621, which they neared to water, they fell in with two large ships who feinted to be Hollanders until they had secured the advantage of position, when they broke the Spanish colors and fired upon the English ships. Nothing daunted by the sheer force of their size and superiority of battery the "Margaret and John" gave battle. Six hours the unequal combat lasted with the most desperate courage on the part of the English, and then—they beat off the enemy with the loss of the latter's captain, making "their skuppers run with blood, coloring the sea in their quarter."

In this heroic defense Dr. Bohune fell, while encouraging the crew to resistance. Seven others were killed outright, two died and twenty were wounded. The victory fired the English mind and high

tribute was paid the memory of the gallant Bohune.

Purchas used the incident in "Purchas his Pilgrimage," and Captain John Smith recited an account of it in his History of Virginia. George Deseler wrote of it in Amsterdam, and "Thomas Hothersell, late zitysone and groser of London being an I witness an interpreter in this exployte," left a description in manuscript which is still in existence.

C. C. M.

From an account by Caleb Clarke Magruder in the Interstate Med. Jour., St. Louis, June, 1910.

Boisliniere, Louis Charles (1816–1896).

Louis Charles Boisliniere was born September 2, 1816 on the island of Gaudeloupe, West Indies, of one of the oldest families of the island. His father was a wealthy sugar planter and took his son to France in 1825 in order that he might have every advantage attainable. Here thirteen years were spent in scientific, classical and legal studies at the most celebrated institutions of the day. Young Boisliniere took a diploma as licentiate in law at the University of France and returned to Gaudeloupe in 1839 after the death of both parents. Some months there and an extensive journey through South America made him determine to leave the West Indies entirely and settle in the United States. In 1842 he landed in New Orleans but went almost immediately to Lexington, Kentucky, where he received polite attention from Henry Clay's family to whom he had brought letters of introduction. In 1847 his attention was attracted by the advantages that seemed to be afforded to young men in St. Louis, so he went there, continued his medical studies commenced in France, and in 1848 graduated in medicine in the medical department of the St. Louis University. He immediately entered into practice. In 1853 Dr Boisliniere took part in establishing under the auspices of the Sisters of Charity what is thought to be the first lying-in hospital and foundling asylum founded in America. In 1858 he was elected coroner of St. Louis County, the first physician who held this office. In 1865 he was elected a member of the Anthropological Society of Paris. He held the professorship of obstetrics and diseases of women and children in the St. Louis Medical College and had for a number of years a clinic for the diseases of women at the St. Louis (Sisters) Hospital. For two successive years he was president of the St. Louis Obstetrical and Gynecological Society. In 1879 he received the degree of LL. D. from the St. Louis University. He died in St. Louis January 13, 1896. W. B. O.

Med. Mirror, St. Louis, 1890. vol. i.
Tr. Am. Ass. Obstet. and Gyn., 1895, Phila., 1896, vol. viii.

Bolton, James (1812–1869).

James Bolton was born in Savannah, Georgia, June 5, 1812, his early life being spent in Savannah and later in New York, where he was educated, graduating as A. B. from Columbia in 1831. He then studied medicine at the College of Physicians and Surgeons of New York, graduating in 1836 when he took up the study of eye and ear diseases and under Dr. Kearney Rogers he assisted the great operator Dr. Mott. Subsequently he settled in Richmond, where he enjoyed a large practice until the breaking out of the Civil War, when he joined the confederate forces as surgeon and served with devotion during the entire war. At its close he returned to Richmond and resumed practice; but his life was cut short by Bright's disease on May 15, 1869. His interest in ophthalmology was shown in his Treatise on "Strabismus" published in 1842.

Dr. Bolton stood at the very head of the profession in Virginia for many years.

H. F.

Trans. Am. Med. Assoc., vol. xxxi.

Bond, Thomas (1712–1784).

Thomas Bond may with justice be considered one of the foremost eighteenth century medical men in America because

of his influence in founding the first hospital and the first medical school (The Pennsylvania Hospital and the medical department of the University of Pennsylvania).

The son of Richard and Elizabeth Chew Bond, he was born in Calvert County, Maryland, in 1712. He studied medicine under Dr. Alexander Hamilton, completing his education by European travel and special study at the Hôtel Dieu, Paris. He probably came to Philadelphia and began practice there in 1734. When but eighteen he married Sarah Roberts and had seven children, Elizabeth, Thomas, Sarah, Rebecca, Phoebe, Robert, and Venables; Thomas and Robert following their father's profession.

Bond's young brother Phineas came from Maryland in 1738 and the two brothers practised in partnership, being specially active in affairs of municipal health.

It must be recalled that at this time Philadelphia was but a village. When Bond was at the height of his reputation (1769) the city had a population of 28,000. The streets were unpaved and unlit at night; there were no daily papers and but few vehicles.

Dr. Bond was accustomed to visit his patients in a two-wheel sulky drawn by a black horse. This was a very unusual method of conveyance at that time and supposedly permitted only to aged and infirm doctors, and was probably enjoyed by Bond because of his delicacy. In the earlier years of his practice, Bond had a great deal of experience in disease common to immigration; he was on intimate terms with two physicians of the port —Drs. Thomas Graeme and Lloyd Zacharay. That they saw a good deal of yellow and typhus fever was probable as he refers to five epidemics of typhus in his introduction to clinical lectures. Between 1740 and 1754 Bond was constantly asked to visit suspected vessels and attend to the isolation of suspicious cases and fumigating infected houses or ships. His work would now be classed as that of a good, all-round general practitioner; but in his day surgery had not reached its present dizzy height, and his practice must be considered both medical and surgical. He reduced and splinted fractures, incised breasts, and imposthumated livers, scarified "mortifying" feet, amputated legs, tapped not only legs but both chest and abdomen, operated for stone in the bladder, attended difficult confinements, and also saw much of measles, small-pox, typhus and the other infectious diseases.

Benjamin Rush gives Bond credit for the instruction and general use of mercury in practice in Philadelphia. It was his habit to prescribe it in all cases which resisted the common methods of practice. Bond also used the hot and cold as well as vapor and warm air baths in the treatment of disease and had baths introduced into the Pennsylvania Hospital. He also devised a splint called by his name for fracture of the lower end of the radius, which has been familiar to all graduates in medicine during the last hundred years.

It is probable that Dr. Bond from the nature of his practice daily realized the comfort and aid which a well equipped hospital would furnish to many of his patients. It is an assured fact that he constantly talked to his friends and patients about the foundation of a hospital for the care of sick and injured to say nothing of the care of the insane. During the first years of the Pennsylvania Hospital a considerable proportion of its work consisted in the care of the so-called lunatics.

It was not, however, until Bond approached Benjamin Franklin and explained to him the value of such an institution to the community, that any material progress was made.

The year 1765 marked the beginning of systematic medical instruction in the United States; that year's courses in anatomy and surgery (and midwifery) were given by William Shippen, Jr., and lectures on physic by John Morgan. Dr. Bond taught clinical medicine the following year, and continued to hold clinics at the Pennsylvania Hospital till his

THOMAS BOND.

(From an engraving in the College of Physicians, Philadelphia.)

death. As will be remembered the appointment of Morgan and Shippen was soon followed by that of Rush and Kuhn to the respective chairs of chemistry and materia medica and botany. Bond was, however, at this time a man of fifty-four, whereas his associate professors were all men under or a little over thirty.

It is difficult to secure much of an estimate of Dr. Bond's general appearance. Concerning him, Thacher ("American Medical Biography," p. 117) says, "Dr. Bond was of delicate constitution and disposed to pulmonary consumption for which he went a voyage when a young man to the Island of Barbadoes. By unremitted care to his health, the strictest attention to diet, and to guard against change of temperature and also by frequently losing blood when he found his lungs affected, he lived to an age which the greater part of mankind never reached."

But few articles from his pen can be discovered. He made quite a number of communications to the Philosophical Society and frequently read letters from physicians both in England and some of the English Colonies. In 1779 he read a paper before the Society on the "Means of Pursuing Health and the Means of Preventing Diseases." Two years before his death he delivered the annual oration at the State House before the Philosophical Society, the title of which was "Rank and Dignity of Men in the Scale of Being." This was published subsequently in the form of a small book of thirty-four pages. The address is distinctly scholarly, but with the exception of a few references to the use of new instruments for the measurement of atmospheric pressure, temperature, etc., which he always considered of great importance, there is little reference to things medical.

In the "Medical Observations and Inquiries," vol. i, page 68, is found a short clinical article by Bond, entitled "A Worm and a Horrid One found in the Liver." This article details the symptoms of a case in his practice in Philadelphia which he supposed to be due to the presence of an intestinal worm found in the liver, with a good description of the autopsy and an engraving of the postmortem findings. A second article in vol. ii. of the Observations was on the "Use of Peruvian Bark in Scrofulous Cases." The most notable contribution that he made to literature is, however, his "Introductory Clinical Lectures."

The cause of Dr. Bond's death is unknown. While he was considered rather a delicate man, he was, however, able to continue in his medical work until several weeks of his death. It seems probable, therefore, that he died of some acute disease, or one of the conditions common to the aged, on Friday, March 26, 1784. He was seventy-two years of age. He was buried on Sunday in the burial ground at Fifth and Arch Streets where his grave is marked by a low flat marble tablet. His name, age and date of death are still easily read, but the inscription under the name has become illegible.

F. R. P.

A sketch of the life of Thomas Bond, Clinician and Surgeon, University of Pennsylvania Medical Bulletin, January, 1906.
Morton's History of the Pennsylvania Hospital and the result of an extensive search of records at the Historical Society of Pennsylvania.
Co-partnership Ledger of Drs. Thomas and Phineas Bond. Six vols. in the library of the Coll. of Phys. in Phila.
Norris. Early Hist. of Med. in Phila.
Thacher. Am. Med. Biog.

Bonine, Evan J. (1821–1892).

Evan J. Bonine, surgeon, of Quaker parents was born at Richmond, Indiana September 10, 1821; the third son of a family of twelve children. Until seventeen he worked on his father's large farm during the summer and attended school during the winter, then, owing to his father's financial losses, he depended on himself. He began medical study with Dr. J. Pritchett of Centerville, Indiana, and received his M. D. from Ohio Medical College in 1843. Settling in Niles, Michigan, he soon be-

came a leader in things surgical and medical; in politics and social life. Several times he served in the House of Representatives and in 1870 in the Senate. During the war of the rebellion he was appointed surgeon to the Second Michigan Infantry, rapidly being promoted until he was surgeon-in-chief of the third division, ninth army corps, during service taking part in twenty-nine different engagements. On June 17, 1864, Dr. Bonine had charge of two thousand wounded and dying soldiers brought in from all directions, and forty surgeons working under him. In the fall of 1864, because of illness (chronic diarrhea), he resigned and was appointed examining surgeon on the Provost Marshall's staff for the Western District of Michigan with headquarters at Kalamazoo, and filled the place until the close of the war. He was a member of the Michigan State Medical Society. Dr. S. Belknap of Niles, his partner for eleven years and a personal friend, said: "As a surgeon he had marked ability and superior judgment; he rendered unusual public service to his city and the state; his business ability guided the affairs of many households; his sympathy for his fellows impelled him to put forth his life to help others, either as individuals or institutions." In 1844 he married Eveline Beall, and his three children survived him; one son, becoming Dr. F. N. Bonine. Dr. Evan J. Bonine died at Niles, Michigan, December 28, 1892, from chronic diarrhea acquired during army service.

Paper: "Report of a Case of Ear Embolism." Physician and Surgeon, Ann Arbor, vol. viii. L. C.

Representative Men in Mich. West. Biograph. Co., Cincin., O., vol. iv.

Bontecou, Reed Brockway (1824–1907).

Reed Brockway Bontecou was known as one of the largest contributors of pathological specimens to the Army and Navy Museum, which was, of course, indirectly a contribution to the "Medical and Surgical History of the War of the Rebellion" (J. S. B. Billings). He was born in Troy, New York, on April 22, 1824, the son of Peter and Samantha (Brockway) Bontecou, of French Huguenot and Scotch ancestry.

His early career may be briefly summed up by stating that he graduated B. Sc., Rensselaer Polytechnic Institute, 1842; was instructor in botany and zoology, 1843. Studied medicine with Drs. John Wright and Thomas C. Brinsmade of Troy; attended lectures, medical department, University of City of New York, 1844–45; made a romantic trip up the Amazon river, 1846, to collect flora and fauna for the Troy Lyceum of Natural History; graduated M. D., Castleton, Vermont, Medical College, 1847, and began to practise in Troy with Dr. Thomas C. Brinsmade.

In 1848 he made a study of Asiatic cholera, epidemic at the time; treated diphtheria (newly recognized as a specific form of disease) by open-air method and tracheotomy when necessary; and treated general peritonitis with large doses of pulverized opium, reporting the following remarkable case August 2, 1854.

Mrs. W. A., of South Troy, aged thirty-four, in good health and six months pregnant, while in squatting position, feeding her chickens, ruptured an old umbilical hernia, spilling almost all her abdominal viscera to the ground. Patient when seen was in collapse, intestines covered with pebbles and dirt and swollen to size of a peck measure. The opening was enlarged, viscera cleansed and replaced, wall repaired by rolling up and fixation with skewers, and a large dose of opium administered "to let her die easy." Despite severe peritonitis, however, recovery ensued under repeated large doses of opium (15 to 20 grains).

Another case which attracted great attention as the first of its kind in this country was one of fracture of the cervical vertebræ with complete general paralysis; treated sucessfully, April 3, 1856, by extension; patient recovering to resume his occupation as house painter,

and to afford the doctor twenty years later the satisfaction of confirming by autopsy his original diagnosis. He made the first resection of the shoulder-joint (1861) and of the knee-joint (1863) for gunshot wounds and practised extensively excision of the fractured ends of long bones; modified Pirigoff's operation on the foot.

April 13, 1861 he enlisted in the Civil War as surgeon, Second Regiment, New York State Volunteers, with rank of major and operated on the field at Big Bethel, the first battle of the war. From October, 1863, to June, 1866, he was surgeon in charge of United States Army General Hospital, "Harewood," at Washington, District of Columbia, one of the largest hospitals of the war, with capacity of 3,000 beds.

On November 21, 1857, while in charge of the Troy Hospital he ligated the right subclavian artery for diffuse traumatic aneurysm of the axillary artery, the first successful case in America and one of the first three on record.

Brevetted lieutenant colonel and colonel of United States Volunteers, March 13, 1865, he resumed private practice in Troy in 1866. For many years he was attending surgeon at Watervliet Arsenal, West Troy, and attending physician and operating surgeon for twenty years at Marshall's Infirmary, Troy, where he made the first operation in this country and the second in the world for typhoidal perforation.

He was a member of the Rensselaer County Medical Society, Medical Society of the State of New York, New York State Medical Association, charter member and fellow, American Surgical Association, 1887.

He married, in 1847, Miss Susan Northrup of New Haven, Connecticut, and had five children.

Personally a vigorous and handsome man of genial temperament and great originality, he was an indefatigable worker and constant student of his profession, keeping himself abreast of its advances, and covering in his sixty years of practice an immense field of activity and achievement. A healer by instinct and a brilliant surgeon, he was a naturalist by taste and early training. He travelled extensively, and his mind, rich with wisdom and broadened by varied tastes and vast experience, was a storehouse for all who knew him, and Lincoln Steffens, the publicist, said of him, "He will go down to history, I suppose, as a great doctor, and yet, what is really so much more to the point is that he was so great a man."

He died in Troy, New York, March 27, 1907. R. B. B.

Botsford, Le Baron (1812–1888).

The Botsfords were an old family who emigrated from Leicestershire, England to Newton, Connecticut, where they became both eminent and wealthy. Amos Botsford, the grandfather of Le Baron, graduated at Yale in 1763 and was a tutor at the college in 1768, when he espoused the royalist cause. At the conclusion of the war of Independence, he with five hundred other loyalists sailed from New York for Annapolis, Nova Scotia, and he finally settled in Westmoreland County, New Brunswick. His son William, the father of Le Baron, graduated at Yale and studied law, afterwards being made a judge of the supreme court.

Le Baron was born in Westmoreland County, New Brunswick in 1812, and commenced studying medicine in Glasgow in 1831, graduating there in 1835. After practising four years in Woodstock, New Brunswick, he removed to St. John, where he remained until his death in 1888.

In 1854 a terrible epidemic of cholera broke out in St. John, in which fifteen hundred persons perished. During its prevalence Dr. Botsford stuck to his post, and was unremitting in his attentions to all classes and his strong physique enabled him to come through the ordeal unscathed. He was a man over six feet and had a fine prepossessing

face, and was a ready, pleasing and forcible speaker, and, as the writer well remembers, always held the attention of his hearers when he addressed them on a medical or other subject.

He was for a number of years surgeon to the Marine Hospital, as well as to the General Public Hospital and president of the Canadian Medical Association in 1877.

His wife was a Miss Main of Glasgow, with whom he became intimate while a student there. She died in 1877, leaving no children. A. B. A.

Bowling, William K. (1808–1885).

When Dr. Bowling, medical editor, was asked how old he was, he said, "When the Third Napoleon, Emperor of the French, Marshal McMahon, Charles Dickens, Salmon P. Chase, Robert E. Lee, Andrew Johnson, and Jefferson Davis came into the world, and when the American slave trade terminated by a provision of the Constitution of the United States, I came—born when giant men came, and when a giant sin and outrage died." This event occurred in the Northern Neck of Virginia, in the county of Westmoreland, the native county of George Washington. Tradition and history represent his ancestors as planters, and, while remarkable for kindness and generosity, none of them filled any conspicuous place in church or state.

In 1810 his father moved to North Kentucky, where William Bowling—the fifth of ten children, and middle brother of seven—was educated privately by excellent tutors, and among them three authors of books. He says: "Like Clay and Drake, I was dropped down in the wilderness of Kentucky, and left to fight the battle of life as best I could without education, family influence or patronage. To three vagabond authors, whom my father fed for my benefit, and a public library of five hundred volumes, which I devoured before I was fourteen, I owe the foundation of all I am or hope to be. I attended one course of lectnres in the Medical College of Ohio, and practised five years, and attended another course at the Medical Department of Cincinnati College, known as Drake's School, and graduated. Drake was my medical idol, and his memory is yet. I was used to the society of authors. I had slept with them, roamed the wild forests with them, raved and ranted with them, and felt almost as big at eighteen as any of them, and they felt as big as all out-doors. One was a poet, William P. S. Blair, brother of the celebrated Francis P. Blair, of Kendall and Jackson memory. Lyman Martin, afterwards my medical preceptor, a scholar from Connecticut, spent many hours at my father's with these men, but he never raved or ranted. God bless him! He was everything to me, taught me, and believed in me."

Bowling received his medical degrees in the spring of 1836, and as a practitioner from 1836 to 1850 gained a great eminence in Logan County, Kentucky, near the Tennessee line, and became widely known in both states. During this time he had always under his tuition a nnmber of office students, who spread his reputation as an original teacher of medicine far and wide. In 1848 he was offered the chair of theory and practice in the Memphis Medical Institute, the pioneer medical school of Tennessee. This offer he declined.

In 1850 he removed to Nashville, hoping by his presence to stimulate physicians of eminence, to whom he had vainly written, to take part in aiding Dr. J. B. Lindsley in founding a medical school. The latter brought his plans to Bowling who at once declared that he would venture largely of means and labor in connection with the "Old University," and would not invest a cent in a private enterprise. Dr. Lindsley and his associates accepted his views, gave him the chair of theory and practice, and made him their mouthpiece in communicating with the board of trustees, by which the faculty was commissioned on October 11, 1851.

In the school thus established by the energy of a college-bred youth and the wisdom of a backwoods practitioner, coupled with the assistance of a most able corps of teachers, he became at once a master spirit. Understanding doctor and medical student nature with an insight given to but few, he had a hold upon the class peculiar to himself.

In 1851 he founded the "Nashville Journal of Medicine and Surgery," and sustained it for a quarter of a century. His contributions to medicine are principally contained in this journal, where he was never negative, but definitely aggressive or defensive, concerning all things pertaining to his profession.

Many thousand copies of Dr. Bowling's "Introductories" and also of pamphlet editions of articles from the medical journal were circulated by order of the faculty.

Bowling always strenuously advocated the organization of the profession, and contributed his quantum of labor and time to local and national associations. He had avoided office. However, in 1856 he was elected third vice-president, in 1867 first vice-president, and in 1874 he was elected president, of the American Medical Association, and in 1873 he was made by the medical editors of the United States president of their national association. In 1877 he was transferred from the chair of practice and principles of medicine to that of ethical medicine and malarial diseases, which he occupied during that and the succeeding session in the school which he had helped to found, and for which he had labored so long, so faithfully, and so well.

In 1879 he was tendered and occupied jointly with the present occupant the chair of theory and practice of medicine in the medical department of the University of Tennessee, and elected "emeritus" in 1884. The year following he died.

In 1837 he married Mrs. Melissa Cheatham, and had one child, a son, named Powhattan.

Nashville J. M. and S., 1885, n. s., xxxvi. South. Pract., Nashville, 1882, iv (J. B. Lindsley).

South. Pract., Nashville, 1885, vii. Atkinson's Phys. and Surgs. of the United States, in which there is a portrait.

Bowman, Nathaniel (1767–1797).

This young man, a charming and interesting physician, was just beginning to make his name known as a man of skill among his medical brethren of Maine, when he was snatched from life in a fashion worthy of record, showing even in those days of simple living the wonderful uncertainty of human life.

He was born on the eighth of June, 1767, where is not known, and after receiving a medical education graduated from the Harvard Medical School in 1786, settled in Gorham, Maine, and married Miss Mary Johnson. He soon acquired a good practice, with the promise of being a much more brilliant man than the average physician, and things went well with him up to the middle of 1797.

He called on a lady patient on the afternoon of the seventh of June of that year, and as he was leaving, he said, "Well, here I am perfectly well, and happy as I can be, for to-morrow will be my thirtieth birthday, and I shall be the only man of the family for as many generations as we can remember who has ever lived to be thirty years old." The patient congratulated him on his approaching happiness for the morrow, yet never saw him again alive, for in making his way home from other patients, he walked beside the new church where they were finishing a steeple, a rope broke, a beam fell, and he was dead. He was one more of the family who did not live to be thirty. The patient to whom he had spoken about his birthday died from the shock. This tragic end of Dr. Bowman's life caused a great deal of sympathy which was felt then, and I doubt not, even to-day, by those who hear of this curious incident for the first time.

I lately talked with an old man and asked him if this story were really true, and he replied, "Oh, yes! my mother told it to me as far back as 1830.

J. A. S.

Town History of Gorham, page 108.

Boylston, Zabdiel (1679–1766).

Zabdiel Boylston, the first inoculator for small-pox in America, was the son of Thomas Boylston (sometimes written Boyson), a farmer of Muddy River, (Brookline), Massachusetts. It is probable that Thomas was the son of Thomas who emigrated from London to America in the Defense and settled in Watertown in 1635. Zabdiel, the fourth child of Thomas and Mary Gardner, was born in Brookline, March 9, 1679.

He received his medical education from Dr. John Cutter, an eminent practitioner of Boston, and began practice there. Such was his industry and tact that he soon acquired a handsome fortune and a large clientage. He was especially interested in botany and zoology and made a large collection of American plants and animals.

He is known chiefly as the first person in America to inoculate for small-pox. According to his own statement ("Account of the Small-pox," 1726, p. 1) he had the disease himself in 1702 and narrowly escaped with his life. The small-pox appeared as an epidemic in Boston in the year 1721, carrying with it great terror and alarm among the inhabitants.

The scholarly Dr. Cotton Mather received the accounts of inoculation from England and communicating them to Dr. Boylston, urged him to try it. On June 26, 1721 Boylston inoculated his six-year-old son Thomas, and two negro servants. The attempts proved successful. Most violent was the opposition of the physicians, the press and the public, and Boylston's life was in danger at times. He persisted, however, supported by Cotton Mather: the epidemic subsided in May, 1722.

Dr. Boylston in 1721 published "Some Account of What is said of Inoculation or Transplanting the Small-pox by the Learned Dr. Emanuel Timonius and Jacobus Pylarinus," With some remarks thereon. To which are added a few queries in answer to the scruples of many about the lawfulness of this method. Published by Dr. Zabdiel Boylston, Boston, 1721. He inoculated all who came to him, treating 247 with his own hands, and in time the method came to be accepted. In the year 1721 and the beginning of 1722 there were in Boston 5,759 cases of small-pox. Of these 844 died. During the same time 286 persons were inoculated and of these six died ("Boylston's Account of the Small-pox," 1726, pp. 33 and 34). In 1723 he visited England and received honors at the hands of King George the First. While there he published at the request of the Royal Society an account of his practice of inoculation in America, dedicating it to Princess Caroline ("An Historical Account of the Small-pox Inoculation in New England," etc., Zabdiel Boylston, 1726, vol. viii, p. 53, London). After his return to New England he practised medicine for many years, retiring to his farm in Brookline in his old age and dying there in his eighty-seventh year, March 1, 1766.

To show the extent to which the hatred of Boylston and Mather moved the populace it is related that on October 31, 1721, the Rev. Mr. Walter, minister in Roxbury and nephew of Mather, was inoculated by Boylston and while convalescing at Mather's home was visited at night by a mob. They stormed the house, insulted its occupants, and hurled a lighted bomb into the patient's room. Fortunately the fuse of the bomb broke off and no damage was done. "The Boston News Letter" of November 20, 1721, says of the incident: "When the Granado was taken up there was found a paper so tied with a thread about the fuse that it might outlive the breaking of the shell, wherein were these words: "Cotton Mather, I was once of your meeting, but the cursed lye you told of— You know who, made me leave you, you Dog, and Damn you, I will inoculate you with this, with a pox to you."

The honor of having introduced in oculation into America must be divided between the Rev. Cotton Mather and

Dr. Zabdiel Boylston, although the latter was the active agent, and Isaac Greenwood writes of him in his dedication to "A Friendly Debate; or Dialogue Between Academicus and Sawny (Douglass) and Mundungus (Archbold), Two Eminent Physicians, About Some of their Late Performances, Boston, February 15, 1721–2," as follows: "To my very worthy physician Mr. Zabdiel Boylston. Sir, I know of no person so proper to present the following dialogue to as yourself. . . . To you under the auspicious providence of God, we are indebted for the blessing of inoculation, and you can claim the undivided honor of introducing it among us."

Boylston himself says in his "Account of the Small-pox." "I began the practice indeed from a short consideration thereof, for my children, whose lives were very dear to me, were daily in danger of taking the infection by my visiting the sick in the natural way; and although there arose such a cloud of opposers at the beginning yet finding my account in the success, and easy circumstances of my patients (with the encouragement of the good ministers), I resolved to carry it on for the saving of lives, not regarding any, or all the menances and opposition that were made against it."

W. L. B.

A Biographical Dictionary of the First Settlers of New England. J. Savage, 1860.
The History of the Small-pox. Lond., James Moore, 1815.
Some Account of What is said of Inoculation, etc. Z. Boylston, 1721.
An Historical Account of the Small-pox Inoc. in New England. Z. Boylston, Lond., 1726.
Amer. Med. Biog. James Thacher, 1828.
Hist. of Harvard Med. School. T. F. Harrington.
A Narrative of Med. in America. J. G. Mumford.

Bozeman, Nathan (1825–1905).

Nathan Bozeman, one of the most distinguished gynecologists of New York, was of Dutch descent and the son of a farmer, Nathan Bozeman, and his wife Harriet Knotts, and at first turned his attention to surveying, but afterwards studied medicine in the University of Louisville, a pupil of Samuel Gross; he afterwards, upon taking his M. D., became his assistant professor and had the honor of chloroformimg the patient in the first successful ovariotomy done under anesthetization, Prof. Henry Miller being the operator.

At first he settled down to practice in Montgomery, Alabama, devoting himself mainly to the diseases of women. He had for some two years used the clamp suture of Marion Sims in vesicovaginal fistula, but became convinced that this and the usual methods were at fault. He pondered deeply on the subject for some seven weeks and discovered one day while buttoning his vest that something similar to a button might be combined with the old interrupted suture with its independent action, and the "button suture" was the outcome. After this Bozeman had 100 per cent. of cures instead of twenty-five.

In 1858, he visited Europe and introduced some of his operations for vesicovaginal fistula, and the next year opened a hospital in New Orleans for diseases of women and also acted as visiting surgeon to the Charity Hospital of that city. The Civil War, of course, saw all permanency broken up and Bozeman became a confederate army surgeon, going to New York afterwards and opening a woman's hospital there. A controversy with Prof. Gustave Simon with regard to priority and value of "kolpokleisis" as a means of treating vesicovaginal fistula and its dangers having arisen, Bozeman went to Germany and made practical tests at Heidelberg University and was entertained by Duke Ernst of Saxe-Coburg. On return he read a paper before the American Medical Association on "Kolpokleisis as a Means of Treating Vesicovaginal Fistula: Is the Procedure Ever Necessary?"

When Dr. E. R. Peaslee died he succeeded him as surgeon to the New York State Woman's Hospital, and became at once engrossed in ovariotomy, performing successful operations in May, 1878.

Up to 1888, Bozeman did much original work in the hospitals, specially in renal surgery, then finding the time and labor necessary for his bladder and kidney cases in the Woman's Hospital so exacting he opened a private sanitorium and a year later resigned his eleven years' professorship.

On October 25, 1852, he married Fannie Lamar of Macon, Georgia and had four children, Geraldine, Nathan Gross, Fannie Rylance and Mary. His second wife, 1861, was Mrs. Amelia Lamar Ralston of Macon.

He died on December 16, 1905, in New York of cerebral hemorrhage and was buried in Macon.

His writings—all valuable—included papers on:

"Remarks on Vesicovaginal Fistula with an Account of a New Suture;" "The Mechanism of Retroversion and Prolapsus of the Uterus;" "Removal of a Cyst Weighing Twenty and One-half Pounds;" 1861; "On Genital Renovation;" "The Value of Graduated Pressure in the Treatment of Disease of the Vagina, Uterus and Ovaries;" "History of Clamp Sutures;" "Extrauterine Fetation;" also the "Early History of Ovariotomy" which was published by his grand-daughter in the "Biography of Ephriam McDowell."

N. B., Jr.

See Surg. Gen. Cat., Wash., D. C., for a tolerably complete list of writings.

Brachett, Joshua (1733–1802).

Joshua Brachett was born in Greenland, New Hampshire, May, 1733.

A good scholar, he entered Harvard in 1748 at the age of fifteen and, after graduation in 1752, attended to the publication of various works on the science of theology. In selecting the ministry for a profession he consulted the wishes of his parents more than his own inclinations and pursued his studies and was licensed as a preacher, but his health soon became impaired and he was obliged to give up work.

He began to study medicine with Dr. Clement Jackson of Portsmouth and in three years was practising in Portsmouth where he continued to his death.

His ability was recognized and he was chosen an honorary member of the Massachusetts Medical Society, October 30, 1783, in 1792 being given a medical doctorate by his alma mater.

Dr. Brachett was one of the incorporators of the New Hampshire Medical Society in 1791 and its first vice-president, and president in 1793.

He had the largest medical library in the state, consisting of over one hundred and forty volumes, which on his retirement from office he presented to the New Hampshire Medical Society as foundation for a medical library.

Dr. Brachett held the office of judge of the Maritime Court during the revolution until the adoption of the federal constitution in 1784.

A great reader, especially of natural science, he studied zoology and botany and was interested in founding a professorship in these branches at Harvard, and therefore he was very much pleased, when only a few weeks before his death, several thousand dollars were subscribed for carrying out his cherished plan. He left a request with his wife that a certain piece of property of the value of $1,500, when she should have done with it, should be added to the fund, a wish carried out, with an additional $500, a bequest of her own.

His reading was extensive and his observations accurate. He was a man of warm friendship and great benevolence.

In early life Dr. Brachett married Hannah Whipple of Maine.

He died of valvular heart disease July 17, 1802. I. J. P.

Bradbury, James Crockett (1806–1865).

In the days when capital operations were rarely well done, Dr. James Crockett Bradbury did more than one and with excellent results. For that reason his life is worth recording more carefully than has before been done. He was born at Buxton, Maine, March 5, 1806, worked on a farm, and studied during every spare mo-

ment, besides attending school. With an intense thirst for learning, by his own earnings he paid most of the expense incurred in preparing for medical study, studies begun under his brother Samuel in Bangor, Maine. He graduated at the Medical School of Maine in 1839, practised first in Howland, Maine, and then in Oldtown where he devoted himself energetically to his chosen profession.

In 1837 he married Miss Eliza Smith of Warren, Maine, who cheered him in the performance of his onerous practice.

Dr. William Henry Allen of Orono falling ill in 1862, Dr. Bradbury kept on with his own practice and overloaded himself with the patients of Dr. Allen. The governor of Maine having to select a board to examine candidates for surgeons to the Maine soldiers during the wars, nominated Dr. Bradbury for the head thereof. He was also temporarily one of the surgeons to take charge of a hospital at Augusta overflowing with invalided soldiers from the front. Dr. Bradbury here did more than his share in bringing order out of confusion; the mortality ceased, rapid convalescence ensued upon his labors.

Besides this, he was an active member of the Maine Medical Association, and once its honored president.

He was a practical physician, rather slow to adopt new theories but his mind was active; he decided quickly; arrived at diagnosis often by intuition, and by bold treatment was celebrated far and wide for having saved the life of many a patient whose life hung in the balance.

As his medical practice extended a hundred miles North of Oldtown, many wearisome miles did he feel obliged to travel, well knowing that he could never expect proportionate pay for his time or skill. Despite such generosity, he gradually acquired affluence through the kindness of others who were able to pay well.

His fame rested on two special cases. One an "Extensive Laceration of the Muscles of the Forearm" ("Boston Medical and Surgical Journal," vol. xxxvii), showing how a very extensive injury of the elbow-joint may, under proper treatment, escape amputation and be useful for life to the patient. Any surgeon would be proud of such a result as Dr. Bradburg obtained. In fact it was never doubted that he was probably unsurpassed in contriving splints for fractures and in thus saving limbs which otherwise would be amputated.

October 11, 1851, he performed that most formidable operation in surgery, the amputation at the hip-joint for osteosarcoma of the femur; the fourth time it had ever been performed successfully in this country.

Again in February, 1860, he successfully removed from the neck an enormous fibrous tumor involving the entire parotid, the patient being still alive seven years after.

He once attended the maid servant of a well-to-do man who told the doctor that the woman was poor and he could make his bill as light as possible and "take it out of some one who was more able to pay." A year or two later Dr. Bradbury was called to attend this gentleman's wife and on ultimately handing in the bill, personally, the man saw the items of the bill for the maid servant. The man looked at Dr. Bradbury, and Dr. Bradbury looked at him, their eyes twinkled but the bill was paid in full.

The enormous work of his latter life, in taking care of so many patients at Augusta, impaired his health most seriously. He had an attack of paralysis February 11, 1863, gradually recovered, then relapsed; his mind grew cloudy, his body enfeebled, and he gradually fell asleep into another world, October 3, 1865, undeniably to be enrolled among the most worthy medical men that Maine had seen. J. A. S.

Transactions Maine Med. Assoc., 1866.

Bradford, Joshua Taylor (1818–1871). Joshua Taylor Bradford, ovariotomist, was born in Bracken County December 9, 1818, a son of William Bradford of Vir-

ginia, who in 1790 emigrated to Bracken County, his mother being Elizabeth Johnson.

Joshua was educated in Augusta College and studied medicine with his brother, Dr. J. J. Bradford, graduating from Transylvania University in 1839.

From the beginning he directed his attention to surgery, and in all probability received much of his inspiration from Benjamin Winslow Dudley, his surgical teacher in the Transylvania University. Soon after graduation, he successfully performed an ovariotomy. Lunsford Pitts Yandell says: "And it was not long before he became the foremost surgeon of Kentucky, and of all the West, in that affection. Nor is it too much to say that at the time of his death he stood first among surgeons everywhere—in Europe and in our own country—as an ovariotomist. Not that he had done the operation oftener than any other surgeon. Such is not the fact. It has been performed much oftener by Atlee, Wells, Dunlap, and others; but by none with the measure of success that crowned his operations. In the hands of the surgeons just mentioned the recoveries were respectively 71, 73, and 80 per cent. With Bradford the cases in which he operated successfully amounted to 90 per cent."

But it was not alone in this operation that Dr. Bradford proved himself to be a surgeon of the highest order. In whatever cases he was called to operate he exhibited the same coolness and dexterity, the same fruitfulness in resources, and the same thorough knowledge of his art. It is understood that he meditated a work on operative surgery, but he was not permitted to carry out his purpose.

He is supposed to have performed over thirty ovariotomies, which established for him the same relationship towards ovariotomy that Benjamin Winslow Dudley occupied towards lithotomy. Like Dudley, although not the originator of ovariotomy, he was at that time its most successful exponent. He continued to practice in Augusta, where he was raised and not being ambitious preferred the charms of his "Piedmont" home to the allurments of professional life, which goes far towards explaining the comparative obscurity into which he has lapsed. Strange to say, unlike McDowell, Dudley and others, he is almost lost to the medical literature of Kentucky which is not altogether to the credit of his followers. He twice declined the chair of surgery and but a short time before his death was again urged to accept the same chair in Cincinnati.

He excised the os calcis and cuboid, "New York Medical Times," February, 1862. Most of his cases were reported in the "Cincinnati Lancet," "Gross' Surgery," "New York American Monthly," "American Chirurgical Review," "Louisville Semi-monthly News." His cases of ovariotomy have been published by Dr. E. R. Peaslee of New York.

Two articles by him are:

"Selections from a Report on Ovariotomy," read before the Kentucky State Medical Society, at its annual meeting at Louisville, April, 1857.

"Complete Rupture of the Perineum of Ten Years' Standing, Successfully Operated On." Reprinted from "Cincinnati Lancet and Obstetrics," 1869.

Yandell thus describes him: "In manners he was dignified, urbane, cordial and gentle. Of an imposing presence he was a man to attract notice and command respect in any circle; and his warm feelings, varied attainments, and social nature made him one of the most charming of companions."

He died on the thirty-first of October, 1871, in the fifty-third year of his age. The disease which terminated his life being abscess of the liver. A. S.

Lunsford Pitts Yandell. Trans. Ky. State Med. Society, 1873.
Collins. History of Kentucky, vol. ii.
American Biographical Enc. of Kentucky, J. M. Armstrong, Cincinnati, O.
Lewis Rogers, M. D. Presidential Address, Trans. Ky. State Med. Society, 1873.
Proc. Kentucky Med. Soc., Louisville, 1873 (L. P. Yandell).

Brainard, Daniel (1812–1866).

Daniel Brainard, one of Chicago's famous early surgeons, was the son of Jephai Brainard, farmer, of Western, Oneida County, New York, and born on May 15, 1812. As a boy he went to the local schools and afterwards studied medicine under Dr. Harold Pope, graduating in medicine from Jefferson College, Philadelphia in 1834. He at once began practice in Whitesboro but found it rather too small a place and travelled on to Chicago. The Hon. John Dean Caton of Chicago, a fellow student of Brainard's, gives a graphic account of Brainard, "wearing pretty seedy clothes" riding up to his office on a little Indian pony. He was nearly out of funds; what would the judge advise him to do? The Pottowatomies were gathering preparatory to starting a new camp west of the Mississippi, so the judge advised him to go to the camp, sell his pony, take a little table in his (Caton's) office and put his shingle by the side of the door.

Three years of work brought no great success, then a canal laborer fractured his thigh bone and before complete union had taken place came to Chicago on foot, so increasing the inflammation that the two doctors, Brainard and Goodhue, decided on amputation. Brainard operated, while Goodhue compressed the femoral artery and found it necessary to amputate at the hip-joint. The patient went on well for a month when a fatal secondary hemorrhage occurred. The postmortem showed a large bony neoplasm attached to the pelvic bones and surrounding the femoral artery. No doubt a number of such operations had been performed in this country, but history records only two or three at the most.

In 1839 Brainard went to Paris, working hard all the time, and on his return gave a course of medical lectures in St. Louis and soon after perfected his plans for the foundation of Rush Medical College.

When in Paris in 1852 with his wife he had permission to prosecute his studies on poisoned wounds by experimenting on reptiles in the Jardin des Plantes. At that time he was made an honorary member of the Société de Chirurgie, Paris, and of the Medical Society of the Canton of Geneva. In 1854 he gained the prize offered by the American Medical Association by his paper on "The Treatment of Ununited Fractures." Brainard, his biographers say, was a many-sided man, good both in botany and geology and his medical articles are masterpieces—terse, vigorous and lucid. He married Evelyn Sleight, and had four children, Daniel, Robert, Edwin and Julia.

A short time before his death, cholera had been in Chicago, but towards the middle of August it ceased. Those who had been alarmed returned to the city only to encounter a fresh outbreak in October when over a thousand died. Among those soon smitten was Brainard, who was attacked one day when leaving the college and died in a few hours. This happened on the tenth of October 1866. D. W.

Early Med. Chicago. J. H. Hyde, M. D.
Distinguished Phys. and Surgs. of Chicago. F. M. Sperry, Chicago.
Chicago Med. Jour. 1866, xxiii.
Chicago Med. Jour. and Exam., 1876, xxxiii (C. Comstock).

Brashear, Walter (1776–1860).

Walter Brashear, surgeon, was born in Prince George's County, Maryland, on the eleventh of February, 1776. Eight years after, his father, Nacy Brashear, emigrated to Kentucky and settled near the Long Lick within three miles of Shepardsville. Walter was the seventh son; therefore, according to the old idea, destined for the medical profession. After a limited education at schools then within the reach of his scanty means, he entered the literary department of the Transylvania University, where he acquired a good knowlege of the classics and in 1796 began to study medicine under Dr. Frederick Ridgely, of Lexington. Two years after he attended a course of lectures in the University of Pennsylvania and in

1799 sailed to China as surgeon to the ship Jane and while in China amputated a woman's breast, which was probably the first operation of the kind among the Celestials. Having learned the Chinese method of clarifying ginseng, he then, abandoning the profession for a time, devoted himself to mercantile pursuits, and proving ultimately unfortunate, in 1813 moved from Bardstown to Lexington where his career as a professional man may be said to commence.

It was previous to this period, however, while merchant and surgeon, he amputated the hip-joint in August, 1806, eighteen years prior to the much eulogized case of Dr. Mott of New York. The subject was a mulatto boy, seventeen years of age, belonging to the monks of St. Joseph of Bardstown. He had fracture of the thigh complicated with severe injury of the soft parts, but completely recovered, living in good health many years after. Dr. Brashear had no precedent to guide him in his hazardous undertaking, for the cases of Larrey and other army surgeons of Europe had occurred only a short time before and were then entirely unknown to the bold and adventurous backwoodsman. The operation was performed upon a very novel plan comprising two distinct stages: first the thigh was removed about its middle in the ordinary manner; then the remainder of the bone was separated from its muscular connection by a long incision on the outside of the limb and disarticulated at the socket.

The operation was done in the presence of Dr. Burr Harrison and Dr. John Goodtell, the boy's doctor. Brashear seemed to possess peculiar tact in treatment of diseases of the bones and joints, especially in cases of scrofulous enlargement, vulgarly called "white swelling." He was also very successful in the management of fractures of the skull, and had a set of trephining instruments constructed under his immediate direction in Philadelphia, which he regarded as much superior to those in ordinary use.

He practised medicine and surgery in Lexington from 1813 to 1817 with great success, and was the first in the West to change from the depleting to the stimulating plan of treatment in the so-called "cold plague," prevalent and very fatal during a portion of that period.

Being seized anew with the ginseng fever, Dr. Brashear left Kentucky, and in 1882 removed his family to the Parish of St. Mary, where he had previously held property.

Dr. Brashear had a mind of great originality and of infinite resources. Nature had evidently disigned him for a great man, and it is much to be regretted that he allowed himself to be drawn aside from his professional pursuits. He was successively doctor, merchant, legislator, lawyer, and naturalist.

Facts given by R. B. Brashear of St. Mary, Louisiana.
Am. Pract. and News, Louisville, 1894, vol. xvii.
Louisville Med. Monthly, 1894–5, part i.
Pioneer Surgery of Kentucky. Yandell.

Brickell, Daniel Warren (1824–1881).

D. W. Brickell, gynecologist, was born in Columbia, South Carolina, October, 1824, of Huguenot, German and Irish extraction. In 1844 he prepared to enter Yale but determining to study medicine, matriculated at the University of Pennsylvania under the private tutorship of Gerhard and received his diploma in 1847. He made a special study of gynecology, but applied for admission to the United States Navy, passing second among forty applicants. There being no vacancy for foreign service and having been assigned to duty at Pensacola, he resigned his commission as assistant surgeon and began to practice medicine in New Orleans in 1848. Teaching private classes in the Charity Hospital, he soon became known and was offered the professorial chair which he so long adorned. With Fenner, Choppin, Peniston, Pieton, Axson and others he organized the New Orleans School of Medicine. He was editor of the "New Orleans Medical News and Hospital Gazette," "Southern Journal

of Medical Sciences;" clinical teacher of the diseases of females, and lecturer on obstetrics in Bellevue. In 1862 he was a member of the committee of safety and did what he could for the defense of the city; on its surrender he entered the service of the confederacy and served in field and hospital until the close of the conflict. In 1873 Bellevue tendered him the chair of obstetrics, which after a short while he resigned, returning to the home of his affection and there he remained until his death in December, 1881.

A wise, cautious conservative physician. A bold dextrous and self-reliant surgeon, as lecturer, clear, cogent and terse; a successful journalist. In every phase of his multiform character, a valuable member of society.

J. G. R.

N. O. Med. and Surg. Jour., Feb., 1882.
St. Louis Courier of Med., 1882, vol. vii.

Briggs, William Thompson (1828–1894).

W. T. Briggs, surgeon and obstetrician, was the son of Dr. John McPherson and Harriet Morehead Briggs and born at Bowling Green, Kentucky on December 4, 1828. After studying with his father he graduated from the medical side of Transylvania University in 1850 and was made demonstrator of anatomy in the University of Nashville. He settled down at Nashville in partnership with Dr. John M. Watson.

As a surgeon he did good work; ligating the internal carotid artery for traumatic aneurysm, removing both upper jaws for gunshot injury; amputating at the hip-joint for elephantiasis arabum (the leg weighed 80 pounds), and he removed over 300 ovarian tumors.

His most important publications were:

"History of Surgery in Middle Tennessee."

"Enchondromatous Tumors of the Head, Forearm and Hand," 1871.

"Trephining in Epilepsy," 1869.

"The Surgical Treatment of Epilepsy," 1881.

He was one of the founders of the American Surgical Association and its president in 1885; member of the Southern Surgical and Gynecological Association; staff surgeon to the Nashville City Hospital; adjunct professor of anatomy in the University of Nashville, and there successively; professor of surgical anatomy and professor of obstetrics and diseases of women and children, and professor of surgery.

He married in 1851, Annie E., daughter of Samuel Stubbins, of Bowling Green, and had four children and the three sons became doctors. Charles S., Waldo, and Samuel S. D. W.

Nashville J. M. and S., 1890, n. s., vol. xlvi, also vol. lxxvi, 1894, also vol. lxvii, 1895 (J. H. Callender).

Brigham, Amariah (1798–1849).

Amariah Brigham, alienist, was born in New Marlborough, Berkshire County, Massachusetts December 26, 1798. His father, John Brigham, was a native of the place, a farmer by occupation and a descendant of Thomas Brigham, who came over from England and settled in Cambridge in 1640.

Amariah becoming fatherless when eleven years old he was adopted into the family of his uncle, Dr. Origin Brigham of Schoharie, New York, who meant to educate him for the medical profession. Within a short time, however, the boy was thrown upon his own resources by the death of this uncle, and at fourteen made his way to Albany and secured employment as clerk in a bookstore, where he had access to books and leisure to read them. After three years' service he returned to his mother's home in New Marlborough, where he spent a like period fitting himself for the medical profession, and had, besides, a year in New York in attendance at lectures. During this period he taught school through the winter months, and it is said of him in this connection that up to this time he had never studied English grammar but in order to qualify as teacher he mastered the subject in a

single day. Some time was spent as a medical student under Dr. E. C. Peet, of New Marlborough, and in 1820 he went to Dr. Plumb, of Canaan, Connecticut, with whom he began to practice, but in 1821 established himself in Enfield, Massachusetts, where he remained for two years, removing thence to Greenfield, where some seven years' practice brought him such financial success that he was able to spend a year in travel and study in Europe. He returned in 1829 with increased ambition and confidence, and soon selected Hartford, Connecticut, as a more prominent and lucrative field for his labors, settling there in April, 1831. His early residence in Hartford was marked by a controversy in which, in his solicitude for the mental and physical health of his fellow-citizens, he opposed the custom of revivals and protracted religious meetings, bringing upon himself a charge of scepticism and infidelity. He published his views on this subject in two small volumes entitled "Influence of Mental Cultivation on Health" (1832) and "Influence of Religion on the Health and Physical Welfare of Mankind" (1836).

About this time Asiatic cholera made its first appearance in America, when he made a careful study of the disease and published a treatise on "Epidemic Cholera."

1840 saw another work entitled "An Inquiry Concerning the Diseases and Functions of the Brain, the Spinal Cord and the Nerves," and in the same year he became a candidate for the office of superintendent of the retreat for the insane at Hartford, but having created prejudice by his stand against undue religious enthusiasm, and strong political views, his candidacy was opposed, but the appointment in the end conferred.

Dr. Brigham married, in 1833, Susan C. Root, daughter of Spencer Root, of Greenfield, Massachusetts. They had four children, one son and three daughters.

In 1842 he accepted the superintendency of the New York State Lunatic Asylum at Utica, opened in January of the following year, which he labored to make a model institution and to persuade the public of its curative rather than custodial function. To this end he sought to diffuse a more extended knowledge of mental diseases through the medium of his annual reports and popular lectures. For the same purpose he undertook the publication and editorship of the "American Journal of Insanity," at the time the only magazine of its kind. The first number appeared in July, 1844.

Dr. Brigham kept a journal relating to his health, and it is noted that from 1845 his condition caused him some uneasiness. In February, 1848, he was obliged to give up work temporarily, and spent two months in travel in the southern states. The benefit derived from this change was soon offset by great sorrow at the death of his son, which occurred in August, 1848; an affliction followed within a few weeks by the death of his mother. The following year is a story of struggle against failing health, and in August he was prostrated by an attack of dysentery to which he succumbed on September 8.

The Utica State Hospital is an enduring monument of his ability as an organizer, and his annual reports and editorial writings in the "Journal of Insanity" bear witness to his professional fitness for his pioneer service in the state of New York. It may be said without hesitation that his most prominent characteristic was a benevolent interest in his fellowmen. And his self-reliance and strong determination were traits which served equally to advance his own beneficent ambitions and the welfare of the afflicted in his care. Not at all covetous of personal popularity, he was governed in all his acts by conscience rather than by considerations of human respect. His last publication, "The Asylum Souvenir," dedicated to those who had been under his care, is a collection of aphorisms and maxims to aid in the restoration and preservation of health; among them he placed a quotation from Bryant which describes the purpose of his life and the manner of his death:

So live, that when thy summons comes to join
The innumerable caravan, that moves
To that mysterious realm, where each shall take
His chamber in the silent halls of death,
Thou go not like the quarry-slave at night,
Scourged to his dungeon, but sustain'd and sooth'd
By an unfaltering trust, approach thy grave,
Like one who draws the drapery of his couch
About him, and lies down to pleasant dreams.

E. K. H.

Memoir of Dr. Brigham, American Journal of Insanity, Utica, October, 1849. By Dr. C. B. Coventry, Utica, N. Y.

Brock, Hugh Workham (1830–1882).

The history of the medical profession of West Virginia would he incomplete without mention of Hugh W. Brock. The formal outline of such a man's life or even biographic detail, however suggestive, can ill represent the value of his rare and gifted personality and his scientific skill. Of American parentage, English-Scotch by descent, he was born January 5, 1830, at Blacksville, Virginia and educated at private schools and various academies. He began to study medicine with Dr. Charles McLane of Morgantown. In 1850 he entered Jefferson Medical College and two years later received his doctor's degree. Returning to Morgantown, he became a partner of Dr. McLane, and from that time until his death, April 24, 1898, he was a leading physician and surgeon in Morgantown, becoming more and more a recognized authority not only in West Virginia but in the neighbouring parts of Pennsylvania.

From his college days he was an enthusiastic student of anatomy. With him the scientific spirit once aroused, could never slumber. Chemical analysis, microscopic study of organic tissue, constant practice in dissections, busied even his lighter hours. If the material were not at hand, he ordered it from the great cities, and many a gruesome box lent skill and certainty to his surgical touch. Profoundly interested as he was in pathology and ready always to minister to the relief of the suffering, the more exact demands of scientific surgery still more strongly attracted him. As field surgeon with Sheridan at Winchester, he had gained valuable experience.

Active in the formation of the West Virginia Medical Society, he became its second president, for many years acted on its board of censors and constantly contributed to its transactions He was one of the early promoters of the State Historical Society and succeeded in effecting an initial organization in connection with the university. From the establishment of the West Virginia University he was special lecturer to the classes in anatomy, physiology and hygiene, for five years resident member of the Board of Regents and in 1878 accepted a professorship in the university with the intention of making this chair a nucleus for a future medical school. He was one of the early fellows of the American Surgical Association, and at the request of members his portrait was added to the collection of physicians and surgeons known as the Mütter Museum.

In 1878,he married Isabella, daughter of the Rev. Andrew Stevenson, D. D., of New York City, but left no children. His death was due to pneumonia contracted from physical exposure on professional duty. Hitherto no serious illness had hampered his activity.

"A useful life ended but not the memory of its beneficence." L. S. B.

Tr. Am. M. Assoc., Phila., 1882, vol. xxxiii. Tr. Med. Soc., W. Vir., 14-15 Sess., 1881-2.

Brodie, William (1823–1890).

William Brodie was born at Fawley Court, England, July 26, 1823, but in 1832 his father emigrated and settled on a farm twelve miles west of Rochester, New York. William had his general education at a district school and the Collegiate Institute at Brockport, New York. In 1847 he became a student with Dr. William Wilson of Pontiac, Michigan, and after one course of lectures in Berkshire Medical College at Pittsfield, Massachusetts, one in Vermont Medical College at Woodstock, Vermont,

and one in the College of Physicians and Surgeons of New York, he took his M. D from the latter in 1850, at once beginning practice in Detroit, Michigan. In 1857 he was secretary of the American Medical Association and its president in 1886. He was one of the editors of the "Peninsular Medical Journal," 1855–56–57; editor of "New Preparations," 1879–80; editor of the "Therapeutic Gazette" from 1880 to 1885; president of the Michigan State Medical Society, 1876; from 1850 to 1863 he was surgeon to St. Mary's Hospital; president of the Wayne County Medical Society (Detroit) from 1876 to 1890 excepting two years; a founder of the Detroit Medical Society (1852–59), and its president in 1855; professor of clinical medicine in the Michigan College of Medicine and for many years he was the motive power of the Wayne County Medical Society, maintaining a club feature of refreshments and social discussion at all meetings, so compacting the members. Dr. Brodie was the first surgeon to volunteer from Detroit during the Civil War and was commissioned surgeon of the First Regiment, Michigan Volunteers, and took charge of the wounded during the first battle of Bull Run. Later he was appointed brigade surgeon with Gen. Fremont. His friends, before antiseptic surgery was introduced, used to wonder that Dr. Brodie's surgical cases rarely suppurated. The fact was, from his natural neatness of person, clothes and surroundings, including instruments, he was aseptic all the time. In his prime Dr. Brodie was about five feet ten inches tall, with reddish-gray hair, closely cut whiskers, of medium weight, nervous manner, energetic movement, always pushing for some person or thing; quite ready to fight obstacles opposing his plans.

In November, 1851, he married Jane Whitfield, daughter of James Whitfield, England, by whom he had two sons and one daughter. One son, Benjamin P., became a doctor.

Dr. William Brodie died at his home in Detroit, July 30, 1890, from the results of vascular degeneration.

Partial list of writings by Dr. William Brodie:

"Drainage." ("Transactions of the American Medical Association," vol. xv.)

"Typhus." ("Transactions of the American Medical Association," vol. v.)

"Sulphur in Skin Diseases." ("Transactions of the American Medical Association," vol. xxxi.)

"Traumatic Tetanus." (Detroit Review of Medicine and Pharmacy," vol. ii.)

"Strangulated Hernia from Imperfect Descent of the Testicles in the Right Side." ("Peninsular Medical Journal, vol. i.)

"Observations on Dropsy." ("Peninsular Medical Journal," vol. i.)

"Medullary Cancer of the Knee." ("Peninsular Medical Journal," vol. i.)

"Michigan Itch." ("Peninsular Medical Journal," vol. i.

"Melanotic Deposits." ("Peninsular Medical Journal," vol. iii.)

"Strangulated Hernia of Right Side, Complicated with Descent of the Ovary—Operation—Cure." ("Peninsular Medical Journal," vol. iv.)

"Strangulated Serotal Hernia Complicated with Hydrocele." ("Peninsular Medical Journal," vol. iv.)

"Operations Preceded by Railway Injuries." ("Peninsular Medical Journal," vol. iv.)

"Simple Abscess of Bone with Enlargement." ("The Peninsular and Independent Medical Journal," vol. i.)

"Dissolution of the Vitreous Humor." ("Peninsular Medical Journal," vol. v.)

"Sanguineous Tumor of the Scalp." ("Transactions of the Michigan State Medical Society," 1883.) L. C.

Biographical Sketches of Early Pioneers of Detroit, Mich. Fred. Carlisle. O. S. Gully & Bornman, 1890.
Farmer's History of Detroit, 1884.
Representative Men in Mich.

Brooks, John (1752–1825).

John Brooks, colonel in the Continental Army, governor of Massachusetts, presi-

dent of the Massachusetts Medical Society, was born in Medford, Massachusetts in May, 1752. The son of a farmer, he received his education at the town school and at the age of fourteen was apprenticed to Dr. Simon Tufts, Jr., of Medford, for seven years, according to the custom of the day. At school he was the companion and friend of Count Rumford. Dr. Brooks at the termination of apprenticeship began to practice in the neighboring town of Reading.

He interested himself in raising a company of minute men in his town, and was chosen commander. On the news of the Battle of Lexington he marched to the front at once with his company and assisted in harrassing the British on their retreat. He was actively engaged in the military operations of the Revolution, with the rank of colonel, and was designated by Gen. Washington for the command of a brigade at its close.

Settling in Medford after the war was over he engaged in active practice, and was one of the early members of the Massachusetts Medical Society and its president from 1823 to the time of his death in 1825, preceding James Jackson in this office.

In 1816 he was elected Governor of the Commonwealth and served seven years in that capacity. Harvard College conferred her honorary A. M. upon him in 1787, and Yale the same in 1781, and he received the A. M. from Harvard College in 1810, also LL. D. in 1817.

He was a member of the Society of the Cincinnati, the Academy of Arts and Sciences.

He died March 1, 1825, in his seventy-third year. His wife, Lucy Smith, of Medford, died early in life leaving two sons and a daughter. One son was a major of artillery in the United States Army and the other, a lieutenant in the navy, was killed in the battle of Lake Erie.

As a physician Dr. Brooks was a good diagnostician and conservative in treatment. His anniversary oration before the Massachusetts Medical Society in 1808 is preserved in its transactions, with the title, "Pneumonic Inflammation."

W. L. B.

A Memoir by John Dixwell, M. D., Mass. Med. Com., vol. iv, 1829.
History of Harvard Med. School. T. F. Harrington.
A Military Jour. during the Rev. War, from 1775 to 1783. James Thacher, M. D., Boston, 1823.
The Early Physicians of Medford. C. M. Green, 1898.

Brown, Bedford (1825–1897).

A physician and army surgeon, he was the son of the Hon. Bedford Brown, United States senator from North Carolina from 1828 to 1841, and was born in Caswell County, North Carolina, January 17, 1825. His mother's maiden name was Mary L. Glenn.

In 1845 he studied under Dr. Benjamin W. Dudley, of Lexington, Kentucky; attended two courses of lectures in the medical department of the Transylvanian University, and graduated in 1848. Two years later he took a course of lectures at the Jefferson School in Philadelphia, and graduated from that institution.

Dr. Brown was a member of the Southern Surgical and Gynecological association of which he was vice-president in 1893, and one of its judicial council from 1894; a member of the Board of Medical Examiners of Virginia from 1885 to 1894, and of the Medical Society of Virginia, of which he was president in 1886.

After graduation he practised three or four years in Virginia, and about 1855 returned to North Carolina and practised at Yanceyville until the outbreak of the Civil War. At its close he settled in Alexandria, Virginia, where he practised until death.

In the spring of 1861 he was appointed chief surgeon in the camp of instruction at Weldon, North Carolina, then assigned to the troops sent from Richmond, Virginia, to northwestern Virginia and eventually served during the rest of the war as inspector of hospitals and camps.

He always took an active interest in professional affairs. He was also prominent in the Council of Confederate Veterans, and served as surgeon of the R. E. Lee Camp, of Alexandria, from its organization.

Dr. Brown performed many capital operations during his military service, and after the war had a large practice.

He married, in 1852, Mary E. Simpson of Washington, District of Columbia, and had three children, two sons and a daughter. William Bedford who became a physician in New York City, was one of the sons.

During the last months of his life he was troubled with chronic cystitis, for the relief of which an operation was performed by the late Dr. Hunter McGuire, but failing to rally, he died at his home in Alexandria, September 13, 1897.

Among his contributions to medical literature are found:

"Epidemic Typhoid Pneumonia." ("American Journal of Medical Sciences," 1858.)

"Adynamic Remittent Fever Treated with Nitric Acid." (Ibid., 1859.)

"Extensive Injury of the Frontal Bone, Etc., with Recovery" (Ibid., 1860.)

"Epidemic Cerebrospinal Meningitis." ("Richmond Medical Journal," 1866.)

"Reminiscences of Personal Experience in the History of Diphtheria." ("Transactions of the Medical Society of Virginia," 1883.)

The "Transactions of the Medical Society of Virginia," from 1879 to the year of his death, contain many papers read before the society by Dr. Brown, too many indeed to enumerate. Several also are to be found in the "Transactions of the Southern Surgical and Gynecological Association," many of these of great historical interest. R. M. S.

Photographs of the doctor are in the possession of his family.
Trans. Med. Soc. of Va., 1898.

Brown, Buckminster (1819–1891).

Buckminster Brown, orthopedist, was the son of Dr. John Ball Brown and grandson of Dr. John Warren. He was born in Boston, July 13, 1819. His father had introduced subcutaneous tenotomy in England and managed a private orthopedic infirmary where patients came for treatment from all over the country. Buckminster was to follow in his father's footsteps, so when he had received his M. D. from the Harvard Medical School in 1844 he went abroad to study the new specialty of orthopedics in London under J. Little, in Paris under Guérin and Bouvier, and in Germany under Stromeyer. On his return to Boston in 1846 he established himself in general practice, in the course of a few years gravitating to the exclusive practice of orthopedics. He was associated with his father in the infirmary and was surgeon to the House of the Good Samaritan for nineteen years. Although handicapped by poor health, having had Pott's disease when a boy, and in consequence leading a shut-in life, he carried on, in spite of his deformity, an arduous and exacting practice for fifty years. Patience characterized his work, his favorite quotation being "Genius is the talent for taking pains." Of a refined and sensitive nature he shrank from publicity devoting himself to his patients and his books. Dr. C. C. Foster, his assistant for ten years, said of him: "His mechanical ability was very great and his surgical dexterity equally remarkable." His operating and his whole handling of a case were characterized by a certain delicacy and finish that I have seen in no other man's work." Also, "His sense of touch was also very keen and he learned much through the ends of his fingers. To watch him as he manipulated a contracted tendon or a carious spine was an object lesson."

He published, with his father, in 1850, "Reports of Cases Treated at the Boston Orthopedic Institution." In 1853 appeared "A Case of Extensive Disease of the Cervical Vertebræ," and in 1859 he made an address, "Ectopia Cordis," before the Suffolk District Medical Society. In 1847 appeared "The Treatment and Cure of Cretins and Idiots" and an essay

on the "Pathology and Physiological Effects of Ethereal Inhalation." His best work was in club-foot, where his persistency with the clumsy methods of the day enabled him to obtain success which less painstaking surgeons did not gain.

Dr. Brown married, in May, 1864, Sarah Alma Newcomb, daughter of Joseph Warren Newcomb, and great granddaughter of Gen. Joseph Warren.

He died at Auburndale, Massachusetts, December 26, 1891 leaving in his will his collection of specimens to the Warren Museum in the Harvard Medical School, and a large sum of money to found the first professorship of orthopedic surgery in Harvard University. He was an active member of the American Orthopedic Association and the Boston Society for Medical Improvement.

W. L. B.

N. Y. Medical Journal, 1892, vol. lv, p. 272.
J. Ridlon, M. D.
Trans.Amer. Orthop. Asso., 1892, Phil., 1893.
C. C. Foster, M. D.
Eminent Amer. Physicians and Surgeons.
R. French Stone, 1894.
Personal Communications, E. H. Bradford, M. D.
Bos. Med. and Surg. Jour., vol. cxxvi.
Biograph. Encyclopedia of Mass.

Brown, Gustavus (1689–1765).

He was the first of his family to arrive in Maryland, and was born at Dalkeith, near Edinburgh, Scotland, on April 10. 1689, His parents were Gustavus and Jane Mitchelson Brown, and his paternal grandfather was the Rev. Richard Brown, of the established Church of England, a graduate of the University of St. Andrews and minister to Salton in Scotland in the reign of Charles I. The name was formerly spelled Broun.

Nothing is known of Dr. Brown's education. He came to Maryland in May, 1708, and is said to have been a surgeon's mate on board an English vessel. While his ship lay at anchor, he went ashore, but before he could return a storm arose which made it necessary for the ship to weigh anchor. Thus left, with nothing but the clothes on his back, he made himself known, and informed the planters of his willingness to serve them. He soon gained their respect, married in 1710 a lady of wealth, and acquired a large practice. Many years later he went to Scotland to live, but his wife not liking the country, he returned to Maryland in 1734.

Dr. Brown's place, called "Rich Hill" was four miles from Port Tobacco, in Charles County. He was prominent in the affairs of the state. He was one of seven trustees appointed by the General Assembly to select teachers for the Province.

He had a number ot medical students, two of whom, Dr. Michael Wallace, of King George County, Virginia, and Dr. John Key, of St. Mary's County, Maryland, became his sons-in-law. His nine daughters, known as "the nine graces," married men of prominence. Dr. Brown showed remarkable shrewdness by requiring all their husbands to secure upon them, at marriage, the property which he gave as dower.

Dr. Michael Wallace told that on one occasion Dr. Brown was sent for in haste to pay a professional visit in the family of a Mr. H., a wealthy citizen of King George County, Virginia, who was very slow in paying his physician but very ostentatious in displaying his wealth. In leaving the patient's room it was necessary for Dr. Brown to pass through the dining-room where Mr. H. was entertaining some guests at dinner. As Dr. Brown entered the room, a servant bearing a silver salver on which stood two silver goblets filled with gold pieces, stepped up to him and said: "Dr. Brown, master wishes you to take out your fee." It was winter and Dr. Brown wore his overcoat. Taking one of the goblets, he quietly emptied it into one pocket, and the second goblet into another, and saying to the servant: "Tell your master I highly appreciate his liberality;" he mounted his horse and returned home.

Dr. Brown died at Rich Hill, suddenly, of apoplexy, in April, 1765. In

his will he speaks of himself as "Practitioner in Medicines and Laird of Mainside and House Byers in Scotland."

Dr. Brown married first, in 1710, Frances Fowke, daughter of Col. Gerard Fowke, of Charles County, by whom he had twelve children, of whom one son and seven daughters survived their mother. She died November 8, 1744. His second wife was Mrs. Margaret Black Boyd, a widow, and by her he had a son and a daughter.

E. F. C.

Brown, Gustavus, Jr. (1744–1801).

This physician was the grandson of the emigrant Dr. Gustavus Brown, Sr. He was the son of Rev. Richard Brown, a minister of the Anglican Church, and a nephew of Dr. Gustavus Richard Brown. He was born at Morningside, near Edinburgh, Scotland in 1744, and after studying medicine at that university for seven years, received his M. D. in 1770. His name appears in the catalogue of graduates as "Brown, Gust. Brit. De Cynanche Phlogistica, 1770." He came to America shortly after in company with several of his fellow students, and settled in St. Mary's County, Maryland. In 1782 he attended one of these, Dr. Ireland, and the illness proving fatal, married his widow. This lady was the only child of Col. John Reeder, an officer of the Revolution, and of a Huguenot family settled in Maryland since 1736. Her estate was called "Summerseat," and she is said to have been very rich. There the doctor settled down and practised until his death, July 3, 1801, at the age of fifty-six. He had no children.

Dr. Brown practised with great success and had the honor of being called to attend Gen. Washington by Drs. Craik, Dick and Gustavus R. Brown. Receiving the summons at midnight, he mounted his horse and hastened towards Mt. Vernon, but on reaching Long Bridge he learned of the patient's death and turned back. The hastily-written summons, together with other relics, was destroyed by fire at the old homestead in 1874.

To him, through his father, descended by entail the Scotch estate. His remains were interred in the Reeder burial ground at Westfield, St. Mary's county, and his tombstone bears an inscription highly commendatory. E. F. C.

Brown, Gustavus Richard (1747–1804).

A son of Dr. Gustavus Brown, by his second marriage, he was born, according to his own statement, at his father's seat near Port Tobacco, Maryland October 17, 1747, and educated at Edinburgh University where he took his M. D. in 1768, his thesis being "De Ortu Animalium Caloris." Among his fellow students was Dr. Benjamin Rush, who said that he was second to no student in the university at that period.

After "walking" the London hospitals for several months, he returned to Maryland, stopping on the way for some time at the Madeira Islands, and bringing thence a large collection of rare plants and flowers. He settled to practise at Port Tobacco. During the Revolution he was a firm and active patriot. He was a county judge in 1776 to 1777. In the spring of the former year, in company with his nephew, Dr. James Wallace, he established a hospital for the inoculation of small-pox near the Potomac river, on the Virginia side. He was a member of the State Convention, which was called to ratify the constitution of the national government in 1788.

Like his father, Dr. Brown was a man of fine personal appearance, being over six feet and well proportioned. His manners were pleasant and affable, and he was a well-read physician and fine classical scholar. He was particularly fond of botany and cultivated with great care and success an extensive garden of rare flowers and plants, not for their beauty alone, but for their medicinal qualities. It was the most extensive and artistic collection in the state, occupying a sloping lawn of some ten acres, with three terraces and interlaced with serpentine

walks, bordered with box-wood, savrin, juniper and other rare evergreens. His collection had been gathered from all parts of the world and his home took its name from his rare and extensive collection of roses. He provided means of irrigation for the summer, and a large hot-house for propagating plants and for the care of the more delicate during the winter. Dr. Hosack is said to have been a frequent visitor to Brown during the former's residence in Alexandria, Virginia, about 1791, and to have thus gained the idea for the public botanical garden which he afterwards founded in New York City.

Brown was a favorite preceptor with medical students from the adjoining parts of Maryland and Virginia. From the close of the Revolution to his death his office is said to have been filled with them.

In his practice he is said to have used but few remedies, but those of the most efficient character.

Both his sons became physicians. An interesting letter from Dr. Brown to Dr. Craik is published in "Lossing's. History, Rec. 11, 506, quoted in "Hayden," in which the former acknowledges that they were wrong in bleeding Washington so much.

Dr. Brown died at his house, "Rose Hill," September 30, 1804, aged fifty-six. He was in active practice up to his last short illness.

On May 15, 1769, Dr. Brown married Miss Margaret Graham, of Prince William County, Virginia, and had four children, two daughters and two sons.

E. F. C.

Brown, Harvey E. (1840–1889).

Harvey E. Brown, surgeon of the United States Army, was the son of Col. Harvey Brown of the fifth United States Artillery. After graduating in medicine at the University of New York he was appointed assistant surgeon to the seventieth New York Volunteer Regiment and was transferred to the regular army April 13, 1863. He rendered notable service during the Civil War. In 1881 he was promoted to the rank of major. During the last years of his life he was employed in the surgeon-general's office at Washington. Dr. Brown was the author of "The Medical Department of the United States Army from 1775 to 1873." He died at Jackson Barracks, near New Orleans August 20, 1889. A. A.

Med. News, Phila., 1889, lv.

Brown, John Ball (1784–1862).

John Ball Brown, pioneer orthopedist of America, son of Dr. Jabez Brown of Wilmington, Massachusetts, was born in that town October 20, 1784.

Graduating from Brown University in 1806, he studied medicine with Dr. Augustus Holyoke and Dr. Moses Little at Salem and began practice in Dorchester in 1809 but returned to Boston in 1812, shortly after (1814) marrying the third daughter of Dr. John Warren.

He was appointed surgeon and physician to the Boston Almshouse in 1817 and associate surgeon to the Massachusetts General Hospital when that institution was organized, while in later years he became consulting surgeon.

In 1838 Dr. Brown began to devote his attention especially to orthopedics, a new specialty, being the first to introduce it to this country. He was the first in America to do subcutaneous tenotomy and had a wide reputation in the treatment of wry-neck, club-foot and spinal curvature, patients seeking his aid from places so remote as the Sandwich Islands.

Dr. Brown was said to have great mechanical ingenuity in the invention and application of special surgical apparatus. He was assiduous in following up his patients, who were treated for the most part in his orthopedic infirmary, the first of its sort in Boston, and was an occasional writer for the medical journals on subjects connected with his specialty. In 1839 he republished from the "Boston Medical and Surgical Journal," "Remarks on the Operation for the Cure of Club-feet, with Cases."

He died May 14, 1862, aged seventy-nine years, being succeeded in the practice of orthopedics in Boston by his son, Buckminister Brown. W. L. B.

Obit. Com. Mass. Med. Society, 1861–1866, vol. x.
Com. Mass. Med. Soc., vol. x, 1861–1866.

Brown, Samuel (1769–1830).

A pioneer inoculator for small-pox. and one of the first two professors of the Transylvania University Medical Department. Samuel Brown was born on January 30, 1769, in Augusta, now Rockbridge County, Virginia.

He was the son of the Rev. John Brown, Presbyterian minister, and Margaret Preston, the second daughter of John and Elizabeth Patton. Samuel was the third of four distinguished brothers, Hon. John Brown, Hon. James Brown, and Dr. Preston Brown.

His early education he received from his father, who founded a grammar school for the education of his sons and other boys in the neighborhood. He went eventually to Dickinson College in Pennsylvania, where he took his bachelor of arts degree.

He immediately began to study medicine under his brother-in-law, Dr. Humphreys, at Staunton, Virginia. After several months he went to Philadelphia and became a private pupil of Dr. Rush but did not remain there long but went to Edinburgh where he had as classmates Dr. Hosack Dr. Davidge, Ephraim McDowell and other Americans. Not having fulfilled certain requirements of the Edinburgh University, he did not graduate there but took his M. D. from Aberdeen University. On returning to America he began to practice at Bladensburg near what is now the city of Washington. Although he prospered, a strong desire to be with his family is the reason given for his leaving the shores of the Potomac in 1797 and joining his brother, James Brown, who began the practice of law in Lexington, Kentucky.

In 1804 the health of James Brown compelled him to seek a milder climate and he chose New Orleans. Dr. Brown, unable to separate himself from his brother, descended the Mississippi in 1806 and entered upon practice in New Orleans, where, after three years, he married Katherine Percy, abandoning New Orleans and settling upon a plantation at Fort Adams, a short distance from Natchez, practically giving up medicine.

His wife died a few years after this, leaving him three children, the last of whom followed its mother to the grave.

This made another change in the career of Dr. Brown. He left Natchez and with his negroes moved to a plantation near Huntsville, Alabama. His energies were now directed for a time to educating his children until they reached the age for school. He also co-operated with Dr. Daniel Drake with a view to establish a medical school in Cincinnati. Dr. Drake had obtained a charter from the state of Ohio in 1819. About this time the trustees of the Transylvania University offered Dr. Brown the chair of practice, which he accepted. This was the reorganization of the medical department of the Transylvania University as he and Dr. Frederick Ridgly had been appointed in 1799, Brown as professor of chemistry, anatomy and surgery.

In the spring of 1825 he tendered his resignation in favor of his friend, Dr. Daniel Drake, who was unanimously appointed his successor.

In 1799 he used his influence by uniting with his brothers John and James and Mr. Henry Clay in their endeavor to introduce a clause into the new state constitution respecting the gradual emancipation of slaves. These efforts were not crowned with success and ever afterwards he shunned politics.

According to Lunsford P. Yandell, Sr., the first medical paper from the pen of a Kentucky physician was one written by him for the "American Medical Repository" in June, 1799; its title, "A Curious Instance of Disease in which the Feeling of the Patient

was Abolished while the Power of Motion remained Unimpaired." In 1797, two years prior to Yandell's date, Brown wrote "An Inaugural Dissertation on the Bilious Malignant Fever," Manning and Loving, Boston. He was an industrious writer but composed no elaborate papers and his letters to scientific men, which were very numerous, were more interesting than his medical papers. On the authority of Micheaux in Rank's "History of Lexington," he is credited with being the first American physician to practise vaccination. This, it is stated, was carried on before the first experiments with it were made in New York or Philadelphia. It is said that up to 1802 he had vaccinated many persons. In the interest of history, we feel it proper to add that according to Joseph M. Toner, M. D., "Contributions to the Annals of Medical Progress and Education in the United States before and during the War of Independence," that vaccination was introduced into South Carolina in February, 1802, by Dr. David Ramsay.

The crowning effort of his life was the organization of a society with branches in other cities, whose members pledged themselves to ideals similar to those of Dr. Brown, a society styled "The Kappa Lambda Association of Hippocrates." Its members were elected by unanimous vote and on the exaction of a promise similar to that of the Hippocratic oath. A journal was put forth in 1825 in Philadelphia under the auspices of this association, under the name of the "North American Medical and Surgical Journal."

He was active in the organization of societies for the discussion of questions of science and literature, and probably the first to make known to his countrymen the discovery of the art of lithography in Europe, and the first to suggest a process for clarifying ginseng, rendering it fit for the Chinese market. He also made some valuable suggestions about the distillation of spirits.

His contribution to "The Transactions of the American Philosophical Society" consisted of a paper under the title of "A Description of a Cave on Crooked Creek, with Observations on Nitre and Gunpowder." His death was caused by apoplexy in the third attack of which he died on the twelfth of January, 1830, in the sixty-second year of his age. He died at the residence of Col. Thomas G. Percy, near Huntsville, Alabama. A. S.

His best portrait is by Jouett at Frankfort, Ky.
Samuel Brown, by Dr. R. LaRoche. "Lives of Eminent American Physicians and Surgeons of the Nineteenth Century," Samuel D. Gross.
Filson Club Publication No. 20, Medical Literature of Ky., by L. P. Yandell, Sr.
Transactions of the Ky. State Medical Society, 1874.

Brown-Sequard, Charles Edward (1817–1894).

This great and original "savant," cosmopolite physiologist and physician who taught in England, America and France, Charles Edward Brown-Séquard was born at Port Louis, Mauritius April 8, 1817, the posthumous son of Edward Brown (a Philadelphian), captain in the merchant service. His mother's family, the Séquards, had been for some years settled in the Isle of France and as his father was Irish the lad inherited a large amount of vivacity, and, arguing from the seen, it is easy to imagine his work as clerk in a store was soon thrown up. His mother in 1838 went to Paris and kept her son at his medical studies by taking in some students also Mauritians, but she died soon after and Brown affixed her maiden name to his own. In 1846 he was admitted M. D. of Paris with a thesis on "Researches and Experiments on the Physiology of the Spinal Cord." In 1849 he was auxiliary physician under Baron Larrey at the military hospital of Gros Caillou during an outbreak of cholera.

During these years he had a hard fight with poverty but devoted himself to physiology and on the foundation of the Société de Biologie became one of the four secretaries.

The political troubles of 1852 made him fear the consequences of his own republicanism and he sailed for New York where he taught French, attended obstetric cases at $5.00 each, and married an American woman, with whom and a baby son he returned to France the year following, only to stay one year, for he seems to have had touches of travel fever and went to Mauritius to practice. There was just then an outbreak of cholera and Brown-Séquard did fine service there.

His next journey, in 1855, was as long as the title he was asked to assume—professor of the institutes of medicine and medical jurisprudence at the Virginia Medical College in Richmond, Virginia.

But the duties were uncongenial, or fortune was tossing him about until she had landed him in his fittest position. At any rate he was soon back in Paris, where he rented with Charles Robin a small laboratory in the Rue St. Jacques and taught students who afterwards did honor to their master. In 1858 his lectures on the physiology and pathology of the central nervous system attracted universal attention and when next year the National Hospital for the Paralyzed and Epileptic was opened in Queen Square, London, he was chosen physician. Four years of this and special practice wore him out and he came again to America; this time as professor of physiology and pathology of the nervous system at Harvard. Four years later his first wife, Ellen Fletcher, a niece of Daniel Webster, died leaving him one son and he was once more in his beloved Paris where, as co-editor with Vulpian and Charcot of the "Archives de Physiologie Normale et Pathologique," and as professor of comparative and experimental pathology in the faculty of medicine he achieved a brilliant success, yet in 1872 he was again in America, settled as a New York physician and married to another American, Maria R. Carlisle of Cincinnati, who died in 1874, by whom he had one daughter. Three years later he left for London, then on to Paris and Geneva to be in the last town professor of physiology, and marrying there his third wife, an English woman, Mrs. Elizabeth Emma Dakin, widow of T. Doherty, an artist. She died in 1894, and he only survived her three months and died of an apoplectic seizure April 1, 1894, in his flat, 19 Rue Francois Premier, Paris.

In 1878, when his friend and rival Claude Bernard died, Brown-Séquard succeeded him as professor of experimental medicine in the College of France, but the honor he coveted most, the presidency of the Société de Biologie, fell to him in 1887.

All his life he devoted himself to the experimental study of the most recondite parts of physiology. Money and position, a professorship in Virginia, a fashionable practice in London, and assured income in New York were reckoned as nothing when found incompatible with his life's work. Horace Bianchon, writing of him, says, "his bronzed face, long white hair, and feverish alertness gave him the appearance of an old imaginative Canadian." His mind was always working and inventing and notes were jotted down haphazard on newspaper wrappers, margins of books, and old envelopes of which he had a whole cupboardful in his room.

"He was chiefly concerned with the properties and functions of the nervous system. He traced the origin of the sympathetic nerve fibers into the spinal cord and was the first to show that epilepsy could be produced experimentally in guinea-pigs. With Claude Bernard he shares the honor of demonstrating the existence of vasomotor nerves. From June 1889 he was much interested in the secretion of certain glands; his conclusions, not generally accepted, will probably be found to contain the germs of further advances in physiology."

His chief characteristic was entire devotion to science, the warmth of his affections, his almost superhuman activity. Money, honors, positions counted as

nothing to him except as a means to develop science and assist young scientists. The laboratory had more interest than the consulting-room, and it was only when in need of funds to carry on experiments that he attended patients. He was forever rushing hither and thither, to the United States, to France, to England, back to the Mauritius, writing, lecturing, experimenting, making warm friends everywhere, notably Agassiz, Sumner, Longfellow in the States, often fighting for his theories against unbelief and opposition, at other times lifted high on the tide of popularity, as when for instance he helped to stamp out an epidemic of cholera in Port Louis and his compatriots presented him with a gold medal in token of their gratitude. Owing to his strong opinions he went through many upheavals that accounted for his restless and unsettled life.

His writings, of which there is no full list, are chiefly in the "Journal de la Physiologie Normale de l'Homme et des Animaux;" "Bulletin de la Soeiété de Biologie;" "Archives de Physiologie Normal et Pathologique;" "Archives of Scientific and Practical Medicine and Surgery;" "The Philadelphia Medical Examiner," 1853, and in London and New York medical journals. In 1858 he established at his own cost the "Journal de Physiologie" and in 1861, elected fellow of the Royal Society, delivered the Croonian lecture on the "Relation between Muscular Irritability, Cadaveric Rigidity and Putrefaction." The "Archives of Scientific and Practical Medicine," in which he published his first article on Inhibition," was founded by him in 1874.

In 1856 appeared articles on the functions of suprarenal capsules. A series of papers which came out in the "Boston Medical Journal," 1857, were published in a book entitled "Researches in Epilepsy, its Artificial Production in Animals, its Etiology, its Nature, and its Treatment in Man."

A course of "Lectures on the Physiology and Pathology of the Central Nervous System," given at the Royal College of Surgeons of England, May, 1858, were published in Philadelphia, 1860, after appearing in "The Lancet" in London.

Lectures on the "Diagnosis and Treatment of the Prineipal Forms of Paralysis of the Lower Extremities," also lectures on the "Diagnosis and Treatment of the Various Forms of Paralytic, Convulsive and Mental Affections considered as Effects of Morbid Alternations of the Blood or of the Brain or of Other Organs," being a combination of the 'Gulstonian Lectures" delivered at the Royal College of Physicians, London, 1861, and clinical lectures delivered at the National Hospital for the Paralyzed and Epileptic. In 1868 there appeared in Philadelphia "Lectures on the Diagnosis and Treatment of Functional Nervous Affections."

During 1875–76 he delivered lectures in Dublin and other places on "Anesthesia, Amaurosis and Aphasia caused by Lesions of the Brain," and at the Royal College of Physicians, London, on the "Pathological Physiology of the Brain."

In 1878 he began his course at the College de France. From then to the time of his death the "Archives de Physiologie," the reports of the "Académie des Sciences," and of the "Société de Biologie" contained the results of his researches "On the Physiology of the Blood-corpuscles," "on Cadaveric Rigidity" and "Museular Contractions," "On the Influence of Carbonic Acid" and "On the Noxious Effects of Expired Air, Effects Distinct from Those of Carbonic Acid."

In 1889 Brown-Séquard began his experiments "on the internal secretion of glands," and descriptions of his new therapeutic method of subcutaneous injections of organic liquids appeared in the above-mentioned journals and reports.

Among many other papers one may eite the article "Epilepsy" in Quain's "Dictionary of Medicine," and an article in the "Forum," New York, 1892, on "Have we Two Brains or One?"

Many honors and appointments came to him. He was one time lecturer before the Royal College of Surgeons of England on the physiology and pathology of the nervous system and Gulstonian lecturer before the Royal College of Physicians, London, and fellow of the faculty of physicians and surgeons, Glasgow. He received the honorary LL. D. from Cambridge University, England, the Lacaze prize from the French Académie des Sciences, and from the same body in 1885 the 'grand prix biennal' which elected him member in place of Vulpian. The Royal College of Physicians, London, presented him with the Baly medal in 1886.

From a personal communication from his daughter Mrs. Bolton McCausland.
Dr. D'Arcy Powell in the Dict. of Nat. Biog.
Archives de Physiologie Normale et Pathologique, Dr. E. Gley, 5th series, 1891, vol vi.
Comptes Rendus de la Société de Biol., 1894.
Nos Grands Medécins. H. Bianchon, 1891.
Lancet, 1894, vol. i, p. 1391.
Monsieur Berthelot. The Life of Brown-Séquard. Paper read before the Acad. des Sciences, Dec. 19, 1898.
There is a portrait in the town hall, St. Louis, Mauritius by Serudat de Belzian.

Brown, William, M. D. (17— –1792).

William Brown, an army doctor, was born in Scotland, probably Haddingtonshire, where his grandfather had left an entailed estate. William was the grandson of Dr. Gustavus Brown, Sr., of Rich Hills, near Port Tobacco, Maryland and the son of the Rev. Richard Brown.

He graduated M. D. in 1770 from the University of Edinburgh, where he was a student, the subject of his thesis being "De Viribus Atmosphæræ."

Settling in Alexandria upon his return home, he soon attained a high professional rank, and being a man of culture and polished manners, became intimate with many of the leading men of the day, and among them, Washington, Jefferson and Madison.

At the beginning of the Revolution he entered the service of his country as surgeon to Col. Woodford's regiment of Virginia troops, but on the twentieth of September, 1776, was elected assistant to Dr. Shippen, a chief physician of the Continental Army. Upon the recommendation of Dr. Hugh Mercer, he was elected by Congress, February 7, 1778, to be physician-general of the middle department in place of Dr. Rush, which position he resigned on July 21, 1780, returning to private practice.

In resigning he forfeited his right to pay in bounty lands, but so highly were his services esteemed, the General Assembly of Virginia made an exception in his case and decreed that he should receive the pay due him, and also that he should be entitled to the bounty of land allowed surgeons of regiments raised under the authority of the state (Hening's "Statutes," vol. vi).

Dr. Brown married Miss Catherine Scott of the District of Columbia, and had a large family. His son, Gustavus Alexander, became a physician and practised in Alexandria for many years.

Dr. Brown died in January, 1792 and was buried at Preston, the Alexander estate, near Alexandria, Virginia.

His chief writing was a "Pharmacopœia for the Use of Army Hospitals," a copy of which is now in the Toner collection in the Library of Congress. R. M. S.

Med. Men of the Revolution, Dr. J. M. Toner.

Browne, John Mills (1831–1894).

He was born in Hinsdale, New Hampshire, and after graduating at the Harvard Medical School in 1852 John Hills Browne, surgeon-general of the United States Navy entered the navy as assistant surgeon. From 1853 to 1858 he served on the Pacific coast, and was then promoted to the rank of surgeon and assigned to the United States ship Kearsarge. He was an eye-witness of the famous battle between the Kearsarge and the Alabama off the coast of France July 17, 1864. At the close of the war Browne was put in charge of Mare Island Naval Hospital near San Francisco. In 1878 he was commissioned medical director and transferred to Washington. Browne represented the medical department of the United States Navy at the International Congresses of

1881 in London and of 1884 in Copenhagen. He was appointed surgeon-general of the Navy in 1888 and reappointed in 1892, but retired in 1893 and died in Washington December 7 of the following year. A. A.

J. Am. M. Ass., Chicago, 1895.
Gihon. Proc. Ass. Mil. Surg., 1895, Cincin., 1896.

Bruhl, Gustav (1826–1903).

Gustav Bruhl, one of the oldest and most prominent physicians in Cincinnati, Ohio, was born on May 31, 1826, in Herdorf, a small village in Rhenish Prussia. His father was a proprietor of a mine in this mining district and lost his wife while Gustav was still a child, so he was therefore sent first to a boarding school and afterwards to a college in Treves. For medical education he visited the universities of Halle, Munich and Berlin. After finishing his studies in Europe, he resolved to emigrate to the United States of America, with the avowed intention of locating in Missouri, where an uncle of his was living at the time. On his journey thither, in 1848, he visited an aunt in Cincinnati, who prevailed upon him to abandon his further trip, and induced him to stay in that city. Owing to an outbreak of an epidemic of cholera he soon obtained a large practice, especially among the German population, in the western portion of the city, where he was the first, and, for a time, the only German physician, but he was soon known over the entire city. Besides his skill as a physician, his eminent literary qualifications, and particularly his oratory, enabled him to acquire a leading part in the intellectual life of the "Queen of the West," where he delivered lectures on the historical and political topics of the day, chiefly under the auspices of various German societies.

As a medical man he was interested in the organization of the first German Hospital of Cincinnati, which was founded by the Sisters of the Poor of St. Francis, a religious order from Aix-la-Chapelle, Germany, who established their first charitable institution in that city in 1858. With his financial and moral aid St. Mary's Hospital was erected, and in it he served as first physician for many years. During this time he again visited Europe and studied the newly formed specialties of laryngology and rhinology under Czermak at Prague, and Tuerck at Vienna, being the first to introduce these specialties in Cincinnati, but after a few years again abandoned them to devote himself more particularly to the practice of obstetrics and general medicine. He became one of the organizers of the Cincinnati Medical Society, an offshoot of the Academy of Medicine in the early '70's. He there read an interesting paper on "Precolumbian Syphilis," in which he contended that this disease had been acquired by the Spaniards in the New World under Columbus and his followers, and then carried over by them to Europe. This theory caused considerable comment at that time, being bitterly opposed by many European and American authorities, but was as stoutly maintained by the author, who based his opinion on the result of his archeological studies. For he was a diligent student of archeology, anthropology, and ethnology, to which he devoted all of his leisure time when not professionally engaged. In these branches he became a prolific writer. Under the auspices of the German Pionier-Verein he founded a monthly periodical, "Der Deutsche Pionier," to which he contributed largely as editor, besides securing contributions from almost all the prominent German writers on the history of the German settlements in the United States. As a result of these studies he soon extended his researches to American antiquities in general, more particularly of the old Spanish possessions, making extensive trips through Central and South America for the purpose of visiting the places and searching the archives in these old settlements. These archeological and historical studies he brought forth in a work called "Die Culturvoelker von Alt-Amerika" (Primitive Peoples of America).

Other travels in the Western Hemisphere were recorded later, in a work with the title: "Zwischen Alaska und dem Feuerland" (From Alaska to Terra del Fuego). He, moreover, published papers on archeological and ethnological subjects in various German and American magazines devoted to these departments of science.

Accordingly, as his reputation among the cultured classes was that of a scientist and historian, Dr. Bruhl became widely known with the masses, not only as a public speaker, but as a poet. He is indeed ranked as one of the foremost German poets of America. His subjects were chiefly derived from the tales and myths of the Indians, as well as the achievements of the early German settlers. Besides numerous smaller poems he wrote "Charlotte," and "Die Heldin des Amazon." Other verses are collected in two volumes entitled, respectively, "Poesien des Urwalds" (Poems of the Primitive Forests) and "Abendglocken" (Evening Chimes), the latter containing the productions of "The Evening Tide of Life." A posthumous epic poem, "Skanderbeg," was published by his family after his death, which occurred suddenly on February 16, 1903, of paralysis of the heart. He was for many years a member of the American Association for the Advancement of Science. He was a member of the first board of trustees of the University of Cincinnati. He married Miss Magdalen Reis, of Cincinnati, January 31, 1849 and had four sons and one daughter. H. E. H.

Bruns, John Dickson (1836–1883).

Born in Charleston, South Carolina, on February 24, 1836, he took his M. D. from the medical College of Charleston. During the Civil War he was surgeon to a general hospital of the confederacy and in 1866 was professor of physiology and pathology in the New Orleans School of Medicine.

He wrote "Life, its Relations, Animal and Mental" (1857) and "Fever of the Lower Coast of the Mississippi River" (1880). As a poet and scholar he wrote many things showing considerable genius.

His death took place in New Orleans on May 20, 1883.

In 1858 he married Sarah, daughter of Dr. H. S. Dickson of Charleston. She died leaving two children, Henry Dickson and Margaret Graham. In 1870 he married Mary, daughter of Levi Pierce, who survived him with two sons, John Pierce and Robert Martin. J. G. R.

Bryne, John (1825–1902).

Destined for a British naval surgeonship, John Bryne, born in Kilkeel, October 13, 1825, son of Stephen Bryne, ended as one of the thirty-nine original fellows of the American Gynecological Society. He was only sixteen when he began to study medicine at the Royal Institute in Belfast and took his M. D. there in 1842. A license to practise did not satisfy him so he went on studying at Dublin, Glasgow, and Edinburgh Universities, graduating with honor from the latter and subsequently taking an *ad eundem* degree at the New York Medical College. After serving in a fever hospital during the Irish famine he came to Brooklyn and settled there, in 1857 being instrumental in founding a dispensary and hospital afterwards known as the Long Island College Hospital of which he was the first physician.

Most notable among his surgical achivements were varied applications of electrocautery in gynecic surgery. His results in hundreds of cases of high cervical amputation for cancer of the cervix doubtless exceeded those of hysterectomy in life-saving value. He was the first to substitute electrothermic hemostasis for the ligature in hysterectomy. His earliest complete ablation of the cancerous uterus by cautery was in 1895.

Twice married and the father of nine children, two only survived him. He was a man of sterling character and honorable in all his dealings, and the common-place that "he was beloved by all who knew him" exactly describes this uncommon

man. He died when at Montreaux, Switzerland, on October 1, 1902.

His papers included:

"Clinical Notes on the Electric Cautery in Uterine Surgery," New York, 1873.

"Kolpocystotomy by galvanocautery" ("Transactions of the American Gynecological Society," vol. iv, 1879).

D. W.

Tr. Am. Gynec. Soc., 1903 vol. xxviii. (port).

Buchanan, George (1763–1808).

A founder of the Medical and Chirurgical Faculty of Maryland, Dr. Buchanan was of Scotch descent, the son of Andrew and Susan Lawson Buchanan, and grandson of George Buchanan, the emigrant who laid off Baltimore town in 1730. He was born at "The Palace," Baltimore County, Maryland September, 19 1763, and studied under Dr. Charles Frederick Wiesenthal, a famous Prussian surgeon of Baltimore, and under Dr. William Shippen of Philadelphia. Under the latter he served in the Revolution. He became M. B. at the University of Pennsylvania in 1785. He then spent about three years in Europe, chiefly in medical study at Edinburgh University. While there he held the office of president of the "Royal Physical Society." Returning to America, he received from Pennsylvania University his M. D. in 1789 his thesis being "Dissertatio Physiologica de causis Respiratienis ejusdemque Affectibus." He began practice in Baltimore the same year. With Dr. Andrew Wiesenthal he also attempted to found a medical school, and lectured during the winter of 1789–1790 to a class of nine students on "diseases of women and children and the Brunonian system." In connection with this enterprise he published a treatise on "Typhus Fever," the proceeds of which he desired to go towards the founding of a lying-in hospital. Unfortunately dissensions, the nature of which are not now evident, arose and, notwithstanding the efforts of Dr. Buchanan, the society was dissolved and the school abandoned. In 1790 he issued a letter to the inhabitants of Baltimore in which he urged the registration of deaths, the creation of a public park, and the establishment of a humane society. In a fourth-of-July oration the following year he discoursed on "The Moral and Political Evils of Slavery." He retired from practice on account of bad health in 1800 and in 1806 removed to Philadelphia. There he became resident physician to the Lazarettos, in which institution he died of yellow fever on July 9, 1808 in his forty-fifth year. In 1789 he had married Laetitia, daughter of Thomas McKean of Pennsylvania, a signer of the "Declaration of Independence." E. F. C.

Cordell's Med. Ann. of Maryland.

Buck, Gurdon (1807–1877).

Gurdon Buck was born in Fulton Street, New York, on the fourth of May, 1807, a son of Gurdon Buck, a New York merchant, and Susannah Manwaring Buck of Connecticut, both grand children of Gov. Gurdon Saltonstall of Connecticut. Dr. Buck went to Nelson Classical School and finally determined to study medicine. With this view he studied under Dr. Thomas Cock and in 1830 received his M. D. from the College of Physicians and Surgeons in the city of New York. After passing the regular term on the medical side of the New York Hospital he went to Europe and continued his studies in the hospitals of Paris, Berlin, and Vienna for a period of about two years and a half. In 1836 he made a second visit to Europe, and in Geneva, Switzerland, married Henrietta E. Wolff, of that city. In 1837 he was appointed visiting surgeon of the New York Hospital and held the position up to the day he died. He was also appointed visiting surgeon to St. Luke's Hospital and the Presbyterian Hospital at the time of the organization of those institutions, and was visiting surgeon to the New York Eye and Ear Infirmary, from 1852 to 1862. He was a fellow of the Academy of Medicine from its organization, and served as its vice-president for one term; a member of the New York Pathological Society, serving one term as president, and mem-

ber of the state and county medical societies.

For some years his health had slowly been failing, and grave symptoms appeared, referred to kidney trouble. Finally the sypmtoms of uremic poisoning became more marked, until he sank into coma, in which state he quietly passed away on March 6, 1877.

As a surgeon, Dr. Buck was remarkable for boldness in operating, and thoroughness of detail in after-treatment. His patient study of his cases was one of his peculiar traits. To cases of fractures he was particularly attentive, and in the wards of the New York Hospital he not infrequently devoted the greater part of the day to dressing them. As a result of such painstaking he was enabled to revolutionize the prevailing system of treatment. The improvements which he made in the then existing apparatus are matters of surgical history. His method of treating fractures of the thigh by the weight and pulley was at once recognized by surgeons throughout the civilized world as the establishment of an orginial principle of the utmost value.

His investigations with regard to the pelvic fasciae are to be found in the first volume of the "Transactions of the American Medical Association," and his several papers on "Perityphlitic Abscess in the Ilio-cecal Region," "Migration of Purulent Matter," and "Post Fascial Abscesses originating in the Iliac Fossa" were finally collected in a pamphlet (1876) under the title of "Abscesses in the Lower Abdominal Cavity."

The various capital operations described in the periodical medical literature of the time describe what is known as Buck's operation for edema of the glottis, one which holds deservedly high rank But in no department did he gain more laurels than in autoplastic surgery. His devotion to this branch, during the latter part of his life, amounted to a passion, and his marvellous successes roused in him an enthusiasm which mocked the increasing infirmities of his age and his rapidly declining health. His work on "Contributions to Reparative Surgery," gives his remarkable experience, and may be looked upon as the crowning effort of a most notable career.

As a man, Dr. Buck was noted for his sterling integrity of character, his high sense of professional honor, his consistent christianity, his charity to the poor, and his quiet devotion to his family. He left a widow and five children, three sons and two daughters. Two of the sons became physicians.

The following list comprises nearly all the different papers written by Dr. Buck:

"Researches on Hernia Cerebri, following Injuries of the Head." ("New York Journal of Medicine and Surgery," vol. ii, 1840.)

"Excision of the Elbow-joint in a Case of Suppuration and Caries of the Bones." "A Case of Anchylosis of the Knee-joint, etc." ("New York Journal of Medicine and Surgery," vol. iv, 1841.)

"The Knee-joint Anchylosed at a Right angle; restored nearly to a straight position, after the excision of a wedge-shaped portion of bone, consisting of the patella, condyles, and articular surface of the tibia." ("American Journal of the Medical Sciences," 1845.)

"Edematous Laryngitis" (with plates showing instruments and operation). "On the Anatomical Structure of the Genito-urinary Organs." ("Transactions of American Medical Association," vol. ii, 1848.)

"Six Additional Cases of Edematous Laryngitis, successfully treated by Scarification of the Epiglottis." ("Transactions of American Medical Association," vol. iv, 1851.)

"Surgical Treatment of Morbid Growths within the Larynx." ("Transactions of American Medical Association," vol. vi, 1853.)

"A Case of Deep Wound of the Parotid Region, in which a ligature was simultaneously applied to the common and internal carotid arteries." ("New York Medical Times," November, 1855.)

"Postfascial Abscess, originating in

the Iliac Fossa, with a New Method of Treatment." ("New York Journal of Medicine," 1857.)

"Case of Aneurysm of the Femoral Artery, for which ligatures were successfully applied to the femoral, profunda, external and common iliacs, occurring in the New York Hospital." ("New York Journal of Medicine," 1858.)

"Improved Method of Treating Fractures of the Thigh." (Illustrated; also table of statistics.) ("Transactions of Academy of Medicine of New York," 1861.)

"The Operation for Strangulated Hernia, without opening the sac." ("Bulletin of the New York Academy of Medicine," February, 1863.)

"Lithotomy and Lithotrity." ("Transactions of State Medical Society of New York," 1869.)

"A Contribution to the Surgical Therapeutics of the Air Passages." ("Transactions of New York Academy of Medicine," 1870.)

"Femoral Aneurysm in the Groin, successfully treated by flexion of the limb, after a relapse following a previous apparent cure by compression." ("American Journal of Medical Sciences," January, 1870.)

"A Case of Edema Glottidis in which a patient was resuscitated by the operation of tracheotomy after respiration had ceased." ("Medical Record," October, 1870.)

"A Case of Strangulated Hernia of the Tunica Vaginalis of rare variety, operation: gangrene, death." ("American Journal Medical Sciences," 1871.)

"On Abscesses originating in the Right Iliac Fossa, with table of statistics." ("Transactions of the Academy of Medicine of New York," 1876.)

"Migration of Pus. ("Richmond and Louisville Medical Journal," March, 1876.)

Med. Rec., N. York, 1877.
Med. and Surg. Rep., Phila., 1865.
Tr. Med. Soc. of New York, 1877.
Distinguished Living New York Physicians. Francis, 1866.

Buckingham, Charles Edward (1821–1877).

Charles E. Buckingham was born in Cambridge, June 27, 1821, the son of an influential newspaper editor of the day.

He graduated from Harvard College in the class of 1840 and from the Harvard Medical School in 1844. In college he developed a taste for chemistry and was employed as a student assistant to Prof. John White Webster. Early after graduation he became physician to the Boston Dispensary and to the Home of Industry, which gave him clinical advantages improved by keeping careful notes of cases.

In 1847, together with a number of physicians of about his own age, several of whom became distinguished in later life, he formed the Boylston Medical School. This school, in which he had charge of instruction in obstetrics and diseases of women and children, was an ambitious one; and established a partly graded course as early as 1850. He was unable, however, to get its charter extended to the granting of degrees, and owing to this and to increased difficulty in getting anatomical material, it was abandoned in 1855. Within a few weeks of this abandonment of instruction Dr. Buckingham resigned his clinical appointments which had now become less valuable to him, and for the next ten years held no appointment of any kind except that he inspected hospitals on the Ohio river for the sanitary commission for a month during the Civil War.

On the establishment of the Boston City Hospital he was made visiting surgeon and there gave a course of clinical lectures on his own account. In the same year, after consultation with his colleagues of the hospital, he accepted the appointment of adjunct professor of theory and practice of medicine in Harvard University, later becoming professor of obstetrics, which appointment he held at the time of his death in 1877. He was also consulting physician to the Boston Lying-in Hospital. His

City Hospital appointment was resigned because of the pressure of other work.

He was an original member of the Boston Society for Medical Observation, then an active clinical society, and was also a member of the Obstetrical Society of Boston, and of the American Gynecological Society. He was a corresponding member of the Philadelphia Obstetrical Society and an honorary fellow of the Obstetrical Society of London.

Dr. Buckingham died in Boston February 19, 1877. Dr. D. W. Cheever says of him as a surgeon at the Boston City Hospital: "He always had new ideas; usually practical, sometimes eccentric, frequently brilliant. He was a tireless worker, he never gave up a case; was full of expedients; and his advice was usually wise and judicial." W. L. B.

Biog. by son, Edward M. Buckingham, M. D.
History of Boston City Hospital, 1906, D. W. Cheever, M. D.
Trans. Amer. Gyn. Soc., 1877, vol. ii, G. H. Lyman, M. D.
Boston Med. and Surg. Journal, March 11, 1877.

Buckler, Thomas, Hepburn (1812–1901).

One of two brothers, Baltimore doctors, he was born at Evergreen, Maryland on January 4, 1812 and educated at St. Marys' College, Baltimore, taking his M. D. in 1835 with a thesis on "Animal Heat." He afterwards practised in this city as physician to the City Almshouse, and from 1866 to 1890 he became a Paris doctor under a license from the French government, then returned to Baltimore.

He was best known as a teacher and writer. His views were independent and original—some said original even to eccentricity. Quinan, in his "Medical Annals of Baltimore" gives a list of thirty-two of his writings, a great many of them on sanitary and social subjects among other things, the filling up the "Basin" or inner harbor of Baltimore, with "Federal Hill," and the introduction of the waters of the Gunpowder River for the supply of Baltimore. The latter of these recommendations was carried out many years later. He introduced phosphate of ammonia for the treatment of gout and rheumatism, and as a solvent of uric acid calculi, and the lithic acid diathesis generally; also the hydrated succinate of the peroxide of iron for the prevention of gallstones. He laid great stress in the pathology of uterine affections on the strangulation of the vessels in the cervix and the resulting engorgement and malnutrition of the organ. More elaborate works are his history of the "Cholera Epidemic of 1849" and a treatise on "Fibro-bronchitis and Rheumatic Pneumonia," 1853.

Dr. Buckler was a man of striking personal appearance and was much sought after on account of his brilliant conversational powers and wit. He never had a large practice; in fact never sought one, and lacked the steadiness and plodding perseverance of his brother. He was twice married and left a son, William H. There are two portraits of Dr. Buckler at the "Medical and Chirurgical Faculty," Baltimore. E. F. C.

Budd, Abram Van Wyck (1830–1891).

Abram Van Wyck Budd, surgeon, was born in Pemberton, New Jersey, October 17, 1830 and graduated at Mercersburg College in 1847, and from the medical school of the University of Pennsylvania in 1853. While there he was a private pupil of George B. Wood and afterwards spent two years in the Philadelphia ("Blockley") Hospital.

In 1855 a coal company at Egypt, North Carolina, offered young Budd a position as surgeon to their works and six years later, when Civil War came on, he was made surgeon in the confederate army and served throughout the war.

By natural instinct Dr. Budd was gifted as a surgeon, and for many years did all of it in his community. It was crude, but was always thorough and for the most part successful. He removed many ovarian tumors and opened all his intestinal obstruction cases. He was unusually adept in lithotomy and his "high operation" was the subject of much comment in the '80's, but he never could be prevailed upon to report any of his

cases. A colored woman, now aged seventy-five, told the writer that Dr. Budd opened the right side of her abdomen in 1880 and evacuated a large quantity of foul-smelling pus. He did this without any anesthetic, first cutting through the skin, then introducing a needle and finally inserting his hand.

His management of hysterical patients was the talk of the state during his active life and even now is referred to. His work in the field was *sui generis*. He knew how to control hysterics. He snatched off the night cap of one; built a fire under the bed of another; he prepared to get into the bed of a woman who had not been out of it for two years but who took to flight and was cured by this treatment; and still another was tied in a road cart, while the horse was lashed to a run of a mile or more—she was relieved of her "nervousness."

In 1881 Dr. Budd removed to Lockville, a small settlement in the same county. Both here and at Egypt he had rooms in his house at the disposal of patients. They were frequently brought on stretchers from distant neighborhoods and were sometimes on the road for two or three days. He was exceedingly kind to the poor, on more than one occasion having taken the coat off his back and given it away.

Dr. Budd was a large man, six feet tall, eccentric in dress and, though very clean in his attire, practically never wore a collar. He was known as an original and independent character.

He married Anna C. Bryan in 1875 and had four children.

Dr. Budd died in 1891. Six months before his death he went to Philadelphia to consult Dr. John H. Packard (his classmate) and Dr. William Pepper. His friends in that city told him of the property formerly owned there by the Budd family, that just a few inches of earth sold off the top would have meant millions, and that, if he had remained there, it might all have been his. To this he replied: "Why, I would rather have fresh air, elbow room and good water than all your millions. I can't stand the Schuylkill." H. A. R.

Personal interview with Mrs. A. V. Budd.
Letters and papers of Dr. P. E. Hines, Mr. H. R. Horne and others.
A portrait in oils is in the possession of his niece, Mrs. W. B. Williams of Wilmington, N. C.

Bulkeley, Gershom (1635 (?) –1713).

A clerical physician of note, who had a large consulting practice in all parts of Connecticut. He was born in Concord, Massachusetts about the year 1635, his father being the celebrated divine, Rev. Peter Bulkeley, driven from England on account of his non-conformity and who settled in Concord, Massachusetts.

Reared in the best of family surroundings, Gershom graduated from Harvard College in 1655 and shortly after studied for the ministry. It is unknown from whom he received his medical instruction. His first charge was in New London, but after four years there he gave it up because of his opposition to the half-way covenant, and subsequently, on June 1, 1666, received a call to the church in Wethersfield, where he labored for eleven years, resigning early in 1677, probably by reason of weakness of his voice. The rest of his life was devoted entirely to medicine, in the town of Glastonbury.

During King Phillip's War he rendered important services as surgeon and was wounded in the thigh in one of the expeditions. For this service he was well compensated, and also received the "hearty thanks" from the Colony's Council of War for his "good services to the country during this present war."

His account books which remain bear evidence of his extensive practice, although he does not appear to have been licensed until 1686. A mass of manuscripts also survive giving many of the remedies he employed. These are now in the possession of the Hartford Medical Society.

He was well versed in chemistry, alchemy and was "master of several languages. Some of his political pamphlets have been handed down to us.

He is said to have had few superiors in his time. He married Sarah, daughter of Pres. Chauncey of Harvard on October 26, 1659 and had by her six children, one of whom, John, was a clerical physician, of high rank in his day. Another son, Charles, also practised medicine. He died in Wethersfield (the father), 1713 and is buried in the cemetry there, back of the Congregational church.

W. R. S.

Sumner, Address on the Early Physicians of Conn. Trans. Conn. Med. Soc., 1892.
Russell, Early Medicine and Early Medical Men in Conn. Trans. Conn. Med. Soc., 1892.
Steiner, The Reverend Gershom Bulkley, an Eminent Clerical Physician. Johns Hopkins Hospital Bulletin, 1906, xvii.
Sibley, Harvard Graduates, 1873, i, pp. 389–402.
Chapman, The Bulkley Family.

Bulkley, Henry Daggett (1804–1872).

Henry Daggett Bulkley, the son of John Bulkley, ship captain and trader, was born at New Haven, Connecticut, April 4, 1804 and graduated from Yale in 1821. For a number of years he engaged in business in New York but tiring of this he studied medicine under Dr. Jonathan Knight and received his M. D. from Yale in 1830. The year 1831 was spent in Europe, most of the time in Paris, where he attended the lectures of Biett and Albert at the St. Louis Hospital, but in 1833 settled in New York City where he was immediately appointed surgeon to the department of skin diseases in the New York Dispensary. In 1837 he delivered a course of lectures on this specialty at the Broom Street Infirmary for Skin Diseases, an institution founded and for many years sustained by him. These lectures were undoubtedly the first on skin diseases given in America. In 1842 he delivered a special course during the spring term of the College of Physicians and Surgeons. He was for some years editor of the "New York Medical Times" and edited the American edition of Burgess, "Translation of Cazenave" and Schedels, "Diseases of the Skin."

He was, perhaps, the earliest writer on infantile syphilis in this country. His article of sixty-six pages on "Syphilis in Infants" appeared in 1840 and was considered a work of great importance at that time.

Most of his other journal articles, which were few in number, were in the form of clinical lectures on diseases of the skin.

He died January 4, 1872 and was twice married, his second wife being Miss Julia Barnes of Oneida, New York. One of his sons, Lucius Duncan Bulkley, became a cutaneous specialist in New York City.

For a number of years he was attending physician at the New York Hospital; 1867, president of the Medical Society of the County of New York; 1869, president of the New York Academy of Medicine; 1870, president of the New York Dermatological Society. J. M. W.

New York Med. Jour., 1872, vol. xv.
Med. Reg. of New York, 1872, vol. x.

Bull, William Tillinghast (1849–1909).

One of New York's leading surgeons, W. T. Bull, son of Henry B. Bull, was born in Newport, Rhode Island, May 18, 1849; graduated from Harvard with his A. B. in 1869, received his M. D. from the College of Physicians and Surgeons in the City of New York, 1872; and after an interneship in Bellevue Hospital and two years' study in Europe, settled for practice in New York City. He was in charge of the New York Dispensary from 1875 to 1877; of the Chambers Street Hospital in 1877 and 1878; visiting surgeon to the New York Hospital, 1883; visiting surgeon to St. Luke's Hospital from 1880 to 1883; consulting surgeon to the Hospital for the Ruptured and Crippled, Roosevelt, Woman's hospitals, and to the State Emigrants' Hospital. He began his teaching work in his alma mater in 1879 as demonstrator of anatomy, and was made professor of practice of surgery and clinical surgery in 1889. He was a fellow of the American Surgical Association and of the New York Academy of Medicine, and a member of many other scientific societies.

It was while Dr. Bull was at the

Chambers Street Hospital, New York, that he did a laparotomy which brought him fame all over the world. The subject was a man who had been shot through the abdomen. Dr. Bull made an incision, removed the intestines, repaired and replaced them. The operation is now a common one, but Dr. Bull's work was of a pioneer character.

He was highly esteemed by the medical profession of the United States, not only because of his skill as a surgeon, but for his sound judgment and the zealous application which he gave to his cases. Dr. Bull was a frequent contributor to the medical literature and his articles included:

"Remarkable Cases of Fracture," 1878.

"Notes on Cases of Hernia which have relapsed after Operation," 1891.

"On Three Cases of Pylorectomy with Gastroenterostomy," 1891.

He married Mrs. Marie James G. Blaine, Jr., daughter of Col. Richard Nevins. She had suffered from acute rheumatism, and, in spite of a crippled life predicted by her doctors, was entirely cured by Dr. Bull.

Shortly before he was stricken with his fatal illness a young East Side physician called at his office and said that he was attending a poor girl over in his neighborhood who would surely die unless operated on. The family was too poor to pay, and the doctor did not feel that he was equal to the operation. Would Dr. Bull give him a little advice?

"Well, I guess we had better go and take a look at the patient," said Dr. Bull.

They found the patient in an East Side tenement, and in less time than it takes to tell it Dr. Bull had the room cleared and began the operation.

When he was leaving, the father of the girl met him in the hall and forced a quarter into his hand. Dr. Bull thanked him and went off feeling as happy—happier than if he had received a $1,000 fee.

For several months he had been ill with cancer of the neck and made a brave fight for life, using all the methods of treatment known to science, but without avail. On January 29 he started for Georgia in the hope of being benefited by the milder climate, but improvement was only temporary and he gradually failed and died at Wymberly, Isle of Hope, near Savannah, Georgia, from cancer of the neck, February 22, 1909.

D. W.

Jour. of Am. Med. Ass., Feb., 1909.
New York daily journals, Feb. 23, 1909.

Buller, Francis (1844–1905).

Francis Buller, ophthalmologist, was one of the most eminent specialists Canada has produced in virtue of his work in ophthalmology, his extensive writings, his large practice, his strong personality, and the attractiveness of his character.

He was the son of Charles G. Buller, and Frances Elizabeth Boucher. Born at Campbellford, Ontario, on May 4, 1844, he was educated at Peterborough High School and Victoria College, where he graduated in medicine, 1869. Subsequently in Europe, he specially studied diseases of the eye, ear, and throat, under Helmholz and von Graefe. During the Franco-Prussian War he served as surgeon in the German military hospitals and afterwards occupied a position on the staff of the Graefe-Ewers Hospital in Berlin. In 1872 he went to London, and was for four years connected with the Royal London Ophthalmic Hospital —for the last two years as chief house surgeon. He was the first to introduce in London the procedure instituted in Germany, of ophthalmic examination by the "direct method." He became a member of the Royal College of Surgeons, England, and in 1876 returned to Canada where he lived till his death from pernicious anemia October 11, 1905.

Dr. Buller was the first to give ophthalmology an independent status in Canada when he was appointed to the Montreal General Hospital in 1877. After seventeen years' service there he accepted the same post in the Royal Victoria Hospital and upon the foundation of the chair of ophthalmology and

otology in McGill University, in 1883, he was appointed and for twenty-two years his learning and experience were freely given. He was also president of the Montreal Medico-Chirurgical Society and a member of the Ophthalmological Societies of Great Britain and of America.

The writings of Dr. Buller number some seventy-six and extend over a period of thirty years. They deal rather with the art than the theory of surgery. Most are a record of his unceasing efforts to overcome obstacles in ophthalmic practice. His first article describes the shield for the protection of the sound eye in gonorrheal ophthalmia, which has always been associated with his name. His modification of Critchett's idea of slitting the outer canthus in gonorrheal ophthalmia to apply strong solutions of nitrate of silver to the everted conjunctiva is another proof of his quickness to grasp newer developments in bacteriology. His alteration of Mule's operation was of the greatest value, as he saw that its failure was due to suppuration brought about by the pyogenic organisms of the conjunctival sac entering the interior of the sclerotic along the sutures passed through the sclerotic and the conjunctiva. By suturing first the scleral wound in the vertical direction, Dr. Buller made it impossible for organisms to produce suppuration within the sclerotic. His idea of tying the canaliculi to prevent the regurgitation of septic material from the lacrimal sac in chronic dacryocystitis was new, and his trial frame was another expression of his ingenuity in meeting certain well-known deficiencies.

His writings, especially "Anomalies in the Functions of the Extrinsic Ocular Muscles," "Blindness Caused by Wood Alcohol," which he was the first to notice, and "Skin-grafting in Ophthalmic Surgery," mark him as one of the first exponents on this continent of the newer school of ophthalmology which originated with Helmholz, Donders, and von Graefe.

In his operations and after-treatments he had infinite patience, and would frequently remain all night in the hospital observing the results of his work. For many years he was the only specialist in Canada of recognized standing, and his practice was enormous; but he took a whimsical pleasure in giving to his hospital patients his first consideration. He was a man of plain speech and frankness to rich and poor alike and so conscious was he of his good intentions that he would hear with amazement that anyone could possibly have been offended. With his patients he was affectionately gentle, though when occasion demanded he would not refrain from offering an opinion upon their conduct for the amendment of their ways. Dr. Buller had a singular instinct for diagnosis, which was quite apart from the usual process of reasoning; and in treatment he frequently obtained good results by methods which were inexplicable even to himself.

A. M.

Bullitt, Henry Massie (1817–1880).

Henry Massie Bullitt, founder of Louisville Medical College and son of Cuthbert and Harriet Willit Bullitt, was born in Shelby County, Kentucky on February 28, 1817.

His father was a direct descendant of Benjamin Bullitt, the founder of the family in this country, who, refusing to surrender his religious views after the edict of Nantes, came with his wife in 1685 from the Province of Languedoc, France, and settled in Maryland.

Originally the name was spelled "Bullet" but, owing to the existence of an English law in this country by which alienists were prohibited acquiring landed property, Benjamin Bullet changed his name to Bullitt in order to hold the land which had been granted him in America.

At the age of seventeen he studied medicine with Dr. Coleman Rogers, Sr., and pursued his studies with rare devotion, entering the University of Pennsylvania, from which institution he graduated in 1838 with high honors. From Philadelphia he returned to Louisville and entered upon active practice.

Bullitt passed the year 1845 in Europe, where he availed himself of every opportunity to advance in medical knowledge and returned home liberally equipped with the fruits of his sojourn abroad. In 1846 he was elected a professor in the St. Louis Medical College, and lectured there during the sessions 1846–47 and 1847–48. In 1849 he was called to the chair of materia medica in Transylvania University at Lexington, Kentucky, at that time the oldest and most renowned school in the Ohio valley.

In 1850 Dr. Bullitt organized the Kentucky School of Medicine, which entered upon its career in the winter of 1850–51, and in 1866 was elected to the chair of principles and practice of medicine in the University of Louisville, in 1867 occupying the chair of physiology in the same school.

In 1868 he established the Louisville Medical College, with which he remained and co-operated several years.

Dr. Bullitt was an able writer on professional subjects. Prof. Charles Caldwell having published that: "None but professors practically trained in the West and South could competently lecture on western and southern diseases, hence a medical education acquired in the northern and eastern cities could not qualify for practice in the West and South," Dr. Bullitt entered an eloquent and potent protest against this heresy. This paper was published in the "Medical Examiner," Philadelphia, in 1844 or 1845. Other papers were on the "Art of Observing in Medicine; "(published in the "St. Louis Medical Journal.") "Medical Organization and Reform;" "On the Pathology of Inflammation," published in the "Transylvania Journal of Medicine."

Dr. Bullitt held chairs in five medical schools and in all showed great aptitude for teaching.

Dr. Bullitt was co-editor of the "St. Louis Medical Record," the "Transylvania Journal of Medicine" and "Louisville Medical Record." His great affliction, deafness, was all that prevented him from taking the formost position among medical practitioners, teachers and writers. This misfortune he bore with singular equanimity and fortitude.

On May 26, 1841, Dr. Bullitt was married to Miss Julia Anderson (who died January 16, 1853) and had seven children; only two lived to their majority.

On September 14, 1854, he was married to Mrs. Sarah Crow Paradise (who died December 3, 1901) and had six children, one son and five daughters.

The cause of Dr. Bullitt's death was Bright's disease. During his long and severe illness he was always cheerful and escaped some of the most dreadful sufferings which attend this disease. He had led a long and useful life, and often recalled many beautiful reminiscences of his boyhood. A short time before his death, on February 5, 1880, he read, with great joy and pleasing anticipation Lord Lytton's beautiful poem, "There is no Death" greatly enjoying its fine gracefulness.

J. M. B.

Bullock, William Gaston (1815–1885).

William Gaston Bullock was born at Savannah on August 3, 1815 and died there on June 23, 1885. He was the great grandson of Archibald Bullock, first governor of Georgia and son of John Irvine and Charlotte Glen Bullock.

He was equally well known in his state as a surgeon, physician and oculist. He graduated at Yale and M. D. from the University of Pennsylvania, 1838, afterwards studying in Paris and eventually settling in Savannah. He was one of the first in South Georgia to do a successful ovariotomy and other major operations, and for a long time stood alone as an ophthalmologist. Ashhurst in his "Surgery" mentions Bullock's splint for fracture of the lower maxilla. He had the reputation of being a fine diagnostician and after the yellow-fever epidemic of 1854 in Beaufort was presented by the citizens there with two large silver pitchers.

Always active in advancing his own science, Bullock helped to found the

Savannah Medical College and was for many years professor of surgery there. His appointments and memberships included: President of the Georgia Medical Society; honorary member, Gynecological Society of Boston; surgeon in the Confederate Army during the war and an organizer of the Confederate States Hospital, Richmond, Virginia.

J. E. B.

Bumstead, Freeman J. (1826–1879).

Freeman J. Bumstead was born in Boston, Massachusetts, April 21, 1826, a descendant of a New England family whose ancestors came from England and settled in Boston in 1750; his father was a prosperous merchant of Boston; his mother, Lucy Douglas Willis, the sister of Nathaniel P. Willis the poet.

He graduated from Williams College in 1847, afterwards teaching for a short time then receiving his degree of doctor of medicine from the Harvard Medical School in 1851.

A few months were spent in Paris studying venereal diseases, then in 1852 he lived in New York, being appointed surgeon to the Northern Dispensary in 1855 and in 1857 to the New York Eye and Ear Infirmary. Early in his professional life he devoted his time to diseases of the eye and ear. In 1858 he received the degree of LL. D. from Williams College.

After 1860 he returned to the specialty which had been his first choice, venereal diseases and genito-urinary surgery.

He was a contributor to medical journals on venereal diseases and the translator of the "Hunter-Ricord Treatise" on venereal diseases and Cullerier's "Atlas of Venereal Diseases;" the author of "Pathology and Treatment of Venereal Disease" and co-author with Robert W. Taylor of "Venereal Diseases."

In 1861 he married M. Josephine, daughter of Ferdinand E. White of Boston and had five children. He died November 27, 1879. J. M. W.

In Memoriam. Freeman J. Bumstead. Dr. G. A. Peters, New York, 1880.

Burbank, Augustus Hannibal (1825–1895).

This scientific physician, eccentric indeed, but of very unusual ability, was the son of Dr. Eleazar Burbank, who twice walked 100 miles and back from Maine to Dartmouth Medical School to attend the lectures. The father settled in Poland, Maine, in 1818, and while still living in Poland Dr. Eleazar Burbank married Miss Sophronia Ricker, of that town, and their son, Augustus Hannibal, was born January 4, 1823.

He prepared for college at the North Yarmouth Academy, graduating from Bowdoin College in the class of 1843, obtaining his M. D. at the Harvard Medical School in 1847, and immediately beginning practice in Yarmouthville, remaining there until his death in 1895.

He was twice married, first to Elizabeth Banks, of Portland, November 25, 1850, by whom he had one daughter. When she died he married, in 1868, Alice Mary Thompson, of Yarmouthville, and had four more children. Augustus Burbank was original in every respect, not greatly eccentric, but humorous; never cross, full of genuine fun, and always young. He kept posted in medicine up to the day of his death, early mastered the modern doctrine of asepsis, making extensive use of this knowledge for the benefit of his patients in his extensive obstetric practice of forty-one years.

He once said: "When I go to put a woman to bed to be delivered of a child, I say, 'show me your teeth,' and if she has good teeth. she is going to have a good deliverance, and that means a good child, but if she has bad teeth, I say to myself, 'poor teeth, poor bones, poor deliverance.'"

He was always an active member of the Maine Medical Association, and when acting as president during his term of office he would say to a member rising to speak, "Go on brother, I hope that you will have a good deliverance."

He was very independent in medicine, and had original ideas. He believed a physician had a right to terminate gestation to his own convenience. For

instance; a women expects to be delivered on a certain day. A few days before that time the doctor would choose a day when all other affairs could be set aside, call at the woman's house, and not leave her until the baby was born. "That is the best way" he would say, "for both of us."

His prescriptions were odd enough. Despite the prohibitory law, whenever he felt inclined to write for a stimulant for a patient he would use this formula: "Know all men by these presents, that I, Augustus Hannibal Burbank, the doctor, hereby command you or your new drug clerk, to draw out, measure and sell to Mrs. —— for her dear, but sick husband, one-half pint of your best gin, to cure him of his present terrible malady, I do."

Among the numerous and original medical papers contributed by Dr. Burbank to the Maine Medical Association, mention should be made of one on the "Induction of Delivery," and in 1892 a charming oration "On the Mutual Relations of Medical Men," filled with humor and depth of thought combined. Dr. Burbank was tall and erect, with clean cut features and in his older days wore a short, straight white beard. He was a genuine character in medicine, and everybody who knew him considered him a man of much interest. He should have been known to every medical man who ever lived as a most delightful specimen of humor, combined with excellent judgment and exquisite skill. He died after only a short illness, June 27, 1895. J. A. S.

Trans. Me. Med. Assoc.
Family Papers.

Burnett, Charles Henry (1842–1902).

Henry Burnett, otologist, was born in Philadelphia on May 28, 1842. After education in the schools of his native city he entered Yale in 1860 and graduated in 1864.

After graduating from Yale he entered the University of Pennsylvania, receiving the M. D. in March, 1867. He was soon after appointed resident physician in the Episcopal Hospital of Philadelphia, serving a full term in that capacity. Upon the completion of this service he went abroad, spending ten months in the laboratories and hospitals of Europe during the years 1868–69. Upon returning to Philadelphia he practised medicine for a year.

He had always had his attention strongly attracted to the study of otology, and at length decided to return to Europe and devote himself to a special study of that subject. In the pursuit of this design he gave up his practice in 1870 and went abroad, where he worked for over a year, especially in the laboratories of Helmholtz and Virchow, and in the clinic of Politzer. These three eminent men became greatly attached to the American student, and in subsequent years their friendship was continued. With Helmholtz, in particular, he established most cordial relations, conducting in his laboratory his invaluable series of investigations into the condition of the membrane of the round window during the movements of the auditory ossicles and upon the various effects of changes in intralabyrinthine pressure. This research work of Dr. Burnett placed him at once among the most eminent investigators into the physiology of hearing.

He returned to Philadelphia in April, 1872, and took up practice once more, devoting his work solely to diseases of the ear.

He never enjoyed robust health, and his unflagging industry was often a source of anxiety and wonder to his friends who knew how severe a physical strain it must have been for him to bear.

In spite of the arduous labor involved in his attention to his practice, Dr. Burnett never ceased to pursue his investigations into the scientific side of the specialty of otology.

Of literary work of large scope I mention particularly his "Treatise on Diseases of the Ear," published in 1877; "Hearing, and How to Keep It," one of the American Health Primers published in 1879; "The

System of Diseases of the Ear, Nose, and Throat," edited by him in 1893; and the chapters on otology in the "American Text-book of Surgery," 1896: in the "Encyclopœdia of Diseases of Children," edited by Keating, and in the "American Year-book of Medicine and Surgery." For many years Dr. Burnett edited the department of progress of otology in the "American Journal of the Medical Sciences," and the author can bear personal testimony to the diligence and assiduity with which he labored.

Of the many positions which he held the following may be regarded as the most important.

In 1882 he was elected professor of diseases of the ear in the Philadelphia Polyclinic Hospital and College for Graduates in Medicine, and later emeritus professor of the institution. At various times he was clinical professor of otology in the Woman's Medical College; aural surgeon to the Presbyterian Hospital; consulting aurist to the Pennsylvania Institution for Deaf and Dumb; to St. Timothy's Hospital; to the West Philadelphia Hospital for Women; to the Philadelphia Hopsital for Epileptics.

Among his contemporaries in the profession, Dr. Burnett enjoyed a wide circle of friends; his kindly disposition and warm heart held by his side many who, in the daily rush and hurry of their labors, were unable to hold as much intercourse with him as they wished.

But a few months before his death, Dr. Burnett published, in collaboration with Drs. E. Fletcher Ingalls, of Chicago, and James E. Newcomb, of New York, a "Text-book of Diseases of the Ear, Nose, and Throat," which may be regarded as the most advanced work of its character in the English language. The last literary work of Dr. Burnett, aside from this book, was an article on "Scarlatinous Empyema of the Superior Squamomastoid Cells," which appeared in the "American Journal of the Medical Sciences" for March, 1902, after its author had passed away. He attended the meeting of the section of otology and laryngology of the College of Physicians of Philadelphia on the evening of Wednesday, January 15, and took an active part in the discussion of the papers read upon that occasion. A few days later he developed pneumonia and died, after a brief illness, on January 30, at his home in Bryn Mawr, Pennsylvania. His widow, who was Miss Anna Lawrence Davis, of Buffalo, New York, and four children survived him.

Dr. Burnett was a fellow of the College of Physicians of Philadelphia; president of the American Otological Society and member of the Pennsylvania State Medical and kindred societies.

I have given a full list of his writings in the "Transactions of the College of Physicians of Philadelphia," 3d. series, vol. xxv, 1903. F. R. P.

Tr. of the Coll. of Phys., Phila., 1903. (F. R. Packard.)

Burnett, Swan Moses (1847–1906).

Swan Moses Burnett, ophthalmologist, was born in New Market, Tennessee, March 16, 1847, and graduated in Medicine from Bellevue Hospital Medical College, New York City, now the medical department of New York University, in 1870, and first settled in Knoxville, Tennessee, where he practised for five years, in 1873 marrying Miss Frances Hodgson. 1875 saw him in the District of Columbia, attaining prominence as a specialist in ophthalmology and otology, and well-known in literary and art circles, and also as the author of a "Treatise on Astigmatism," a "Treatise on Refraction of the Human Eye" and over sixty-four distinct articles on diseases of the eye and ear, and chapters in text books. He was associated with Dr. John S. Billings in the production of the "National Medical Dictionary," and with Drs. Norris and Oliver in that of the "System of Ophthalmology," writing as well many magazine articles and public addresses.

In 1878 he was appointed lecturer on ophthalmology and otology in the school of medicine, Georgetown University, continuing in this capacity until 1883,

when he became clinical professor, which position he filled until 1889, since when until the time of his death he had been professor in those branches. In 1879 he established a post-graduate course in ophthalmology and otology in connection with his hospital and private practice, and rendered most distinguished services as an author, teacher and clinician.

He gave much of his time and skill on the attending staff of the Central Dispensary and Emergency Hospital, of which he was president. There he founded and equipped the "Lionel Laboratory," in memory of one of his sons, "Little Lord Fauntleroy." This laboratory was the first of its kind to be established in connection with a hospital for clinical, bacteriological and pathological research in the city of Washington.

For many years he was ophthalmologist and otologist to the Children's and Providence Hospital, and also a member of the consulting staff of the Episcopal Eye, Ear and Throat Hospital. In 1889 he was elected president of the Medical Society of the District of Columbia, and was a member of the Washington Academy of Sciences, Philosophical Society, Anthropological Society, Historical Society, the American Ophthalmological and Otological Society.

His degree of doctor of philosophy was bestowed by the University of Georgetown in 1890. During his service extending over twenty-five years in the cause of higher medical education, he was distinguished for his devotion to his calling and was unexcelled as a teacher, scholar and gentleman. His kind, open and earnest manner, his clear, concise and comprehensive lectures could not fail to impress his students.

Dr. Burnett died from chronic myocarditis January 18, 1906, at his house 916 Farragut Square, Washington; his second wife and his son Vivian survived him.

Among his literary contributions and important writings are the following:

Translation of Edmond Landolt's "Manual of Examination of the Eyes."

"A Course of Lectures delivered at the Ecole Pratique," revised edition, vii, 9–312 pp., 1 chart, 1 table, 8°, Philadelphia, 1879.

"A Theoretical and Practical Treatise on Astigmatism," viii, 245 pp., 8°, St. Louis, 1882.

"The Principles of Refraction in the Human Eyes based on the Laws of Conjugate Foci," 67 pp., 8°, Philadelphia, 1904.

"Study of Refraction from a New View-point," Philadelphia, 1905.

Of the sixty-four distinct contributions to medical literature the following are mentioned:

"A Case of Diplacusis Binauralis with Remarks," 10 pp., 8°, New York, 1877. Reprinted from "Archives of Ophthalmolgy and Otology," New York, 1876.

"A Case of Choroiditis Exsudativa," 11 pp., 8°, New York. Reprinted from "Archives of Ophthalmology and Otology," New York, 1877.

"Double Optic Neuritis (Choked Disc) and Sloughing of the Right Cornea accompanying a Sarcomatous Tumor on the Right Side of the Brain," 10 pp., 8°, New York. Reprinted from "Archives of Ophthalmology and Otology," New York, 1877.

"Results of an Examination of the Color Sense of 3,040 Children in the Colored Schools of the District of Columbia," 9 pp., 8°, New York. Reprinted from "Archives of Ophthalmology," New York, 1879, viii.

"Are there Separate Centers for Light, Form and Color Perception?" Reprinted from "Archives of Medicine," New York, 1884, xii.

"The Comparative Frequency of Eye Diseases in the White and Colored Races in the United States." Reprinted from "Archives of Ophthalmology and Otology," New York 1884, xiii.

"Theories of Color Perception." Reprinted from "American Journal of Medical Sciences," Philadelphia 1884, lxxxviii.

"An Analysis of the Refraction of 576 Healthy Human Cornea examined with the Ophthalmometer of Javal and

Schiötz." Reprinted from "Transactions of the American Ophthalmological Society," Hartford, 1888–90, v.

"The General Form of the Human Cornea and its Relations to the Refraction of the Eye and Visual Acuteness." Reprinted from "Transactions of the American Ophthalmological Society," 1891–3.

"The Racial and Geographic Distribution of Trachoma in the United States of America." Reprinted from "American Jour. of Ophthalmology," St. Louis, 1896.

"A Case of Obstructed Retinal Circulation with a Series of Pictures showing the Changes in the Vascular System during its Reestablishment of New Vessels in the Retina." Reprinted from "Ophthalmological Record," Nashville, 1899. G. M. K.

Burnham, Walter (1808–1883).

Walter Burnham, the son of Dr. Walter Burnham, was born in Brookfield, Vermont, January 12, 1808. He studied medicine with his father and his brother, Dr. Z. P. Burnham, a pupil of Nathan Smith, and graduated from the medical department of the University of Vermont in 1829. After practising in several places he settled in 1833 in Barre, Vermont, where he lived until his removal to Lowell, Massachusetts, in 1846. For several years he was treasurer of the Vermont State Medical Society. While in Vermont he performed many major surgical operations, but it was only after his removal to Massachusetts that he devoted himself to gynecological surgery.

An early advocate of the operation of ovariotomy, he removed his first ovarian tumor in August, 1851. From this time until 1882, a period of thirty-one years, he did about three hundred ovariotomies with a mortality of about 25 per cent., a good showing for those days.

His first case of hysterectomy for fibroma of the uterus, the first successful case on record, was performed in June, 1853. In 1883 the woman was still alive. Later experience with this operation—only three successes in fifteen cases—led him to doubt the propriety of doing it except in carefully selected cases.

Among his successful cases in the field of general surgery may be mentioned two cases of ligation of the common carotid artery and a case of ligation of both external carotids for malignant tumor of the jaw, done at two sittings.

Dr. Burnham was surgeon of the sixth Massachusetts Regiment of Volunteers in the Civil War from 1862 through the war and after until 1870. He became a member of the Massachusetts Medical Society in 1863. While a member of the Massachusetts House of Representives in 1855 he was instrumental in securing the passage of the "Anatomy Act" by which members of the medical profession were authorized to obtain the bodies of dead paupers for dissecting purposes, an immense assistance to the cause of anatomy in Massachusetts.

Dr. Burnham died at his home in Lowell, January 16, 1883 after an illness of five weeks, the exciting cause of his death being gastritis. W. L. B.

Boston Medical and Surgical Journal, Jan. 25, 1883, vol. cviii.

Burrell, Herbert Leslie (1856–1910).

Herbert Leslie Burrell, surgeon, was born in Boston, April 27, 1856, the son of Randall Gardner and Elizabeth Madeleine Burrell, and received his preliminary education at the English High School in that city, graduating from Harvard Medical School in 1879. After a few years general practice, during which he gradually turned towards surgery, he commenced his work as a teacher as demonstrator of surgical technic in his alma mater; for many years he gave a systemic course of lectures on surgery and in 1903 was made professor of clinical surgery.

He was made surgeon-general of Massachusetts in 1893, and in 1898 saw service during the Spanish-American War as surgeon-in-charge of the Massachusetts volunteer aid hospital ship, Bay State.

He became surgeon in the Children's Hospital in 1893, and was made consult-

ing surgeon to the Carney Hospital in 1899 and senior surgeon of the Boston City Hospital in 1897. Burrell was a surgeon of high grade and one of the first successfully to ligate the innominate artery and the first successfully to reimplant an entire trephine button.

His society membership included the American Surgical Association, of which he was secretary for several years; the American Society of Clinical Surgery; American Orthopedic Association; of Pathologists and Bacteriologists, and in 1908–9 he was president of the American Medical Association. He wrote a good deal for medical journals and also wrote "Case Teaching in Surgery" with Dr. J. B. Blake.

He married Lillie, daughter of Dr. William H. Thorndike and, when she died in 1897, Carolina W. Cayford in 1899; who with two sons, survived him.

During the last year Dr. Burrell had been an invalid on account of chronic disease of the kidney with cardiac complications, and had been unable to teach or to practice. He died at his home in Boston, April 27, from valvular heart disease, associated with disease of the kidney, aged fifty-four.

Jour. Amer. Med. Assoc., Chicago, May 7, 1910, in which there is a portrait.
Boston Transcript, April 27, 1910.

Burroughs, Richard Berrien (1833–1901).

One of Florida's prominent physicians and surgeons, he was born in the city of Savannah, Georgia, January 19, 1833. His middle name was derived from his maternal grandfather, John MacPherson Berrien, who was attorney-general of Andrew Jackson's cabinet. Dr. Burroughs graduated at the University of Georgia in 1853 and graduated at the Jefferson Medical College of Philadelphia in 1856, taking up practice afterwards at Tallahassee, Florida, and in Camden County, Georgia, prior to the Civil War. At the beginning of the struggle he entered the Confederate Army as a surgeon, and was assigned to duty with the sixty-third Georgia Regiment at Thunderbolt, near Savannah. Preferring a more active service he was transferred, in 1862, to the fourth Georgia Cavalry, Col. Duncan L. Clinch, and with that noted command shared in the Atlanta campaign. A large portion of the war period was spent by Dr. Burroughs as surgeon with the gallant J. J. Dickison's command in Florida, and deserved tribute is paid to him in the history of "Dickison and his Men." In other fields he was distinguished. At the battle of Jonesboro, Georgia, he rode through a galling fire to where the gallant Captain Wylly had fallen, shot through the neck, placed the wounded man on his horse and on foot succeeded in conveying him to a place of safety. At the battle of Olustee, he gave his horse to Col. Smith, whose own had been killed, and continued during the rest of the fight to discharge the functions of his office unmounted. He settled in Jacksonville in 1880 and for many years was a leading physician in that city. He was appointed by Gov. Drew, in 1885, on the staff of Gen. Capers W. Bird as Chief Surgeon with the rank of major, and in 1892 was appointed surgeon-general by Gen. J. J. Dickison of the Florida Confederate Veterans.

Dr. Burroughs married, first, Ella J. Burroughs, who died on August 13, 1868, then to Florida Lewis, who died April 14, 1895. At his death he left six children. Dr. Burroughs died September 11, 1901, at the home of his son, Joseph Hallett Burroughs, in Norfolk, Virginia.

W. B. B.

Burton, Elijah (1794–1854).

Elijah Burton was a prominent pioneer physician of Collamer, Cuyahoga County, Ohio, and the stalwart progenitor of a line of physicians who, for nearly a century, have dominated the practice of the locality in which he settled. Born in Manchester, Bennington County, Vermont, he received the ordinary education of the common schools of his day. Endowed by nature with a taste for military affairs and filled with the traditional patriotism of the "Green Mountain

Boys of '76," on the outbreak of the war with Great Britain in 1812–14 he enlisted in the volunteer forces of the United States, though still a mere youth, served throughout the war with the rank of orderly sergeant of his company, and at the close of the contest returned to his native city and soon after began to study medicine under Dr. Isham. On the organization of the Castleton Medical Academy, at Castleton, Vermont, in 1818, young Burton attended the lectures there and received his M. D. in 1819 or 1820. About a year before he had married Miss Mary Hollister, of Manchester, and in 1820, with his wife and one child, travelled on horseback from Vermont to the town of Collamer, Ohio, with the purpose of settling in the Western Reserve. Tradition reports that, on his arrival, he found another young physician, also looking for a place of settlement, and that the two young doctors settled the question who should remain in the town by the toss of a penny, in which Dr. Burton won the choice. In order to eke out the scanty emoluments of a pioneer practice, the doctor also took charge, during the first year, of the district school of his own town, teaching by day and attending the wants of the sick by night. Having established his intellectual and pedagogic supremacy by a stirring muscular debate, in which a skillful use of the "*argumentum* a *fortiori*" resulted in depositing his antagonist, a husky, six-foot pupil, upon the smouldering backlog of the school-house fireplace, the tenderness and success displayed in healing the wounds of his late opponent won the stout hearts of the neighboring pioneers, and the doctor speedily stepped into a thriving family practice, which extended through all the adjacent towns. His popularity and the recognition of his military tastes were evidenced by his election to the position of colonel of the local militia, and throughout his life Dr. Burton was held in the highest esteem, both as a physician and an intelligent and vigilant citizen. He died in East Cleveland, April 2, 1854. From the year 1846 Dr. Elijah Burton was associated in practice with his son, Dr. Erasmus Darwin Burton, who in turn associated with his own son, Dr. F. D. Burton.

No portrait or likeness of any kind of Dr. Elijah Burton has been preserved, and as the greater part of his life antedated the formation of medical societies in Ohio, his name is naturally absent from the rolls of such. H. E. H.

A Sketch of Dr. Elijah Burton, by Dr. Dudley P. Allen, in the Magazine of Western History, vol. iv.

Busey, Samuel Clagett (1828–1901).

Samuel Clagett Busey, son of John and Rachel Clagett Busey was born July 23, 1828 on a farm known as "Stony Lonesome," a few miles west of Washington. His father's ancestors came from Scotland and settled in Maryland in 1754, while the Clagetts arrived from England as early as 1671.

He was first taught by his mother, whose early widowhood compelled her, though in feeble health, to do this, and personally supervise the farm. She was a refined and cultivated woman possessed of great force of character and energy, qualities which she carefully inculcated in her sons.

From 1841 to 1845 the boy Samuel attended Rockville Academy, then in charge of Mr. Wright, and in 1844 was offered a cadetship at West Point. This he had greatly coveted, but his mother refused consent and insisted he should enter the medical profession, so in May, 1845, he began to study medicine with Dr. Hezekiah Magruder, of Georgetown. The following winter he attended the lectures on anatomy and operative surgery at the National Medical College, but soon discovered private teaching with text-books twenty-five years old to be far from satisfactory, and, although the income from his estate was quite inadequate even in those frugal days, he went to Philadelphia in the spring of 1846 and worked under the famous Dr. George B. Wood, and in the University

of Pennsylvania where he enjoyed the teaching of such men as the elder Pepper, Wood, Gerhard, Chapman, Gibson, Horner, Hodge, and graduated April 8, 1848. In May, 1848 he began his lifework in Washington in consulting rooms on Capitol Hill, and in the following year married Miss Catherine Posey. In the struggle for existence which confronts every beginner in a profession, he earned less than a dollar a day the first year, while the receipts from his second year's practice were only $800. Thereafter his practice, his income and his influence steadily increased.

In 1853 he was elected professor of materia medica in the medical department of Georgetown University, but in 1858 symptoms of pulmonary disease appeared and drove him to take up the life of a farmer. He moved out to "Belvoir," near the site of what is now Cleveland Park, a change undoubtedly beneficial and one which added many years to a useful life. He attended professionally most of the neighboring families and kept up with the rapid advances then being made in the medical sciences, then after ten years returned to Washington September, 1869, physically and professionally well equipped for a busy life. In that year he helped to organize a dispensary in connection with the Columbia Hospital and was placed in charge of the department of diseases of infancy and childhood. One of the blessings resulting from this connection was the establishment, November 25, 1870, of the Children's Hospital, and when in 1872 the first post-graduate school of clinical medicine in this country was established there he was one of its most successful teachers. In July, 1875, he was appointed professor of Diseases of Infancy and Childhood in the Medical School of Georgetown University. In 1880 he was one of Dr. Jacobi's coadjutors in establishing the section of diseases of children in the American Medical Association. He presided over the first meeting, read the first paper, entitled "Chronic Bright's Disease in Children caused by Malaria," and was elected chairman of the section in 1881. He was also one of the founders of the American Pediatric Society. His interest in behalf of sick children remained unabated; in 1896–1897 he pointed out the absence in Washington of suitable provisions for the treatment of contagious diseases, and thanks to his persistent efforts, these pavilions were established in connection with two hospitals. He was also a founder of the American Dermatological Association.

In 1875 he was elected president of the Medical Association and in 1876 professor of theory and practice of medicine in the Medical School of Georgetown University, which position he filled until compelled by declining strength to give up active teaching. He received there in 1899 the LL. D., the highest honor the University had to bestow.

In 1877 he was elected president of the medical society and re-elected from 1894 to 1899, and largely helped in the founding of the Garfield Memorial Hospital, the Washington Obstetrical Society, Columbia Historical Society, and the Washington Academy of Sciences.

On the fiftieth anniversary of his graduation, April 8, 1898, Dr. Busey was tendered a banquet by the local profession.

How well he deserved this evidence of respect is shown by a list of more than forty distinct distributions to medical literature, besides his miscellaneous publications. The world is indebted to him for his work on "Congenital Occlusion and Dilatation of Lymph Channels," and his masterly exposition of "The Wrongs of Craniotomy upon the Living Fetus," writings which have long since become classic.

For several years he had been in delicate health, yet his interest in the Medical Society and Academy was so great that he rarely missed a meeting and also made the Academy the beneficiary of a bequest, without conditions, amounting to about $5,000.

Peacefully and quietly in the early

morning hours of February 12, 1901. came the end, that end which despite anticipation or expectation, was felt as a shock through a wide circle of friends and admirers in the city which he loved and which owed so much to his bright, fertile and discerning mind.

His writings included:

"Occlusion and Dilatation of Lymph Channels, Acquired Forms," 84 pp., 1877, New Orleans. Reprinted from "New Orleans Medical and Surgical Journal," 1876–8.

"Congenital Occlusion and Dilatation of Lymph Channels," xv, 187, pp., 8°, New York, 1878.

"Personal Reminiscences and Recollections of Forty-six Years Membership in the Medical Society of the District of Columbia and Residence in this City, with Biographical Sketches of Many of the Deceased Members," x, 17–373 pp., 8°, Washington, District of Columbia, 1895.

"A Souvenir, with an Autobiographical Sketch of Early Life and Selected Miscellaneous Addresses and Communications," viii, 382 pp.. 1 plate, 3 photographs, 8°, Washington, District of Columbia.

"Pen Pictures of the City of Washington in the Past," Washington, 1898.

"Annual Addresses of the President of the Medical Society of the District of Columbia delivered 1894–95–96–97–98," iv, pp., 178, 8°, Washington, District of Columbia, 1899.

"Artificial Induction of Labor in Uremia," 62 pp., 8°. Reprinted from "National Medical Journal," Washington, 1870.

"An Inquiry into the Nature of the Uterine Supports and of the Causes of Displacements," 39 pp., 8°. Reprinted from "American Journal of Obstetrics," New York, 1872.

"Address in Obstetrics and Diseases of Women and Children," delivered before the American Medical Association, June 8, 1876, 33 pp., 8°. Reprinted from "Transactions of American Medical Association," Philadelphia, 1876, xxvii.

"The Potassium Bromide and Suspension of the Action of the Stomach in the Treatment of Uncontrollable Vomiting of Pregnancy," 6 pp., 8°. Reprinted from "American Journal of Medical Sciences," Philadelphia, 1879.

"Alternating Anterior and Posterior Version of the Uterus," 12 pp., 8°. Reprinted from "Transactions of American Gynecological Society," 1879.

"A Case of Tuberculosis of the Peritoneum with the Formation of a Sac simulating an Ovarian Cyst," 12 pp., 8°. Reprinted from "Gaillard's Medical Journal," New York, 1880.

"Thrombosis of the Sinuses of the Dura Mater in Fatal Cases of Dysentery in Young Children," 8 pp., 8°. Reprinted from "American Journal of Obstetrics," New York, 1880, xiii.

"Chronic Bright's Disease in Children caused by Malaria," 14 pp., 8°. Reprinted from "Transactions of American Medical Association," Philadelphia, 1880.

"Craniotomy upon the Living Fetus is not Justifiable." Address delivered October 5, 1883, 19 pp., 8°. Reprinted from "American Journal of Obstetrics," New York, 1884, xvii.

"Scarlatina Puerperalis," 15 pp., 8°. Reprinted from "American Journal of Medical Sciences," Philadelphia, 1844, n. s., lxxxvii.

"The Casual Relation of Obstructed Cardiac Circulation to Lymph Stasis," 8 pp., 8°. Reprinted from "American Journal of Medical Sciences," Philadelphia, 1885, n. s., xcix.

"The Hygiene of Pregnancy," 15 pp. Reprinted from "American Journal of Obstetrics," New Jersey, 1886, xix.

"Maternal Impressions," Discussion on Dr. Barker's essay, 19 pp., 8°. Reprinted from "Transactions of the American Gynecological Society," 1886, New York, 1887, xi.

"Persistent Vomiting during Labor Relieved by Anesthesia." 11 pp., 12°. Reprinted from "Journal of the American Medical Association," Chicago, 1887, viii.

"Some Rare Clinical Observations in

Obstetric Practice," 14 pp., 8°. Reprinted from the "American Journal of Obstetrics," New York, 1887, xv.

"Chronic Inversion of the Uterus." In Systemic Gynecology" (Mann), 8°, Philadelphia, 1888.

"The Effusion of Chyle and of Chyle-like, Milky, Fatty and Oily Fluids into the Serous Cavities," 23 pp., 8°. Reprinted from the "American Journal of Medical Sciences," Philadelphia, 1889, n. s., xcviii.

"The Wrong of Craniotomy upon the Living Fetus," 21 pp., 8°. "American Journal of Obstetrics," New York, 1889, xxii.

"Vulvar or Vaginal Hemorrhage in the Newly Born," 8 pp., 8°. Reprinted from the "American Journal of Obstetrics," New York, 1890, xxiii, and many other papers and addresses.

G. M. K.

Bush, James Miles (1808–1875).

James Miles Bush was born in Frankfort, Kentucky, May, 1808 and died in Lexington, February 14, 1875.

His grandparents, Philip and Mary Bush, came from Germany in 1750 and settled in Winchester, Virginia.

James Bush began the study of medicine in the office of the celebrated Dr. Alban Goldsmith, but removed in 1830 to Lexington to attend the medical department of Transylvania University. He became the private pupil of Dr. Benjamin W. Dudley, and between the two men sprang up a warm and life-long attachment.

In 1833 he received his M. D. from Transylvania University and was at once appointed demonstrator and instructor in anatomy and surgery there, a place filled successfully till 1837, when he was made, in the same institution, adjunct professor of anatomy and surgery under Dr. Dudley. In 1844 he became full professor of anatomy.

In 1850 the medical department of Transylvania began to give only summer courses, and Dr. Bush, with others, established in Louisville a winter school, the Kentucky School of Medicine, where he filled, for three sessions, the chair of surgical anatomy and operative surgery.

Dr. Bush married, in 1835, Miss Charlotte James of Chillicothe, Ohio. Two sons and one daughter were born to them, the eldest son, Benjamin Dudley Bush, inheriting his father's fondness for the study of medicine, gave great promise as a physician and surgeon. His early death was a shock from which his father never recovered. James Miles Bush, while distinguished as a surgeon, performing a number of times successfully the then unusual operation of lithotomy, was also a general practitioner.

His principal writings that have been preserved are reports of interesting cases. These can be found in vol. x (1837) of the "Transylvania Journal of Medicine." Two are:

"An Introductory Lecture to the Dissecting Class of Transylvania University," Lexington, November 9, 1840.

"Observations on the Operations of Lithotomy," illustrated by cases from the practice of Prof. B. W. Dudley.

Three portraits of this physician are in possession of his family; one of these, by his brother, Joseph Bush, a talented pupil of Sully, shows the wonderfully keen eyes for which he was noted.

In his surgical work, he felt deeply the necessity of hospital advantages, and it was at his suggestion St. Joseph's Hospital at Lexington was founded, the first hospital in central Kentucky.

Dr. Bush died of diabetes mellitus, and, conscious of his condition, faced the inevitable without confiding to his family the serious nature of his disease. Two months before his death he said to a brother practitioner, "I have but two months to live."

R. M. C.

Bush, Lewis P. (1812–1892).

Born in Wilmington October 19, 1812, he graduated M. A. from Jefferson College and in 1835 received his M. D. from the University of Pennsylvania. He was resident physician at the Blockley

Hospital until 1837, when he went to Wilmington, and practised till his death.

He belonged to several historical societies in Delaware, Virginia and Pennsylvania and was president of the American Medical Society and wrote on the "History of Medicine and Physicians in Delaware," on which subject he wrote the chapter in Scharf's "History of Delaware."

In 1860 he was president of the State Medical Society and read many papers specially advocating sanitary reforms. He died March 5, 1892.

Hist. of the State of Delaware.
Wilmington Board of Health, Biennial Report, 1890–2

Butler, Lucius Castle (1820–1888).

Lucius Castle Butler was born in Essex, Vermont, March 17, 1820 and his preliminary education was obtained in public schools and at Bradford Academy. Afterwards he studied medicine with Dr. George Howe of Jericho and Dr. Leonard Marsh of Burlington, attending lectures at Dartmouth and at the Clinical School in Woodstock, graduating thence in 1843 and thirty years later receiving his honorary M. D. from Dartmouth.

After practising at Clintonville, New York, for seven years, Dr. Butler settled in Essex, where he practised nine years. In 1859 he moved to Bradford where he lived for a year, thence to Philadelphia to accept a position on the editorial staff of the "Medical and Surgical Reporter," but after two years in this position he returned to Essex and practised the remainder of his life.

Dr. Butler was for many years a member and three years president of the Vermont State Medical Society and a member of the American Medical Association. He was a rather prolific writer, not only upon medical but also historic subjects, publishing at various times medical papers read before the Vermont State and other medical societies, and an "Early History of the Town of Essex." Dr. Butler was active in town and state affairs and was an allround good citizen. He also prepared and tabulated for the secretary of state the vital statistics of Vermont for several years. In this connection it should be stated that he was instrumental in securing the establishment of the State Board of Health.

He is represented as a most sympathetic as well as skillful physician and a man who endeared himself to his clientèle. He married in 1845 Hannah D. Page of Essex and had a son and daughter.

C. S. C.

Tr. Vermont Med. Soc., 1888, Montpelier, 1889.

Butler, Samuel Worcester (1823–1874).

This alienist, was born at Brainard, Georgia, May 1, 1823. His father, Dr. Elizur Butler, was a medical missionary among the Cherokee Indians. Samuel W. Butler graduated from the department of medicine at the University of Pennsylvania in 1850, and first practised in Burlington, New Jersey, associating himself with Dr. Joseph Parrish, the latter being editor of the "New Jersey Medical Reporter." Dr. Butler soon became its sole editor and proprietor, his natural qualifications for the post being early conceded, and immediately transformed it into a monthly.

In spite of a growing practice he determined to remove to Philadelphia, in order to prosecute his editorial labors more successfully. The move was made in 1858, and the journal commenced as a weekly under the title "The Medical and Surgical Reporter."

Dr. Butler was appointed in 1859 superintendent physician of the department for the insane of the Philadelphia Almshouse. This position he held until 1866, but from this date to the close of his life he devoted himself to medical literature, continuing the "Medical and Surgical Reporter," commencing in 1867, the "Half Yearly Compendium, of Medical Science and in 1866, the "Physician's Daily Pocket Record," and in 1872 projecting the "United States

Medical Directory." He died January 6, 1874, of pulmonary tuberculosis.

As a contributor to medical science, Dr. Butler's name is connected with the introduction into the materia medica of the hydrangea arborescens, a remedy used by the Cherokees, and the value of which has been, since his introduction of it to professional notice, fully attested by many practitioners.

Dr. Butler was a Presbyterian, an ardent advocate of the temperance movement, and a citizen worth owning.

F. R. P.

Biographical Memoir from the Transactions of the Medical Society of Pennsylvania, 1874.

Butterfield, John Stoddard (1817–1849).

John Stoddard Butterfield, a prominent medical teacher and journalist of Columbus, Ohio, was born in Stoddard, Cheshire County, New Hampshire on December 2, 1817 and went as a boy to the local school. He worked under Dr. Elisha Huntington, of Lowell, took one course of lectures in the Berkshire Medical Institute at Pittsfield, Massachusetts, and finally graduated at the College of Physicians and Surgeons of New York City in 1841. In the latter he had as a classmate George C. Blackman, later the famous surgeon of Cincinnati. After practising for a brief period in Littleton, Massachusetts, Dr. Butterfield returned to Lowell and entered into partnership with his former preceptor, Dr. Huntington. In 1843, however, on the recommendation of Dr. Willard Parker, he was chosen professor of the theory and practice of medicine in the medical department of Willoughby University, Ohio. This medical school, disrupted by the secession of Drs. Delamater, Kirtland and other eminent teachers, who united in the organization of the Cleveland Medical College in the neighboring and larger city of Cleveland, was threatened with extinction. Largely by the exertions and influence of Dr. Butterfield, the Legislature of Ohio, in 1846, authorized the removal of the Willoughby Medical College to the city of Columbus where, in the following year, it was combined with the Starling Medical College then just organized. Dr. Butterfield retained his old chair in the new institution, and was chosen at once as dean of the faculty. Soon after, with courage and energy unabated by the manifest evidences of failing health, he founded, in the year 1848, the "Ohio Medical and Surgical Journal," in the service of which he spent the little remainder of his strength until the editorial pen fell at last from his powerless hand and he retired to Salisbury, New Hampshire, in the vain hope of recuperation by rest and change of air. Here he died of general tuberculosis, September 7, 1849, at the early age of thirty-two. He was buried in Lowell, Massachusetts, where his medical career had begun.

Dr. Butterfield took an active part in promoting the interests of his profession, and was a member of the Ohio State Convention and one of the founders of the Ohio State Medical Society in 1846.

A fluent speaker, a clear and forcible writer, Dr. Butterfield bid fair to become a power in the ranks of the medical profession of the state, until untimely death intervened. In the "Transactions of the Ohio State Medical Convention" of 1846 are two papers from his pen; one, "A Report on Typhoid Fever" (pp. 19–21), the other, an excellent one, on "Obstetric Auscultation," fully abreast with the knowledge of his day. Both are interesting, even at the present time. He is also said to have been preparing, at the time of his death, a work on Physical Diagnosis.

A journalist of his day sums up the character of Dr. Butterfield as follows: "He was a ripe scholar, a popular lecturer, a discriminating writer, a Christian without austerity and a gentleman without ostentation." H. E. H.

The Ohio Medical and Surgical Journal, vol. ii, 1849.
Trans. of American Medical Assn., vol. xxx, 1850.

DeButts, Elisha (1773–1831).

Elisha DeButts, physiologist and a founder of the University of Maryland School of Medicine, was born in Dublin, of a family among the "Landed Gentry," in the year 1773. His father, John De Butts, was an officer in the English army. In his youth his family emigrated to America and settled at Sharpsburg in Western Maryland. He attended school near Alexandria, where lived his uncle, Dr. Samuel De Butts, under whom he studied medicine. Later he entered Pennsylvania University and took his M. D. in 1805, the subject of his thesis being" An Inaugural Essay on the Eye and on Vision." After practising for several years on the Potomac, opposite Alexandria, he settled in Baltimore and was appointed professor of chemistry in the College of Medicine of Maryland in 1809, and held it until his death. He also held the same chair in St. Mary's College, Baltimore. In 1830 he was sent to Europe by the Board of Trustees to procure chemical apparatus for the University. While abroad he lectured with great éclat before the Royal Institution in London, a copy of his address being requested. He died April 3, 1831, of pneumonia, due to exposure in attending a friend to his door on a cold day in his slippers.

Professor De Butts was tall and spare; his health never robust, and he had a cast in one eye. Besides his graduating thesis, only two short articles are known: "An Account of an Improvement made on the Differential Thermometer of Mr. Leslie" (1814), "Transactions of American Philosophical Society, " 1818, pp. 301–306, with plate. "Description of Two New Voltaic Batteries." "Silliman's Journal," viii. 1824, pp. 271–274. "The Baltimore Federal Gazette" mentions a highly important discovery in electricity made by him during the session of 1823–24.

His friend, Bishop Henshaw, of Rhode Island, wrote: "As a teacher of chemistry,, whether we look at the learning and perspicuity of the lectures in which he inculcated the lessons and doctrines of philosophy or at the brilliancy and success of the experiments by which he illustrated them, he was, perhaps, unequalled, certainly unexcelled."

Dr. De Butts had a son, John De Butts, who became a physician of Queen Anne County, Maryland, and died in 1894. There are said to be several oil portraits of the father extant. One of these is reproduced in Cordell's History of the University of Maryland," 1891 and 1907.

E. F. C.

University of Pennsylvania" Alumni Register. Maryland. Med Jour., Sep., 1882.

Buxton, Benjamin Flint (1810–1876).

This physician was born in Warren, Maine, November 5, 1810, the son of Dr. Edmund Buxton, the first physician to settle in Warren.

The son, after an ordinary academic education, began to study medicine with his father then continued after his father's death with a physician in Waldoboro, and attended lectures at the Medical School of Maine, where he graduated in 1830. He settled in his native town and soon, by his own personal force and skill, gained an enormous practice as well as the personal esteem of the entire community. No doctor could do any business in Warren after Dr. Edmund Buxton's death until his son came in and carried everything before him. A physician who will travel ten miles on snow shoes to see a patient is bound to succeed!

The year 1849 found him as busy as ever, but in some way the fever for gold which was then discovered in California seized hold of him and he left Maine for the New Eldorado.

The actual labor of mining for gold not agreeing with him, he sold supplies of all sorts to the miners, then bought a ship, and was on his way to the settlements in the Gulf of California when he was shipwrecked off Cape St. Lucas. Finally, all on board were rescued and taken to Apaculco, where Dr. Buxton

founded a hospital for the benefit of a large floating population of sick and disabled seamen, and did excellent service for about a year. By that time the tropical climate began to tell upon him, and he decided to return to Maine. Unfortunately he was attacked at Panama with the chagres fever, yet after a long serious illness reached Maine in 1851, very much enfeebled.

With the beginning of the Civil War, he was appointed surgeon of the fifth Maine Regiment, despite political opposition, and at the Battle of Bull Run was captured and carried within the enemies' lines. It happened that Gen. Beauregard, the Confederate leader, and Dr. Buxton had been business friends of long standing. When the general learned at dinner that there was a Dr. Buxton among the prisoners, he sent for him, put him at his right hand, and said to his officers, "As there is a prisoner of war here, please do not discuss war or politics at this meal."

When the dinner was over, and for a week following, Dr. Buxton attended skillfully to all of the wounded federal prisoners and then conducted them safely to Richmond. After a few months he was paroled, took charge of the hospital in Augusta for the period of a few months, then rejoined his regiment, but was ultimately obliged to resign in 1863 owing to his health. From that time until his death he remained at home, practising as health permitted. He married Miss Julia Seavey of Wiscasset June 3, 1833 and had three children.

Buxton was an active member of the Maine Medical Association, and contributed as his first paper one on "Medical Education," another on Hypodermatic Medication," and was president of the association in 1871. He was noteworthy for his work in behalf of the Maine General Hospital, whose value to the state he could easily foresee from his long experiences in hospital work during the Civil War.

He was tall, majestic, very energetic, of high public spirit, and firm in his convictions, while as a physician his resources were large, his experience great.

He died October 8, 1876, after a long and difficult illness, worn out by his uncontrollable energetic temperament which drove him much too early into unhealthy climates. J. A. S.

Trans. Me. Med. Assoc.
History of Warren, Me.

Buzzell, John (1826–1890).

When I came to Portland in 1873, I only heard of Dr. Buzzell as an old-fashioned doctor who relied on household remedies like catnip tea and sarsaparilla.

Hearing nothing to the contrary I relegated him to the ordinary run of medical men, but on examining the records of his work and talking with some of his living patients, it was evident proper honor should be paid to him.

John Buzzell was the son of Dr. John Buzzell of Cape Elizabeth, Maine, and born there November 18, 1826. He went to school until he was fourteen and then, by his own earnings, made his way through the Academies at Portland and North Yarmouth, attending medical lectures at the Harvard Medical School, and graduating at the Medical School of Maine in 1850. He then settled in Cape Elizabeth, and soon had a large practice. In 1858 he left his work and spent several months in New York to obtain the latest medical novelties. Returning thence, he moved to Portland, Maine, where he practised the rest of his life.

He suffered much from a chronic eczema for which he consulted dermatologists far and wide in vain, and he suffered also from childhood with caries of the femur, crippling him and leaving him with a shortened leg for life.

He was very skillful as an obstetrician, invented a new forceps and was one of the earliest physicians in Portland to bring forceps into general use.

He did some excellent ovariotomies before the days of asepsis, performed

several amputations which could not be improved upon, and was skillful with the knife, but did not like to use it.

He was a member of the Maine Medical Association, and wrote for it two excellent papers, one on the use of the forceps, and another on amputations.

It was, however, in emergencies that Dr. Buzzell was at his best. A man of thirty developed symptoms calling for tracheotomy; a consultation was held, but none of the physicians dared to operate. Dr. Buzzell did the operation successfully, and forty years later the patient was still living. He was exceedingly fond of travelling, enjoyed a trip to Europe, and was clever as a musician. He married twice, first to Anna Hanson, next to Susan Whitmore, of Cape Elizabeth, Maine, by whom he had two daughters and a son.

In his later years he suffered from enlargement of the heart and died very suddenly, for while ascending the stairs to a patient's chamber, he was taken with severe pains around the heart, and died in a few minutes, April 10, 1890. J. A. S.

Trans. Maine Med. Assoc., 1890.

Byford, William Heath (1817–1890).

Dr. Byford, gynecologist, was born in the village of Eaton, Ohio, March 20, 1817, the eldest of three children. His parents were Henry T. and Hannah Byford; the former, a mechanic in straitened circumstances, died when William was only nine, at which tender age he was obliged to seek such work as he could find. At fourteen he was apprenticed to a tailor, and spent the ensuing six years in mastering his trade and acquiring such knowledge of books as was possible. When eighteen he determined to become a physician and chose as his preceptor Dr. Joseph Maddox. Not long after the termination of his apprenticeship, he was examined by a commission and granted license to practise medicine.

His professional life began in the year 1838 in the town of Owensville, Indiana. Two years later he removed to Mt. Vernon, Indiana, where he married the daughter of Dr. Hezekiah Holland, and during his ten years in this town studied medicine in the Ohio Medical College of Cincinnati, and in 1845 he graduated from this institution. In 1850 he was called to the chair of anatomy in the Evansville Medical College, and in 1852 was elected to the chair of the theory and practice of medicine in the same college.

In 1857 Dr. Byford received a call to the chair of obstetrics and the diseases of women in the Rush Medical College of Chicago, and after serving two years he associated himself with others to found the Chicago Medical College, where he occupied a similar chair until the year 1879, when he was recalled to the Rush Medical College to fill the chair of gynecology. In 1870 he was foremost in championing the cause of medical education for women, participating eagerly in founding the Women's Medical College of Chicago, to which he ever afterwards contributed most liberally in every respect.

As a worker in medical societies he was also active, being one of the founders of the American Gynecological Society and honored member of the Illinois State Medical Society. Medical journalism, too, owes much to him, for he was editor of the "Chicago Medical Journal" and afterwards of the "Chicago Medical Journal and Examiner."

His publications began in 1847 with a paper on "Cesarean Section," and include a great variety of medical topics, the fruit of a vast professional observation. His literary labors will be best remembered by his works on "Chronic Inflammation and Displacements of the Unimpregnated Uterus," "Practice of Medicine and Surgery applied to the Diseases and Accidents of Women," and his work on "Obstetrics" (1862).

Dr. Byford's name is familiar in connection with many important innovations in the treatment of gynecological

William Heath Byford.

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cases. Some of these were in the nature of marked improvements upon former methods in vogue; while they in turn subsequently gave way to still better methods of treatment, others came to remain permanently. It was not in his nature, however, to call loudly for glory, and it not infrequently happened that others received the credit of discoveries of this character which were justly due to him, but which he could scarcely claim without controversy—something that he always abhored. He was one of the first to observe that the contents of pelvic abscesses often become encysted and undergo subsequent alterations without being discharged; to advocate laparotomy for the relief of rupture of the uterus in cases of extrauterine pregnancy; to employ ergot for the expulsion of uterine fibroids, and in the enucleation of cysts of the broad ligament to advise the termination of the operation by the method of stitching the amputated cyst walls to the edges of the abdominal wound.

Of vigorous physique and temperate habits, old age had apparently done but little to exhaust his powers of mind or body; yet for several years he had been conscious of a cardiac lesion which, however, had not prevented him from actively continuing his usual labors. On the twenty-first of May, 1890, he experienced a severe attack of angina pectoris, which in two hours proved fatal. Three days before his death he performed a laparotomy, and even on the last fatal day he went to work as usual.

Dr. Byford was twice married, his second wife being Lina Flersheim, who with four children, a son and three daughters, the offspring of his first marriage, survived him. This son, Henry T., followed in the footsteps of his revered father.

Tr. Illinois State Med. Soc., Chicago, 1891, vol. xli. (J. C. H.)
Am. Jour. Obstet., N. Y., 1890, vol. xxiii.
Tr. Am. Gyn. Soc., Phila., 1890, vol. xv. (port.)
N. Am. Pract., Chicago, 1890, vol. ii.

Byrd, William Andrew (1843–1887).

William Andrew Byrd was born in Bath County, Virginia, October 3, 1843, and died in Quincy, Illinois, August 14, 1887. He was largely self-educated, his college training being limited to two years of study at the Missouri Medical College in St. Louis, Missouri, from which he graduated in 1867 and began practice in Lima, Illinois, a village near Quincy, Illinois. After three years he removed to Ursa, a little nearer Quincy, and in 1873 began his work in the larger city. His predominant interest was in surgery and he soon limited his work largely to this, becoming surgeon to both the local hospitals and drawing patients from a radius of 100 miles to his clinic. He had unusual mechanical ability and initiative, and showed this in instituting and adopting new methods. In 1884 he recognized appendicitis as a surgical disease and made two successful appendectomies for its cure. These cases were reported to the surgical section of the American Medical Association. He became greatly interested in abdominal surgery, made many successful intestinal resections, devising an enterotome to aid in the closure of the artificial anus. He also devised an operation, known by his name, for the cure of imperforate anus in the new-born. While much of his work has been largely superseded by newer methods, he is still regarded as a pioneer in abdominal surgery. In recognition of this he was made a professor of abdominal surgery, a chair created especially for him in the Missouri Medical College where he taught this one month each year. He was also one of the founders of the American Surgical Association.

Dr. Byrd combined many charming personal traits in social intercourse, unusual originality and initiative, with an unusually wide and deep acquaintance with the literature of his profession, especially that part of it having to do with surgical pathology and surgical practice. He died suddenly at the height of his activity when only forty-

four, after having been honored by the highest offices in the gift of the local and state society and surgical section of the American Medical Association, as well as the Mississippi Valley Medical Association, of which he was one of the original members.

Among his pamphlets are found:

"Extirpation of Rectum without destroying Sphincter Ani Muscle," 1880.

"Abdominal Section in the Treatment of Ulceration and Perforation of the Cecum and Vermiform Appendix," 1881.

"Lumbo-colotomy in the New-born for Relief of Imperforate Rectum," 1881.

Address in surgery. "Excisions of Portions of the Alimentary Canal," 1882.

E. B. M.

J. Am. Med. Assoc., Chicago, 1887, ix.
Peoria Med. Month., 1887–8 viii.
Tr. Ill. Med. Soc., 1888. (O. B. Will.)

C

Cabell, James Lawrence (1813–1889).

Dr. William Cabell, founder of the Cabell family in Virginia, and a surgeon and citizen of the eighteenth century, had for grandson one Dr. George Cabell, Jr., who married Miss Susanna Wyatt, to them being born August 26, 1813, James Lawrence Cabell. He went as a boy to private schools in Richmond, and to the University of Virginia, where he matriculated in 1829. An earnest and diligent student, he obtained his M. A. in 1833. The following year he continued the study of medicine in the University of Maryland, and took his M. D., having taken his first course of lectures at the University of Virginia. In 1873 Hampden-Sydney College conferred upon him her LL. D. To further his studies, he went to Paris, and continued to study there until 1837, when he was called to the chair of anatomy, physiology and surgery in the University of Virginia, which he filled with eminent ability until 1856, when a chair of anatomy and materia medica was created, he continuing to teach physiology and surgery, and for a time comparative anatomy, until his retirement from active work at the end of the session of 1888–89, after over fifty years of active service. He was a member of the Medical Society of Virginia, and in 1876 elected president.

During the war between the states, Dr. Cabell was in charge of the Confederate States Military Hospital at Charlottesville, Virginia from July, 1861 to May, 1862, and again from September, 1862 to the end of the war.

Dr. Cabell was a man of zeal and learning, both of a professional and general nature, and wonderfully well rounded in his acquirements. For half a century the greater part of his energies were devoted to teaching and it was as a teacher that he stood preeminent. An able diagnostician and possessing a vast fund of knowledge, his services as a consultant were much sought. During the Civil War, when in charge of the military hospital at Charlottesville, his skill and his remarkable executive abilities were exhibited in a high degree.

He married in 1839 Margaret Gibbons, but had no children, and he adopted two nieces who grew up to comfort his declining years. After some months of failing health, he passed away on the thirteenth of August, 1889, at the house of Major Edward B. Smith, in Albemarle County, Virginia.

While by no means a voluminous writer, he was the author of a book and some valuable papers. His most notable work, entitled "Testimony of Modern Science to the Unity of Mankind," published in 1857, was called forth by Gliddon and Notts' "Types of Mankind," and in it he skillfully combats the views of Gliddon and Notts as tending to unbelief, and shows that the Bible and science are not antagonistic. Everything that he wrote is characterized by excellence of style, force of reasoning, and the importance of the subjects discussed.

The following are some of his contributions to medical literature:

"Syllabus of Lectures on Physiology and Surgery," 1857.

"Gunshot Wounds of the Head." ("Richmond Medical Journal," vol. i.)

"On the Treatment of Acute Pneumonia." (Ibid., vol. iii.)

"Oxygen as a Remedy in Disease." ("Virginia Medical Monthly," vol. i.)

"Sanitary Conditions in Relation to Surgical Operations." ("Virginia Medical Monthly," vol. ix.)

"Defective Drainage as a cause of Disease within the Limits of Virginia."

("Transactions of American Medical Association," 1875.)

The University of Virginia owns a protrait of Dr. Cabell, and there is another in the collection of portraits in the library of the surgeon-general, Washington, D. C. R. M. S.

Trans. Med. Soc. of Va., 1889.
"The Cabells and Their Kin," Alex. Brown.

Cabell, William (1699–1774).

William Cabell, pioneer doctor, the founder of the Cabell family in Virginia, was a grandson of William C. Cabell, of Warminster, England, and the son of Nicholas Cabell. He was born in Warminster, probably in the year 1699, though the year of his birth as inscribed upon his tombstone was 1687. This, however, is believed by his descendants to have been an error.

He studied medicine in London, and was a graduate of the Royal College of Surgeons. There is a tradition that he practised for several years in London with success, and then entered the British Navy as a surgeon. He came to Virginia in 1724 or 1725, and after living for a short time in Williamsburg and in Henrico County, purchased land and settled in Goochland County. In 1726, he was deputy to Capt. John Redford, high sheriff of Henrico, and in the same year married Elizabeth Burks. She died in September, 1756, probably of pernicious malarial fever, and he says in his diary that she died of bilious fever and coma. We find him in 1728–29 one of the justices of the county of Goochland, and in the latter year appointed county coroner. In 1735 he was called to England and did not return until 1741, his wife in the meanwhile managing his affairs in Virginia. He next took up land along the James River in Nelson County, fifty miles west of any then existing settlements. This tract of land extended for twenty miles along the river and contained 8,000 acres of river bottom land. He built a home upon this estate, which he named Liberty Hall, and lived there for the rest of his life. He also established upon it a town, calling it Warminster, which became, and was for fifty years, an important point of internal commerce.

There being no field for practice of medicine in this unsettled country, he acted as assistant surveyor to his friend, Col. John Mayo, and after his death in 1744, to Col. Joshua Fry until 1753, when he turned over this business to his son, John. The country having become better peopled, he now resumed the work of his profession, and did an extensive practice in the counties of Nelson, Albemarle, Augusta, Bedford, and Prince Edward. He also maintained in his home a private hospital for patients from a distance, and performed many operations. He evidently did not hesitate to guarantee cures, as is shown in his schedule of charges. For instance, his ordinary charge for an amputation of the leg or arm was seven pounds ten shillings, but with guarantee of twelve to fifteen pounds. He also had wooden legs made for patients, the price being ten shillings. The hospital patients paid for their board and "necessaries furnished," but professional services were contracted for, generally on the no cure no pay plan. His charges per visit were from one to five pounds, Virginia currency, according to distance. His materia medica embraced various purges, boluses, cordials, pills, blisters, drops, powders, plasters, sweats, emetics, etc., and these specifics, Turlington's balsam, Bateman's drops, Stoughton's bitters and Anderson's pills. Proprietary remedies were evidently in use even in that day. That he was practising as late as 1770 is shown by the following entry in his diary: "Attended (September 1770) Col. John Fry's wife with dead child three nights and two days."

In person, he is described as having been tall and spare, but lithe and active, and of great powers of endurance. His face was handsome until disfigured by scars resulting from the bursting of a gun in his hands. He was, too, a man of moral and physical courage, the latter

being strongly evineed when he, as he said, "was the occasion of carrying the settlements at least fifty miles to the westward, when no other man would attempt it." A scientific man and a reader, he had a large library and constantly added to it the latest medical books. A good churchman and a warden, he was, nevertheless, a dear lover of fine horses and kept a good stable which he himself looked after, and was always ready to risk a small stake on one of his horses.

He was twice married, his second wife being Mrs. Margaret Meredith, whom he married in 1762. By his first wife he had a daughter and five sons, all of whom, except the fifth, who died young, were prominent citizens of the colony.

His health began to fail in 1772, and after a long illness, he died on the twelfth of April, 1774. R. M. S.

The Cabells and their kin. Alex. Brown.

Cabot, Samuel (1815–1885).

Samuel Cabot was born in Boston September 20, 1815, the son of Samuel and Elizabeth (Perkins) Cabot, and grandson of Thomas Handasyd Perkins, a merchant of the seventeenth century.

He graduated from Harvard College in 1836 and from the Harvard Medical School in 1839, afterwards studying abroad from 1839–1841, being a fellow student of Nélaton in the wards of Velpeau and also studying under Louis. At the urgent request of his father, Dr. Cabot made investigation of the homeopathic system of therapeutics in the wards of Hahnemann, the founder of homeopathy. Animated by the exact scientific spirit that he had acquired under Louis, he found much to criticise in the loose diagnostic methods in the Homeopathic Hospital, and was not converted to homeopathy as his father had hoped.

Dr. Cabot was a widely known ornithologist and collected birds throughout his boyhood and early professional life. In the autumn of 1841 he went as ornithologist with the Stevens Exploring Expedition to Yucatan. The year spent in investigating the ruins of the older civilization in Central America was full of interest. The people of Yucatan, learning that he was a surgeon, flocked to him for operations and he had as patients many of the leading people of the country. He returned from this expedition in 1842 with a valuable collection of birds and notes on the birds of Yucatan, many of which were first described by him. For some years he was curator of the Boston Natural History Society, although in those days his own collection of birds was considerably larger than that of the society.

June 19, 1844, Dr. Cabot married Hannah Lowell Jackson, and had eight children.

He was one of the early opponents of negro slavery, and aiming to do practical work in limiting its spread, he joined the Emigrant Aid Society, of which he became secretary. He was for four years in close touch with the emigrants in Kansas and during the days of border warfare supplied the settlers with rifles bought by subscription.

During the Civil War he was sent twice on special missions to the army. At the request of Gov. Andrew he served as a volunteer surgeon at Camp Winfield Scott near Yorktown in April and May, 1862. He returned north with a ship load of those wounded at the battle of Williamsburg, and in 1863 he went as inspector of army hospitals along the Atlantic seaboard.

According to the fashion of those days he had a general practice, although his interests were surgical, and he was visiting surgeon at the Massachusetts General Hospital from 1853–1884. When antiseptic methods were introduced he was nearly sixty, but still young enough to enthusiastically adopt them. As a result he had the first two successful ovariotomies in the record of the Massachusetts General Hospital, and thus ushered in the era of abdominal surgery at that institution.

Dr. Cabot died in Boston April 13,

1885. One son, Arthur T., became a surgeon. A. T. C.

Cadwalader, Thomas (1708–1779).

Thomas Cadwalader was the son of John Cadwalader, who came to Pennsylvania in 1669 with William Penn, and of Martha, daughter of Dr. Edward Jones. When nineteen or twenty years of age, his father sent him to England and France to complete his medical education. In France he is said to have studied at Rheims University and in England to have spent a year studying and dissecting under William Cheselden, the distinguished anatomist and surgeon.

On his return to Philadelphia, he soon secured a large practice and became a very influential citizen. He was associated with Franklin in the establishment of the Philadelphia Library and was among the first to adopt the method of inoculation as a preventive against small-pox, in this country.

So far as now known, Thomas Cadwalader was the first teacher of practical anatomy in this country. According to Caspar Wistar, Cadwalader, upon his return from Europe, "made dissections and demonstrations for the instruction of the elder Dr. Shippen and some others who had not been abroad." According to Dr. Charles Winslow Dulles, the date of this instruction was probably 1730 or 1731, because this was the time of his return from Europe, and the time when the elder Dr. Shippen was eighteen or nineteen years old and engaged in his medical studies. The place in which these instructions were given, Wistar says, "was in a building on the back part of a lot, on which the Bank of Pennsylvania now stands."

In 1738 Dr. Cadwalader married the daughter of Thomas Lampert of New Jersey, and for several years spent the greater part of his time in that state, near the site of the present city of Trenton but about 1750 he appears to have returned to Philadelphia.

In 1742 he performed an autopsy said to be probably the first scientific one in this country. The only known publication of Dr. Cadwalader's is an essay, the title-page of which reads, "An Essay on the West India Dry Gripes, to which is added an extraordinary case in physic. Philadelphia. Printed and sold by Benjamin Franklin, MDCCXLV."

Dr. Cadwalader was one of the founders of the Pennsylvania Hospital, and trustee of the Academy and College of Philadelphia. He was one of the original members of the Philadelphia Medical Society, and the first named of the three vice-presidents chosen when the American Society for Promoting Useful Knowledge was consolidated with the American Philosophical Society in 1768 of which Franklin was president. He died November 14, 1779 in Philadelphia.

Dr. Cadwalader's professional services during the War of the Revolution seem to have been restricted to the occasional performance of duties laid upon him by Congress and assisting his friend and junior, Dr. Morgan, who was at that time director-general of the military hospitals. It is supposed that Dr. Cadwalader had from him some appointment, but I cannot find any satisfactory evidence of this. It is certain that Congress from time to time requested him to do for it certain things among which requests was one on January 30, 1775, that he inquire into the state of health of Gen. Prescott, a British prisoner, and the sanitary conditions in which he was placed in the jail. This duty Dr. Cadwalader performed so promptly and with such judgment and humanity that Gen. Prescott undoubtedly owed his life to him. Being paroled on April 9, he carried with him so great an appreciation of the services of Dr. Cadwalader, and so high a regard for him as a man, that when his son, Col. Lambert Cadwalader, was taken prisoner at the capture of Fort Washington, in November of the same year, Gen. Prescott secured his prompt liberation.

F. R. P.

Dulles, C. W., M. D. Life of Dr. Thomas Cadwalader, Pennsylvania Magazine of History and Biography, July, 1903.

Thomas Cadwalader.

(From a portrait in the College of Physicians, Philadelphia.)

Wistar, Caspar. Eulogium on Dr. William Shippen, delivered before the College of Physicians, March, 1809. Philadelphia, 1818. There is a portrait in the Surg.-gen. Library, Wash. D. C.

Caldwell, Charles (1772–1853).

He was born in Caswell County, North Carolina, May 14, 1772. His father came to this country from the North of Ireland and Charles probably inherited from his father his tenacity of purpose and possibly a certain belligerency which characterized his whole life. His opportunities for education were very limited, yet so great was his mental ability and activity that at the age of eighteen he was elected principal of a literary academy. Having decided to make medicine his profession, he spent a year and a half with a preceptor and then went to Philadelphia where he entered at the University of Pennsylvania in 1792. Here he was pupil and friend of the eminent Dr. Benjamin Rush, but his overweening self-confidence and self-assertiveness finally made a breach in their friendship and aroused the antagonism of Rush and also of the trustees, so he was never able to secure the coveted position of professor. Being disappointed in his expectations in Philadelphia, he turned his eyes to the growing west where, largely through his influence, Transylvania University, at Lexington, Kentucky, was starting a medical department. In November, 1819, he began work in his new field there as professor of the institutes of medicine and clinical medicine and with indomitable energy labored to make this the leading school in Pennsylvania. His brilliancy as a writer and speaker undoubtedly did much to attract the very large classes which soon gathered at Lexington.

With the increasing facilities for travel Lexington soon felt the keen competition of the rival towns, Louisville and Cincinnati. Public-spirited citizens planned the establishment of medical schools and sought the valuable aid of Dr. Caldwell. He decided upon Louisville and, in 1837, went to that city and by his eloquence and zeal soon secured the active cooperation of leading citizens in founding the Louisville Medical Institute, afterwards merged into the University of Louisville as its medical department. With this institution he continued until within a few years of his death which occurred in Louisville on July 9, 1853.

In person, Dr. Caldwell was tall and commanding; a fluent forcible and graceful speaker; a writer gifted with an unusual vocabulary, singularly clear and incisive. His catalogue of published writings enumerates over two hundred different essays, addresses, pamphlets and books. His bent of mind was controversial and was the cause of the many antagonisms which embittered his life. The strong self-reliance, assertiveness and egotism which perhaps offended many were the necessary elements of character which enabled him to be the "pioneer of medical schools and medical philosophy in the Mississippi Valley and premier in the founding and establishment of two of its most famous schools." A full list of his many writings is given in his Autobiography. It includes:

"An Attempt to Establish the Original Sameness of Three Phenomena of Fever, (Principally confined to Infants and Children)." Philadelphia, T. Dobson, 1796.

"A Semi-annual Oration on the Origin of Pestilential Diseases," delivered before the Academy of Medicine of Philadelphia.

"An Oration on the Causes of the Difference, in Point of Frequency and Force, between the Endemic Diseases of the United States of America and Those of the Countries of Europe." Philadelphia, 1802.

"An Essay on the Pestilential or Yellow Fever, as it prevailed in Philadelphia in the year, 1805."

"An Eulogium on Caspar Wistar, M. D." Philadelphia, 1818.

Thoughts on febrile miasms, intended as an answer to the Boylston medical prize question, for the year 1830, "Whether Fever is produced by the Decomposition of Animal or Vegetable

Substances, and if by Both, Their Comparative Influence." 63 pp., 1830.

"An Essay upon the Nature and Sources of the Malaria or Noxious Miasma."

"Thoughts on the True Mode of Improving the Condition of Man," 1833.

"Thoughts on the Impolicy of Multiplying Schools of Medicine." Lexington, 1834.

"Facts in Mesmerism, and Thoughts on its Causes and Uses." Louisville, 1842.

"Physiology Vindicated, in a Critic on Liebig's Animal Chemistry," xvi, 95 pp., 8°. Jeffersonville, 1843.

"Autobiography of Charles Caldwell, with a Preface, Notes and Appendix," by Harriot. W. Warner. Philadelphia, 1855.

"An Experimental Inquiry Respecting the Vitality of the Blood." ("Medical Thesis." Philadelphia, 1805.)

"A Discourse commemorative of Philip Syng Physick." Louisville, 1838.

P. F. B.

"History of the Medical Department of Transylvania University," by Dr. Robert Peter.
"Filson Club Publication, No. 20," Louisville, Kentucky, 1905.
Coates, B. H. Philadelphia, 1855.
Am. M. Month., N. Y., 1856.
Richmond and Louisville M. J., Louisville, 1869, vol. vii.
Richmond and Louisville M. J., Louisville, 1872, vol. xiv, 349–360 (H. M. Warner).
St. Louis M. and S. J., 1853. xi (W. L. Linton).
Tr. Ky. Med. Soc., 1876, xxi (L. P. Yandell).
West. J. M. and S., Louisville, 1853, 3. s. xii (L. P. Yandell).

Caldwell, Frank Hawkins (1857–1906).

Frank Hawkins Caldwell was born in Rome, Georgia, August 25, 1857 at the Rome Female College, of which his father was president. He came of clerical ancestry, for J. M. Caldwell, his father, was a native of North Carolina where his ancestors for three generations had been Presbyterian ministers and for four generations preceding had been ministers in Scotland and Ireland. His mother was C. E. Sivy (Sibby) of Wolfboro, New Hampshire, a daughter of David Thurston Sivy (Sibby), M. D.

During Dr. Caldwell's early childhood his parents were forced by the Civil War to remove to North Carolina, from which they did not return until 1871. Young Caldwell went to the University of Georgia at Athens. He studied medicine under Dr. J. B. Holmes, in 1878 matriculating from Jefferson College and graduating there in 1880.

On December 29, 1880, he married Nellie G. Word, only daughter of Dr. T. J. Word, of Rome. In March, 1882, he was appointed chief surgeon of the Florida Southern, a division of the "Plant System." He introduced what is known as the "hospital system" which was developed under his management to a high degree of efficiency. He was made chief surgeon of the entire group of railways and under his wise direction, what is known as the Hospital and Relief Department, was inaugurated. This not only provided medical and surgical attention in well-equipped hospitals for employés and their families but also life assurance and an endowment fund for sick and injured. In 1898 his office was removed to Waycross, Georgia, where a great central hospital was erected as a center of a system of hospitals in Georgia, Florida and Alabama, covering all the lines of associated railways.

In October, 1899, after sixteen years, he resigned his position with the Plant System and soon removed to Tampa, Florida, where, after five laborious years of hospital and private practice, he died in the early days of 1906.

He was a very active member of the Georgia State Medical Association, the New York Medico-legal Association, and president of the Florida State Medical Association.

During the great yellow fever epidemic at Jacksonville he volunteered his services and was assigned charge of St. Luke's Hospital and, owing to recognized executive ability, he was called to the head of the relief work of the entire city.

Dr. Caldwell was a man of fine personal appearance, cultured and genial.

His first wife died soon after his removal to Tampa. After some years he re-married, July 12, 1904; this time to Mary Spencer who survived him with one son, John Word. F. C. C.

Calhoun, Abner Wellborn (1846–1910).

Abner Wellborn Calhoun was born in Newnan, Coweta County, April 16, 1846. His father was Dr. Andrew B. Calhoun, of Newnan, and his mother, Susan Wellborn.

Abner was less than sixteen when he became a soldier of the south. He went through four years' struggle as a private, and surrendered with General Lee at Appomatox.

He began the study of medicine under his father and subsequently was graduated from the Jefferson Medical college of Philadelphia. After a few years practice with his father he went to Europe to perfect himself as a specialist, having selected the eye, ear and throat as his line of work and, after two years in Europe, came home and located in Atlanta, associating himself with Dr. Willis Westmoreland.

Shortly after becoming a specialist Dr. Calhoun was asked to become a member of the faculty of the Atlanta Medical College. At the college there was an unused basement, and this Dr. Calhoun fitted up at his own expense, and there he cared for his moneyless patients. It was his money which bought provisions to be prepared by the janitor for these luckless ones.

Dr. Calhoun married in 1877 Lula Phinizy, of Athens, daughter of Ferdinand Phinizy, and had four children, two sons and daughters. Dr. Phinizy Calhoun was associated with his father in his professional work.

The Atlanta Medical College was one of his great loves and much of its success was due to Dr. Calhoun's hard work.

When steps were being taken to enlarge the college he gave $10,000 of the fund used. He contributed many articles to medical literature and was very keen on all matters of civic hygiene.

Personal Communication.
Atlanta M. and S. Jour., 1884, n. s., vol. i. (port.).

Calhoun, Samuel (1787–1841).

Samuel Calhoun was born at Chambersburg, Pennsylvania, in 1787 and took his arts degree at Princeton University, 1804, that of medicine at the University of Pennsylvania in 1808. For nine years he was a member of the Jefferson Medical College faculty, holding various professorships. Among these were materia medica and medical jurisprudence. For three years he was dean at Jefferson. He appeared as expert witness in a number of important trials.

He was an intimate friend of George McClellan, and, on the latter's exclusion from the Jefferson Medical College, assisted his old-time friend in the foundation of the medical department of the Pennsylvania College.

The spelling of his name he changed, in 1832, from Calhoun to Colhoun—a fact which has caused no little confusion in the tracing of his personality.

Dr. Calhoun, or Colhoun, was a large and handsome man, and of a genial and generous nature. He used to make excursions into the squalid portions of the city for the purpose of taking poor old men and women into restaurants and giving them hot meals at his personal expense. He never married, and died in 1841. T. H. S.

History of Jefferson Medical College.

Callender, John Hill (1832–1896).

John Hill Callender was born near Nashville, Davidson County, Tennessee, November 28, 1832. His father was Thomas Callender, of Philadelphia, Pennsylvania, tobacconist, merchant, political writer and founder of "The Richmond Recorder."

His mother was Mary Sangster, born in Fairfax County, Virginia, January 10, 1805.

In 1851 he studied law in the office of

Nicholson and Houston, Nashville, and soon after in the law department of the University of Louisville. The illness of his father, followed by his death, recalled him in a short time, and his legal studies were suspended and finally abandoned.

In 1853 he began to study medicine, taking his degree at the University of Pennsylvania in 1855. December, 1855, he became and remained for three years joint proprietor and editor of the "Nashville Patriot" when he was made professor of materia medica and therapeutics in the Shelby Medical College, Nashville, Tennessee, until the Civil War.

He was one of the witnesses summoned to give expert testimony in the celebrated trial of Charles J. Guiteau on the question of his sanity, and after a laborious investigation pronounced him not insane, though leaving home with a different impression.

He was *facile princeps* in Tennessee as an authority in cases of insanity and diseases of the nervous system, and among the best alienists of the United States, whose really recognized experts may be counted on the fingers.

In 1868 he became professor of materia medica and therapeutics in the medical department of the University of Nashville, and in 1870 was appointed medical superintendent of the Tennessee Hospital for the Insane. The same year he was transferred to the chair of diseases of the brain and nervous system in the University of Nashville, and in 1880 held the chair of physiology and psychology in the University of Nashville and Vanderbilt University.

I have a lively recollection, said his colleague Dr. Daniel Wright, of his lectures which had for their main subject the mode of action of remedies in the human system. In treating this subject he manifested a profound acquaintance for so young a man with the subjects of pathology and therapeutics, and applied that knowledge with an originality of thought still more remarkable. He married at Nashville, Tennessee, February 24, 1858, Della Jefferson, daughter of Dr. John Pryor Ford, and had one child, a daughter, Annie Mary.

Dr. Callender died in Nashville, Tennessee, in August, 1896, of acute colitis. W. D. H.

Nashville Jour. Med. and Surg., 1896, vol. lxxx.
Tr. Med. Soc. Tennessee, 1897.

Campbell, Francis Wayland (1837–1905).

Francis W. Campbell, Montreal, son of Rollo Campbell, graduated at McGill in 1860 and was first registrar of the medical faculty of Bishops College when it was organized in March, 1871. In 1883 he was elected dean and professor of medicine, positions which he held till 1905, when the medical faculty was amalgamated with McGill University. For ten years he was secretary of the College of Physicians and Surgeons of Quebec. He received the degree of M. A. in 1871 and D. C. L. in 1895 from the University with which he was associated. He was editor of the "Canada Medical Journal" from 1864 to 1872, and of the "Canada Medical Record" for thirty years more. For forty-three years he was connected with the militia of Canada and rose to the rank of surgeon-lieutenant-colonel. He died on May 4, 1905, from diabetes. A. M.

Campbell, George W. (1810–1882).

His father was deputy-lieutenant of Dumbarton, his mother a daughter of Donald Campbell of Ardnacross, Argyleshire. Dr. Campbell late in life became the head of an old branch of the clan and inherited a small entailed estate on the shores of Loch Long. He was a graduate in arts and also in medicine of Glasgow University in 1832, and came to Canada the same year, being in 1833 appointed to fill the chair of surgery, and to lecture upon obstetrics in McGill University. He taught midwifery till 1842, and surgery till 1875, when he resigned. Upon the death of Dr. Holmes in 1860 he was elected dean and held that post till death in 1882. For eighteen years or more after 1835 he was physician

and surgeon to the Montreal General Hospital, when he was placed upon the consulting staff. It may be said for forty years he dominated medical teaching and practice in Montreal.

He died in Edinburgh of pneumonia on May 30, 1882, while on a visit there. Dr. Campbell always had a large general practice and in later years gave much time to surgery, performing skillfully most of the operations which were then in vogue.

His writings are not numerous. Among the cases which he recorded are: "Aneurysm of the innominate artery—ligature of the common cartoid;" "Osteocephaloma of the humerus—amputation of the shoulder-joint;" "Ligature of the gluteal artery for traumatic aneurysm," and "Excision of the elbow."

A. M.

Canada M. Record, Montreal, 1881–2, vol. x.

Campbell, Henry Fraser (1824–1891).

Henry Fraser Campbell, physiologist and gynecologist, was born in Savannah, Georgia, February 10, 1824, the son of James Campbell, a native of County Antrim, Ireland. His mother, Mary R. (Eve) Campbell, was the only daughter of Joseph Eve the inventor of the brush and roller gin.

After an academic education Dr. Campbell at fifteen began to study medicine and entered the Medical College of Georgia (now the medical department of theUniversity of Georgia), graduating in 1842 at the early age of eighteen. The same year he began the practice of medicine in Augusta Georgia where, except during the Civil War and during 1866–67 when he lived in New Orleans, Louisiania, he remained until his death. In the later years of his life, though having a large consulting practice, he devoted especial attention to surgery and gynecology. In general surgery he was noted as a lithotomist and for operations for the arrest of inflammation by ligation of the main arterial trunks. For lithotomy on the male he invariably performed the operation of Dupuytren and invented the grooved tampon *en chemise* which added greatly to the safety of this procedure. His contributions to the armamentarium of the gynecologist are many and valuable: the sliding-hook forceps for the operation for vesicovaginal fistula, the soft-rubber spring stem pessary for uterine flexions, the cushioned protean pessary for uterine versions, and the pneumatic repositor for the "self-replacement" of uterine dislocations. As a physiologist his investigations were principally into the structure and functions of the nervous system. In 1850 he demonstrated the 'excito-secretory function of the nervous system" and the priority of this discovery magnanimously accorded him by the great English physiologist Marshall Hall gave him an international reputation and led to his election as fellow of the St. Petersburg (Russia) Imperial Academy of Sciences. His work in the line of the prevention of yellow fever, dengue, etc., justly entitles him to a prominent place among the pioneer sanitarians of this country.

Among appointments held was that of assistant demonstrator of anatomy in the Medical College of Georgia; from 1851 to 1857, professor of comparative anatomy and microscopical anatomy; 1857 to 1867, professor of anatomy there; 1866–67 professor of surgery in the New Orleans School of Medicine, and clinical lecturer on surgery in Charity Hospital, New Orleans, Louisiana.

The Medical College of Georgia in 1868 created the chair of operative surgery and gynecology and called Dr. Campbell to be professor and in 1881 he became professor of principles and practice of surgery in his alma mater. Among many appointments held, he was president of the American Medical Association in 1884; one of the founders of the American Gynecological Society; vice-president in 1881; and vice-president of the American Surgical Society; president of the Medical Association of Georgia; corresponding member of the Imperial Academy of

Sciences of St. Petersburg; corresponding member of the Royal Medical Society Sweden; honorary member of the American Academy of Medicine.

During the Civil War Dr. Campbell was surgeon and Medical Director of the Georgia Military Hospitals at Richmond, Virginia. He was also one of the collaborators on the "Manual of Military Surgery," prepared by order of the surgeon-general for the use of the surgeons of the Confederate Army, contributing the section on the ligation of arteries to that work, a section said to be the most succinct and graphic presentation of this subject in the English language.

Dr. Campbell was a voluminous writer on scientific and literary subjects. His contributions are chiefly in the "New Orleans Medical and Surgical Journal," "Transactions of the American Medical Association;" "Transactions of the American Surgical Association;" "Transactions of the American Gynecological Society;" the "American Journal of Obstetrics," and in the "Southern Medical and Surgical Journal," of which he was some time editor.

In 1846 he married Sarah Bosworth, eldest daughter of Amory Sibley of Augusta, Georgia, and had one child, a daughter. J. E. A.

Virginia Med. Month., 1880, vol. vii (L. B. Edwards).
Tr. Am. Surg. Ass., Phila., 1892, x (W. T. Briggs).
There is a portrait in the Surg.-gen. Lib., Wash., D. C.

Campbell, Matthew (1819–1902).

Matthew Campbell was of Irish descent and born near Pittsburg, Pennsylvania, on March 18, 1819.

A self-made man, he was in early life a glass blower. When twenty-four he attended the University of Pennsylvania yet did not graduate there, but graduated when in practice at Winchester (Virginia) Medical College in 1853.

After practising at Fairmont, Virginia, and Wheeling, in 1857 he became chief surgeon to the Baltimore and Ohio Railroad, attending the employés who were building the road and removing to Grafton, West Virginia, the most central point for his work. He remained in Grafton during the troublous times of the Civil War, but removed to Parkersburg in 1864. He established small hospitals along the railroad; an urgent necessity, for in three years he had 1,100 cases of injury to attend. He was in all probability the pioneer railroad surgeon of the United States and known all along as the "Railroad Doctor." In 1875 he was elected president of the West Virginia Medical Society. With Dr. Sherman of the United States Army, he had in 1864 the first successful case of ovariotomy in West Virginia, and paid much attention to operations for vesico-vaginal fistula, operating successfully in several cases. During his service on the railroad he adopted the use of the cold pack for typhoid fever, with very good results. He told me he was led to it by hearing an old English blacksmith tell of its use in England.

He married twice: first to Margaret Ellenor Axter; one son, Dr. John Campbell of Wheeling, surviving. His second wife was Ellen Carney of Fairmont, West Virginia, by whom he had two sons and a daughter. Few medical men were better known in the state than Campbell, and his death at Parkersburg in 1902 left a blank which only a great man could fill. W. H. S.

Capelle, Joseph Philippe Eugene (1757–1796).

He was born at Laurie in Flanders (an old province of France) in 1757, of French parentage and was a man of fine scientific acquirements and came to America to share in the struggle for independence. He served with Counts de Rochambeau and de Grasse, later being transferred to the staff of Lafayette at the general's request and serving thereon until the end of the war.

He received his education and medical degree in France.

Dr. Capelle was one of the incorporators of the Delaware Medical Society in

1789. There is no record of any public positions held, but he enjoyed high reputation for professional skill, and was greatly beloved as a citizen.

Capelle married Mary Isabelle Pearce, of Baltimore, Maryland, and had six children, three of whom died in infancy.

He died at his home in Wilmington, November 5, 1796, and was buried in the Old Swedes graveyard. A simple stone fast crumbling to dust marks the spot, upon which the inscription "Dr. J. P. E. Capelle" and "The Beloved Physician" is still legible. A. R.

Transactions of the American Medical Association, vol. xxix.

Carleton, Charles M. (1838–1886).

Charles M. Carleton was born at Waterford, Maine, April 28, 1838. A delicate child, his education was also attended by difficulties of poverty, but in 1858 he was aided by a relative and enabled to attend the academy at Exeter, New Hampshire. His sight failing, he was again obliged to relinquish his studies. At the office of his brother-in-law, Dr. William Warren Greene, he became interested in medicine, and as his sight improved, took up this study. In the same year he entered Harvard and graduated in 1861. He then moved to Norwich and entered upon the practice of medicine, but soon entered the army and was made brigade surgeon of hospitals and defenses at Baltimore. His health, however, failed and he was obliged to resign his position, and in search of health and rest he sailed for Europe. Here he devoted a little time to study at Montpelier. On his return he again praetised in Norwich as a general and especially as an ophthalmic surgeon. He held many positions of trust and honor. His death occurred December 30, 1886. H. F.

L. S. Paddock: Proceedings of the Connecticut Med. Soc., 1887.

Carey, Matthew (1760–1839).

Matthew Carey, the son of a Dublin baker and born on January 28, 1760, has a claim to notice as founder of a medical journal. He made the acquaintance of Franklin in 1779; established the "Volunteer's Journal" in 1883 and after prosecution and imprisonment as its editor he emigrated to Philadelphia, and with the financial aid of Lafayette, established the "Pennsylvania Herald," later becoming connected with the "Columbia Magazine" and the "American Museum." He also wrote "Essays on Political Economy," 1822; "Letters on the Colonization Society," "Female Wages and Female Oppression," 1835. In 1820, when a publisher in Philadelphia, he conceived the idea of bringing out a really good medical periodical, Dr. Nathaniel Chapman to have the editorship. So the "Philadelphia Journal of the Medical and Physical Sciences" was launched, and after four years Chapman took William P. Dewees and John L. Godman as associate editors and after ninety-two years the journal is still flourishing, though in 1824 it was re-named the "American Journal of the Medical Sciences." Carey himself wrote "A Brief Account of the Malignant Fever which prevailed in Philadelphia in the year 1793," (Philadelphia, 1793). He died in that city September 16, 1839.

A Narrative of Med. in Amer. J. G. Mumford.

The Century Cyclopedia of Names, New York.

Carnochan, John Murray (1817–1887).

He was born in Savannah, Georgia, July 4, 1817, educated in Edinburgh, and graduated in medicine from the College of Physicians and Surgeons in 1836, afterwards spending several years in study in Paris, and returning to New York in 1847. Here he soon won a good reputation as a surgeon. For about twenty-five years he held the position of surgeon-in-chief of the State Emigrant Hospital on Ward's Island, then the largest hospital in this country. He made several original operations. On the twenty-second of March, 1851, he ligated the femoral artery just below the origin of the arteria profunda, for the cure of elephantiasis Arabum of the right inferior extrem-

ity, which had resisted all known methods of treatment; the patient finally recovered, and sixteen months after the operation was well. He was the first to remove the entire lower jaw at one operation, which he did on the thirteenth day of July, 1851, for bone necrosis following a severe attack of typhus fever. The patient recovered and was well in 1855. Dr. Carnochan was the first to perform the operation of exsecting the superior maxillary nerve for the cure of facial neuralgia, his operation being made on the sixteenth of July, 1856. He trephined the superior maxilla just below the inferior orbital foramen, removed the nerve from its groove in the orbital plate and divided it at its exit from the foramen rotundum, at the same time removing Meckel's ganglion, which he maintained was essential to the success of the operation. During the next three or four years he made at least three similar operations. He was a bold and dexterous operator, and did not hesitate to make any operation in which there seemed to be a fair chance of success. From 1851 to 1863 Dr. Carnochan was professor of surgery in the New York Medical College. For two years, 1870–71, he was health officer of the Port of New York. He died at his home in New York City of apoplexy on October 28, 1887.

Among his surgical writings should be noted:

"The Pathology of Congenital Dislocation of the Head of the Femur upon the Dorsum of the Ileum." New York, 1848.

"Amputation of the Entire Lower Jaw, with Dislocation of Both Condyles." New York, 1852.

"Exsection of the Entire Ulna." New York, 1854.

"A Case of Exsection of the Entire Os Calcis." New York, 1857.

"Contributions to Operative Surgery and Surgical Pathology." New York, 1877.

Med. and Surg. Reporter, Phila., 1864.
Med. Reg. of New York, 1888.
There is a portrait in the Surg.-Gen. Collection, Wash., D. C.

Carpenter, Henry (1819–1887).

Descended from a long line of physicians, Henry, son of Henry Carpenter, a surveyor, was born in Lancaster, Pennsylvania, on the tenth of December, 1819.

A hanging lantern dated 1698 has been in the possession of his family since it was brought by his paternal ancestor, Dr. Heinrich Zimmermann, to Germantown in 1698, from Switzerland. He remained two years in medical practice then returned to Switzerland where he married and came back permanently to America in 1706, and removed to West-Earl Township, Lancaster County, Pennsylvania, in 1717. When the patents were issued for the land the clerk at Philadelphia, evidently wishing to render his name conformable to the tongue of his adopted government, anglicized the name Zimmermann to Carpenter. The first Dr. Carpenter farmed his fields, physicked his neighbors and transmitted his professional talents to posterity, many of whom became doctors. Henry's education was in the schools of Lancaster and afterwards under a tutor.

In 1836 he began the study of medicine under Dr. Samuel Humes with whom he remained for five years, going in 1839 to Philadelphia to attend lectures, but undecided which college to enter, he finally settled on that of Pennsylvania.

He graduated in February, 1841, returned to Lancaster and began practice in the office previously occupied by his father as a scrivener. Henry Carpenter was one of the founders of the Lancaster County Medical Society in 1844, and its president in 1855, also secretary and vice-president of the Pennsylvania State Medical Society. He was a man of mechanical genius, constructed his own apparatus and drew plans for his instruments, and invented an obstetric forceps manufactured in Philadelphia by Gemrig which he used for forty-four years, and with which it is said he never failed to effect delivery. His obstetric experience covered nearly 5,500 cases, and his experience in gynecology was equally large.

He responded to the special call from the surgeon-general during the war of the rebellion on two different occasions, being first placed in charge of the "Eckington Hospital" at Washington, and at another time he went to Hagerstown, Maryland, for duty. He attended President James Buchanan and Thaddeus Stevens, for many years and in their last illness.

Dr. Carpenter did not permit his professional duties to overshadow his influence as a citizen, for he took a large interest in all public affairs. He was three times married, but the only children were by his first wife, Anna Louise, daughter of Mayor John Mathiot, and named Mary, Katherine M., and Sarah P. J. N. K.

History of the Carpenter Family, S. D. Carpenter, 1907.
History of Lancaster County, Pennsylvania, Rupp, 1843.
Biographical History of Lancaster County, Pennsylvania, Harris, 1870.

Carpenter, Walter (1808–1892)

Walter Carpenter was born in Walpole, New Hampshire, January 12, 1808. His father, a farmer and tavern keeper, was Sylvester Carpenter; his mother, Lydia, daughter of Benjamin Rowker. Walter was an only child and had his early education in Halsted and at the academy at Chesterfield, beginning the study of medicine under his uncle, Dr. Davis Carpenter in Brockport, New York. Many years later in life, Dr. Carpenter was accustomed to enliven his lectures in the Medical School at Burlington with stories apt and entertaining. One of these had to do with his early experience in Western New York with his uncle: he was accustomed to vary the monotony of office and stable boy by occasionally stealing a glimpse of some interesting case. His curiosity was aroused by a gathering of physicians, among whom was his uncle. On one occasion he managed to gain admittance to the sick-room with the older men and after due examination of the case, they all adjourned for consultation to another room. The young student, called on to express his views in regard to the case, was obliged to confess that it was an interesting one and likewise that he was not prepared to give a positive diagnosis. Some moments later in the course of the discussion by the others present, he discovered that the case was considered by them as one of small-pox. Without waiting for further consultation, the student Carpenter hurried back to his preceptor's office, took down the scab carefully wrapped in beeswax, which was used in those days for inoculation, and inoculated himself in both arms and legs. Dr. Carpenter in later years was accustomed to tell this story to his students and described his feelings as he lay some days later in the "pest-house," surrounded by small-pox cases and picturing to himself the green hills of Vermont.

Later he studied at the Medical College in Fairfield, New York, with Dr. Amos Twitchell of Keene, New Hampshire, and finally graduated from Dartmouth Medical School in 1829, settling at once in Bethel, Vermont, where he remained a year and a half, when, being requested by a committee of citizens from Randolph on behalf of their community, he changed his home accordingly and practised there for twenty-eight years.

In 1853 he became interested with Dr. S. W. Thayre, then a practitioner in Northfield, in the re-establishment of the medical department in the University of Vermont. These two men, together with Dr. Orin Smith, started the old school on a new career of success and honor. They met many discouragements, but Dr. Carpenter's unflagging energy and perseverance did much to tide over the early years of adversity, and finally make this school conspicuous among the medical centers of New England. Dr. Carpenter was for many years professor of theory and practice of medicine in the medical department of the University of Vermont and by his homely common sense and apt

illustrations in the form of stories, made a deep impression on all the classes. He moved to Burlington in 1858 and thence forwards was a familiar figure in the medical profession in northwestern Vermont.

It was mainly through Dr. Carpenter's instrumentality that the magnificent foundation of a hospital was made by Mary Fletcher. Dr. Carpenter secured the charter and assisted in the preparation of the plans and was long the president and consulting physician of the institution. Dr. Carpenter was a member of the Vermont State Medical Society, and at one time its president. He died in Burlington, November 9, 1892.

He married three times. In 1832 to Olivia Chase Blodgett, and had a daughter and a son. His wife died in 1840; and in 1844 he married Mrs. Anne (Brown) Troop, but she died in April, 1869. In February, 1872, Dr. Carpenter again married, this time Adeline Brown. His only son, Dr. Benjamin W. Carpenter was surgeon of the ninth Vermont Volunteers during the Civil War.

C. S. C.

Tr. Vermont Med. Soc., Burlington, 1893 (H. D. Holton).

Carroll, James (1854–1907).

James Carroll of the United States Army, yellow-fever commissioner, was born at Woolwich, England, June 5, 1854. He was educated at a private school, Albion House, and it was intended that he should enter the British Navy as an engineer student. When he was fifteen, however, he emigrated to Canada and there for several years lived what he described as the life of a backwoodsman.

In 1874 he enlisted as a private in the United States Army and served in the campaign against the Ute Indians during the winter of 1879–1880. While acting as hospital steward at Fort Custer, Montana, he became much interested in the subject of medicine and after some difficulty he succeeded in obtaining permission to attend medical lectures at St. Paul, Minnesota. On returning to the east he continued his medical education first at the University of the City of New York and then at the University of Maryland, receiving his M. D. from the latter in 1891. In 1892 and 1893 he attended courses in bacteriology and pathology then opened to physicians at the Johns Hopkins Hospital, and became intensely interested in these subjects.

In 1897 he was assigned, together with Dr. Walter Reed, to the work of investigating the bacillus icteroides, erroneously claimed to be the specific cause of yellow fever, and in 1898 was sent to Fort Alger to study the blood of fever patients there, and it was he who demonstrated the illness then prevailing among the troops to be typhoid and not malarial fever. In 1900, when an army medical commission was appointed to investigate the cause and mode of transmission of yellow fever among the American troops stationed at Havana, Carroll was appointed second in command.

The work begun, the question of experiment upon human beings arose, and Carroll at once volunteered to be the subject of it. He was accordingly bitten by several mosquitos infected by yellow-fever patients and three days later developed the disease in a most severe form, from which he barely escaped with his life. The theory of mosquito transmission was then understood by only a few experts and when Carroll, in the early stage of his illness, told the nurse that he had acquired the disease through the bite of a mosquito, she disbelieved him so entirely that upon recovery he found the following note among the records of his case: "Says he got his illness from the bite of a mosquito—delirious!"

When sufficiently recovered, Carroll took up the preliminary experiments, Dr. Reed, the chairman, being then in the United States, and carried them out to a satisfactory conclusion by the time Reed returned. He assisted most efficiently in the further investigation by which it was proved conclusively that yellow fever is transmitted by the mosquito, "stego-

myia fasciata," and on its conclusion, in February, 1901, when Dr. Reed returned home, he remained for several weeks in Cuba for the purpose of determining several doubtful points connected with the work. Moreover, in August, 1901, he returned to Cuba in order to carry on a final investigation necessary to the full completion of the work of the commission and it is owing to his perseverance and firmness in the face of obstacles that it was finally carried to perfection.

The points established by Carroll's special labors are:

The specific agent of yellow fever is present in the blood during at least the first, second, and third days of the disease.

The specific agent is destroyed, or at least attenuated by heating it up to 55° C. for ten minutes.

Yellow fever can be produced by the injection of a small quantity of the diluted serum taken directly from a patient and passed through a Berkefeld filter.

The specific agent being capable of passing through a Berkefeld filter must belong to that class of organisms known as ultra-microscopic.

On Carroll's return to the United States he was appointed lieutenant and assistant surgeon in the medical corps, the age limit being waived in order to permit him to pass the necessary examinations. The next few years of his life were largely passed in teaching, in which he was most successful. He was professor of bacteriology and clinical microscopy at the Army Medical School and after Dr. Reed's death succeeded him as professor of pathology at the Columbian University.

He wrote a number of papers on the disease in its different phases. The first of these, on "The Treatment of Yellow Fever" was the earliest contribution to the therapeutics of the disease after its mode of transmission was understood. The most important of his papers is, probably, the article on yellow fever in Osler's "System of Medicine."

In 1896 Carroll's name was suggested for the Nobel prize and in 1897 two universities (Maryland and Nebraska) conferred upon him their honorary LL. D. He was also elected to membership in many scientific societies.

Unfortunately, he never fully recovered from his attack of yellow fever. During the height of the disease he had an attack of acute dilatation of the heart which induced in the end an organic heart lesion, from which he died after an illness of some months on September 16, 1907.

He married in 1888, Jennie M. G. Lucas and left seven children, the eldest of whom had only just reached manhood.

C. W. L.

Cartledge, Abiah Morgan (1858–1908).

Abiah Morgan Cartledge was the son of a Baptist minister, A. Morgan Cartledge, and Louisa Haigood and educated by his father and in local schools. When eighteen he helped in the drug store of Dr. Thomas Marian in Richburg, who, seeing the lad had ability, advised his entering college as a medical student, so, as this counsel ran with Abiah's own wishes, he did so, and matriculated at the Hospital College of Medicine in Louisville, Kentucky, in 1880, graduating with honors in 1882. He served one year as interne at the Louisville City Hospital with marked distinction and in 1883 began to practise in Louisville. In 1885 he was made professor of surgery in the Hospital College of Medicine of his alma mater, where he taught with marked success until 1888, when he became demonstrator of anatomy in the Kentucky School of Medicine. During this time he had built up quite a large practice and his fame as a surgeon was beginning to extend. His especial fitness and qualities as surgeon and teacher were also recognized by the faculty of the Louisville Medical College, who tendered him the chair of surgery and clinical surgery in 1890. So he relinquished medical practice and devoted his whole life to surgery. This position was filled with great credit to himself and honor to the college until 1894, when he was given the chair of

gynecology and abdominal surgery, a position retained until death.

He took great interest in medical societies, and belonged to the Louisville Surgical Society, Jefferson County Medical Society, Kentucky State Medical Association, and the Southern Surgical and Gynecological Association, of which he was elected president in 1900.

Perhaps the greater number of his contributions to surgical literature were read before this society, his last contribution being "Some Remote Symptoms and Effects of Cholelithiasis." He was also one of the editors of the "Louisville Monthly Journal of Medicine and Surgery."

He married Ella Powers Gardner in 1886, who preceded him to the great beyond but a few months and by whom he had one child, a daughter.

He had the distinction of removing the largest ovarian cyst in medical history, a report of which appears in "Annals of Surgery" of January, 1900—"Mammoth Ovarian Tumors with Report of a Cyst weighing Two Hundred and Forty-five Pounds." He died May 4, 1908, of acute pulmonary edema.

R. L. I.

Cassels, John Lang (1808–1879).

John L. Cassels, a physician and scientist, of Cleveland, Ohio, was born near Glasgow, Scotland September 15, 1808 and went to Glasgow schools, then on to the University. During his second year financial reverses at home compelled him to resign the career which he had chosen, and in 1827 he came to the United States with an older brother, who had lived for some years near Utica, New York. After a brief visit the young man essayed to support himself by teaching school and wandered fortuitously to Fairfield, Herkimer County, New York, where was located the College of Physicians and Surgeons of the western district of the state of New York. Apparently inspired by the *genus loci*, he at once decided to study medicine, and in 1830 became pupil to Dr. Moses Johnson of Fairfield. He also attended the lectures of the college, and exhibited such energy and aptness that he was speedily appointed demonstrator of anatomy by Dr. James McNaughton, then professor of anatomy. Here too began his association with Dr. John Delamater, the professor of surgery in the Fairfield College, an intimacy which greatly influenced his later life. Graduating in 1834, in the following year he began to practise in Chenango County, New York, but was almost immediately called to the chair of chemistry in the Willoughby Medical College, Ohio, which position he occupied for eight years. In 1837 Dr. Cassels, who was an expert geologist, was appointed by Gov. Marcy first assistant geologist of the New York State Geological Survey, and succeeded to this position without interference with his college work. On the organization of the Cleveland Medical College in 1843, he cast in his lot with Drs. Delamater, Kirtland and Ackley, and accepted the chair of materia medica in the new institution. In 1856, on the resignation of Prof. St. John, Dr. Cassels was chosen his successor in the chair of chemistry, mineralogy and toxicology, and continued to occupy this position with eminent ability and success until disabled by a stroke of apoplexy in 1873. Upon his retirement he was made emeritus professor.

The popularization of science had always been one of his hobbies, and in 1839 and again in 1849 he had given popular lectures in Cleveland on chemistry. Even after his disablement, during the remaining years of his life he beguiled the tedium of confinement by the composition and publication in the journals of the day popular lectures on various branches of science. Dr. Cassels died in Cleveland, June 11, 1879.

He married in 1838 Cornelia Olin, daughter of Judge John H. Olin of Shaftsbury, Vermont, by whom he had one child, a daughter. He was a member of the State Society in 1852, and was elected a corresponding member of the

Geological Institute of Vienna in 1861. The degree of LL. D. was also given to him in 1859 by Jefferson College, Mississippi.

Of his writings very few specimens have been preserved, excepting his official reports of the geological survey of New York. He was frequently called upon by the courts for expert testimony on questions of scientific interest and importance, and his opinions were always received with the utmost confidence.

The faculty room of the Medical Department of the Western Reserve University in Cleveland contains a good portrait in oil of Dr. Cassels, and an excellent engraving will be found in the parlors of the Cleveland Medical Library Association. H. E. H.

Cleave's Biographical Cyclopedia of the State of Ohio, No. 1, Cuyahoga County. Philadelphia, 1875.

Cathrall, Isaac (1763–1819).

A native of Philadelphia, he studied medicine under Dr. John Redman then went abroad to add to his knowledge in London, Edinburgh and Paris. During the yellow-fever epidemic of 1793, 1797–9 he distinguished himself by remaining in the city and doing valiant work, losing no opportunity to study also the disease scientifically and performing autopsies on some of the victims. The results of these studies were embodied in several publications, and in 1802 he, with Dr. William Currie, published their observations on an epidemic fever prevailing that year in Philadelphia. He also wrote a medical sketch of the "Synochus Maligna or Malignant Contagious Fever as it lately appeared in the city of Philadelphia," 1794, and edited "Buchan's Domestic Medicine, adapted to the Climate and Diseases of America," Philadelphia, 1797.

He died on the twenty-second of February, 1819, of apoplexy; and Thacher describes him as "a well-bred gentleman of rigid morality and inflexible integrity.

F. R. P.

Thacher. Amer. Med. Biog.

Chadwick, James Read (1844–1905).

James Read Chadwick, son of Christopher Chadwick, a Boston merchant, was born in Boston, November 2, 1844, and educated in the public schools and in Harvard College where he graduated with the class of 1865. After an extended trip abroad, he entered the Harvard Medical School where he took his M. D. in 1871, in this year marrying Katherine M., daughter of Dr. George H. Lyman, one of the Boston pioneers in gynecology. Dr. Chadwick took his wife to Europe and pursued his medical studies in Berlin, Vienna, Paris and London for a period of two years, giving more particular attention to the study of the diseases of women. On his return to Boston in 1873 he built the house No. 270 Clarendon Street, which was his home during his lifetime.

He was the moving spirit in the selection of the men who were to compose the American Gynecological Society and at its foundation in 1876 he became its secretary. In 1897 he was president and always manifested a lively interest in its affairs. From 1875 to 1882 Dr. Chadwick was physician to out-patients at the Boston City Hospital and for many years conducted a private dispensary for the treatment of diseases of women when he gave instruction to the students of the Harvard Medical School, being clinical instructor in gynecology from 1881 to 1887.

One life interest of Dr. Chadwick was medical libraries. An ardent book-lover, an omnivorous reader, he believed that the library is the heart of our system of education. The formation of the Boston Medical Library in 1875 was brought about by his inspiration. It was his buoyant optimism, his contagious enthusiasm, which interested Oliver W. Holmes in the library. Holmes spoke of him as the untiring, imperturable, tenacious, irrepressible, all-subduing agitator, who gave no sleep to his eyes, no slumber to his eyelids, until he had gained his ends, who neither rested nor let others rest until the success of his project was assured. he Tbuilding of the library on the Fenway was the result of his initia-

tive and never-ceasing agitation. He was librarian from 1875 until his death.

Dr. Chadwick was called the "Father of Cremation in New England," because he was instrumental in reorganizing and putting on a successful basis the decadent New England Cremation Society, founded in 1885.

In 1890 he organized the Harvard Medical Alumni Association and was its president for the first four years of its existence. He was a member and president of the Obstetrical Society of Boston. Among his close friends he numbered such men as Oliver Wendell Holmes, William Osler, S. Weir Mitchell, J. S. Billings and William James. His temperament was that of the poet and the artist. In him were combined versatility and constancy of purpose. Broad-minded and singularly free from narrow prejudices, he could see in an acquaintance or friend those qualities which make for distinction.

Dr. Chadwick's death occurred at his summer home in Chocorna, New Hampshire, September 23, 1905. He was survived by three daughters and a son. Among his writings are:

"The Pathology and Treatment of Child-bed," F. von Winckle, translated by J. R. Chadwick, 1876.

"The Function of the Anal Sphincter, So-called, and the Act of Defecation." ("Transactions of American Gynecological Society, 1877.)

"New Gynecological Table." ("American Journal of Obstetrics," 1878.)

"Obstetrics and Gynecological Literature, 1876–1880." ("Transactions of American Medical Association," 1881.)

"Medical Libraries, Their Development and Use." ("Boston Medical and Surgical Journal," 1896, vol. 134.)

"Dr. Johann David Schoeff," presidential address at the eighth annual meeting of the Association of Medical Libraries, Boston, 1905.

"Cremation of the Dead," 1905.

W. L. B.

Trans. Amer. Gyn. Soc., 1906.
Bulletin Harvard Alumni Asso., Jan., 1906.

Chalmers, Lionel (1715–1777).

Lionel Chalmers, physician and meteorologist, was born in Cambleton, Scotland, 1715 and emigrated to South Carolina in early life. It is not known where he obtained his degree in medicine but probably from the University of Edinburgh. He settled first in Christ Church Parish, but soon removed to Charleston where he practised until his death. He made and recorded observations on meteorology from 1750 to 1760.

As a practitioner he won the confidence and respect of all and left behind him, "the name of a skillful, humane physician."

He wrote an "Account of the Opisthotonos and Tetanus," which was published in the "Transactions of the Medical Society of London in 1754.

His most important writings were: "An Account of the Weather and Diseases of South Carolina and an Essay on Fevers," in which, says Dr. Ramsay, "he unfolded the spasmodic theory of Fevers." Both of these works were published in London in 1776.

L. P.

Chamberlain, Cyrus Nathaniel (1829–1899).

Cyrus Nathaniel Chamberlain was a farmer's son and born in West Barnstable, Massachusetts, March 8, 1829. His early education was at New Salem, Massachusetts Academy, his medical, in the Vermont Medical College, where he graduated in 1850. He attended a course of lectures at the College of Physicians and Surgeons in New York and settled in 1852 in Granby, Massachusetts, becoming a member of the Massachusetts Medical Society in the same year.

As surgeon to the tenth Massachusetts Infantry Dr. Chamberlain served his country during the Civil War until 1863, when he was commissioned surgeon to volunteers. He constructed and organized the Letterman United States Army Hospital at Gettysburg to take care of the severely wounded. Another successful feat of organization

was his establishment of the Dale General Hospital in Worcester, Massachusetts, in 1864.

Returning from the war he settled in Lawrence, being associated with Dr. George W. Garland, whose daughter, Anna E., he married in 1864.

He had a large practice in Lawrence and died in Jamaica Plain, July 18, 1899. W. L. B.

Bos. Med. and Surg. Jour., vol. clxi.
Biog. Ency. of Mass. of the 19th. Cen. 1879.

Chancellor, James Edgar (1826–1896).

Army surgeon and anatomist, of a lineage that can be traced back over nine hundred years, he was a descendant of Richard Chancellor who came to Virginia in 1682, and was the son of George Chancellor of Chancellorsville, Virginia, since the Civil War an historic hamlet. There he was born on January 26, 1826. Educated at an academy at Fredericksburg, Virginia, he then read medicine under Dr. G. F. Carmichael, and matriculated as a student of medicine at the University of Virginia in 1846. The following session he attended lectures at the Jefferson medical College in Philadelphia, graduating in 1848.

He settled in his native place, but later moved to the county seat, and by the beginning of the Civil War had a large practice.

He was elected vice-president in 1871 of the Medical Society of Virginia and again in 1874, and president in 1883.

Commissioned assistant surgeon in the Confederate States Army in 1861 and surgeon in 1862, he served throughout the war in the General Military Hospital at Charlottesville, Virginia, with the exception that in 1864 he was sent as one of the reserve corps of surgeons to the battlefields of the Wilderness, Spottsylvania Court House, etc. In October, 1865, he was made demonstrator of anatomy at the University of Virginia, and filled this position until 1872, when he resigned. In 1885 he was elected and served one term as professor of diseases of women and children in the University of Florida, but resigned and returned to Virginia.

He married in 1853 Josephine Anderson of Spottsylvania County, and had six children of whom five survived their father. The eldest son, Edgar A., became a physician. His wife died in 1862, and in 1867 he married Mrs. Gabriella Garth Mays of Albemarle County, but had no more children. He died at his home near the University of Virginia on September 11, 1896. Among his numerous valuable communications to medical literature were:

"Iodoform as a Local Remedy in Syphilitic, Scrofulous and Indolent Ulcers." ("Transactions of Medical Society of Virginia," 1877.)

"Origin and History of Ancient Medicine." ("Presidential Address," ibid., 1884.)

"Poisoning by Datura Stramonium." ("Virginia Medical Monthly," vol. v.)

"Treatment of Ingrowing Toe-nail." (ibid., vol. vi.)

"Mineral Waters of Virginia." (ibid., vol. x.)

"Review of the Medical History of the Middle Ages." (ibid., vol. xi.)

R. M. S.

Va. Med. Semi-Mon., vol. i.
Watson's Physicians and Surgeons of Amer.

Channing, Walter (1786–1876).

Walter Channing was born in Newport, Rhode Island, April 15, 1786, and died in Brookline, Massachusetts, July 27, 1876. He was the son of William Channing, an attorney of Newport, Rhode Island, who at one time served as attorney-general of the state and also as United States district attorney, and of Lucy Ellery, daughter of William Ellery, a signer of the "Declaration of Independence," to whom several of his grandsons were indebted in great part for their education preliminary to entering college, among them being Dr. Channing's brothers, William Ellery Channing, the Unitarian clergyman, and Edward Tyrrel Channing, professor of

rhetoric, oratory and elocution from 1819 to 1851 in Harvard University.

Walter Channing entered Harvard in 1804 in the same class with his brother, Edward T. and his cousin, Richard H. Dana, the poet, but taking part with them and others in the rebellion of 1807, a somewhat famous incident in the annals of the college, failed to receive his bachelor's degree in regular course, though it was afterwards bestowed as a member of the class of 1808. He graduated M. D. at the University of Pennsylvania (1809) when Dr. Rush was president and continued his studies under Dr. James Jackson, of Boston, afterwards going to Edinburgh University and the London hospitals, where he devoted himself largely to obstetrics, establishing himself in Boston as a practising physician in 1812. In 1815 he was appointed the first professor of obstetrics and medical jurisprudence in Harvard University and held this position for nearly forty years, during all the second period of the life of the Harvard Medical School while it was called the Massachusetts Medical College and was situated on Mason Street in Boston (1816–1847). He resigned, together with many other professors, a few years after the removal of the school to North Grove Street. He was dean from 1819 to 1847.

In addition to an extensive private practice he was for nearly twenty years on the visiting staff of the Massachusetts General Hospital. Soon after the introduction of anesthetics there in 1846, he became deeply interested in the use of ether in childbirth, and mainly through his influence it was successfully used in such cases in this country. He published an elaborate work upon the subject "Etherization in Childbirth" founded on nearly 600 cases in his own practice, describing this innovation in medical treatment which at that time was considered as daring as it has since proved beneficial. He was one of the first attending physicians at the Boston Lying-in Hospital, and he and Dr. John Ware were editors of the "New England Journal of Medicine and Surgery" when that publication became the "Boston Medical and Surgical Journal" in 1828.

He published "Reform in Medical Science," and made addresses on the prevention of pauperism and on the necessity of introducing pure water into Boston. He was librarian of the Massachusetts Medical Society from 1822 to 1825 and an honorary fellow of the Obstetrical Society of London.

He made other risky inky ventures besides editorial ones, being the author of one or two volumes of miscellaneous poems, and his "Physician's Vacation," published in 1856, is a readable record of an extensive European tour. He was also a Bible student and loved Shakespeare and Scott, often repeating long passages of scripture and pages of Shakespeare. He once read the part of Macbeth in public, Fanny Kemble reading that of Lady Macbeth.

Channing was an ardent temperance reformer and a zealous citizen, very charitable, devoted to the poor and always thought people honest, often leaving patients of doubtful character alone in his study. On one occasion a man he had helped a great deal forged his name, when thus left alone, on a check for $300. He refused to prosecute this man and remarked: "I ought not to have left temptation in his way. I dare say his conscience will punish him enough."

While a poor driver, he made a practice of keeping lively horses and met with several accidents. Knowing nothing about the physical points of a horse he once purchased one whose strange actions he could not account for until upon taking him to a horse dealer he found out that the animal was blind. This amused the doctor very much although he had been taken in.

He was devoted to his family and took his five grandchildren, sons and daughters of his son, William Ellery, to bring up after their mother's death, involving some sacrifices on his part as he had passed through a laborious life and was fond of quietude among his books. These grandchildren relate as a treasured re-

collection how he used to play horse and jump rope with them in a thoroughly boyish spirit, even at an advanced age.

In appearance, Dr. Channing was of medium height, of substantial build, florid complexion, with blue-gray eyes. His temper was somewhat quick when excited by anything that he considered an injustice, but was well under control.

There is a portrait of him painted by Ames about the year 1860, which is a fair likeness.

He was a Unitarian and a great admirer of his brother William Ellery Channing, the clergyman, and a joke which he made in connection with him has appeared in various papers even to the present time. Someone calling at his house asked for Dr. Channing and on hearing the inquiry the doctor said, "Which Dr. Channing? My brother preaches and I practise."

Dr. Channing married twice, first to Barbara Higginson Perkins, daughter of Samuel G. Perkins, of Brookline, Massachusetts, and second to Elizabeth Wainwright, of the Boston family of that name. He had one son, William Ellery second, the poet who died at Concord in December, 1901, and three daughters. Dr. Channing died July 27, 1876 at Brookline, very peacefully, after a short illness, at the age of ninety years and three months. W. L. B.

Boston Med. and Surg. Journal, Aug. 24, 1876, vol. xcv.
New York Daily Tribune, 1876.
Recollections by Carolyn Sturgis Channing Cabot (granddaughter of Walter Channing) and G. E. Channing, a grandson.
History of the Harvard Med. School, T. F. Harrington (port.).

Chapman, Chandler Burnell (1815–1877).

Chandler Burnell Chapman was born in Middlebury, Vermont, July 7, 1815, and graduated from a college of medicine in the state of New York, in which city he was married to Mary Eugenia Pease June, 1837. The young couple settled in Trumbull County, Ohio, where Dr. Chapman practised until May 1846, when he moved to Madison, Wisconsin, then a settlement of less than four hundred persons. He accomplished the journey in one week's time by means of private conveyance, steamboat and stage. In addition to his practice, in the early fifties he conducted a school of medicine. Later Dr. Chapman devoted a part of his time to his duties as professor of chemistry and other studies at Miami and Cincinnati Colleges of Medicine. Among his published works is an "Agricultural Chemistry." At the outbreak of the Civil War he accompanied the sixth Wisconsin Regiment as surgeon and later was appointed surgeon of the famous "Iron Brigade." During the later years of the war Dr. Chapman served as medical director of the Army of the Rio Grande under Gen. Herron, his entire service covering the period between June, 1861 and August, 1864. Not infrequently he did operations which would be considered difficult at this time and to be undertaken only by the foremost surgeons. He was one of the organizers of the Dane County Medical Society.

Chapman made two journeys to the old world, spending a year and more each time, observing with great interest a number of the earliest operations performed under anesthetics, and spent much of his time in visiting the hospitals of Great Britain and the Continent.

During the later years of his life he became deeply interested in the development of the state of Kansas.

He died at his home in Madison May 18, 1877, leaving a widow, a daughter, Eugenia Gillette, and a son, Chandler Pease. C. S. S.

The Hist. of Dane Co., Wis.

Chapman, Nathaniel (1780–1853).

The Chapmans were old settlers in Virginia on the Pamunkey River, and Nathaniel was born in Fairfax County on the Potomac May 28, 1780, and is to be remembered because of his conception of medicial journalism and the impulse he gave it through many long laborious years. As a boy he went to the Alexandria Academy and when seventeen

began to study medicine in the Pennsylvania School. Other than an excellent education in the classics and two years desultory medical reading he had no advantages. Yet, although a stranger, poor, without acquaintance or introduction, he had capital in a delightful personality, making powerful friends by his graciousness and holding them by his sterling qualities. The popular young fellow graduated in 1800 with a thesis on "Hydrophobia" in which he defended certain propositions of his preceptor Rush. Then he went abroad for three years and seems to have been a social lion in Edinburgh, where he was taken up by Lord Buchan, Dugald Stewart and Brougham.

In 1804 he settled down to practice in Philadelphia and had immediate success for a period of fifty years commanding whatever he could attend of practice; also that same year he married Rebecca, daughter of Col. Clement Biddle. The personality of the man made a great impression on the Philadelphia of our grandfathers. He was always gay, jovial and witty, and as he grew older his habit of punning increased. His easy graceful way of treating everything appeared even in his writing when he became editor of the "Philadelphia Journal of the Medical and Physical Sciences," founded by the well-known publisher, Matthew Carey. After four years (1824) he took as his associates William P. Dewees and John L. Godman and the journal has run a successful career right up to the present time ("American Journal of the Medical Sciences"). Another important undertaking of Chapman was the founding, in 1817, of the Medical Institute of Philadelphia, which may be considered as the first postgraduate school in the States.

Nathaniel Chapman did a great many other things it would be pleasant to tell. Three years before that July 1, 1853, on which he died he had retired from active service, but his friends and confrères sought him and Philadelphia will from generation to generation reap the fruit of his teaching and writings.

His works included:

"Discourses on the Elements of Therapeutics and Materia Medica," 1817.

An essay on the "State of Canine Fever," 1801.

Lectures "On the more important Eruptive Fevers," 1844; "On the More Important Diseases of the Thoracic and Abdominal Viscera," 1844.

Lectures on the "Theory and Practice of Medicine," 1846.

Select speeches "Forensic and Parliamentary," five volumes, 1808.

His appointments included:

Professor of materia medica, 1813; professor of theory and practice of medicine and clinical medicine, University of Pennsylvania, 1816.

Rush had been chosen for the same chair in 1789 and except for a short occupancy by Barton, these two men, Rush and Chapman, held it for more than sixty years J. G. M.

Narrative of Med. in Amer. J. G. Mumford., Phila., 1903.
A Discourse Commemorative of Nath. Chapman. S. Jackson, Phila., 1854.
Life and Character of the Late Nath. Chapman. St. Louis Med. and Surg. Jour., vol. xi., 1853.
Biog. of Nath. Chapman. S. D. Gross, Lives of Eminent Phys., Phila., 1861.
Tribute to Nath. Chapman. N. Y. Med. Gaz., 1853, vol. iv.
Analysis of the Life of Nath. Chapman. Richmond and Louisville Med. Jour., 1869, vol. viii.
There is a portrait in the collection in the Surg.-gen. Lib. at Washington, D. C.

Chapoton, Jean (1690(?)–1760).

Jean Chapoton, post-surgeon general, son of André Chapoton and Ann Cassaigne, was born in the village of Bagaille, diocese of Uzes, Province of Languedoc, France, about 1690. After receiving a good education, he entered the government service and rose to the rank of major in the Royal Marines and surgeon in the French Army. In 1719 he was ordered to relieve Dr. Forestier as post surgeon at Detroit, (or Fort Pontchartrain). In the records of St. Anne's Church at the post, Dr. Chapoton first appears as best man at

Nathaniel Chapman.

the marriage of Jean Baptiste Gouyon, and was among the first in the settlement of Cadillac to take up land for permanent occupancy. On June 13, 1734, he received a government grant of land known as private claim number 5, being two arpents in width by forty in length, the title running to Jean Chapoton (Chirurgean). Dr. Chapoton's name appears spelled variously, as ("Farmer's History of Detroit," vol. i, p. 50) Pierre Chapoton, ("Jesuit Relations," vol. lxix, p. 308) Jean Baptiste Chapoton, and plain Jean Chapoton. Little is known of the extent and method of Dr. Chapoton's practice. Aside from his service to the soldiers and their families at the post it could not have been great, as Detroit had little resident population until the twenties and little land was taken up until the thirties. In the Jesuit Relations, vol. lxix, p. 249, it is said that on June 13, 1742, Sieur Chapoton, Surgeon of this post, borrowed the sum of one hundred livres in raccoon and lynx skins, promising to pay in similar peltries in May, 1743. That Chapoton was a devout Catholic appears from entries in the manuscript of Fr. Pierre Portier, Jesuit priest at Assumption Mission, Sandwich, viz.: In 1748 the father says that Surg. Chapoton arranged for offering six masses; and in 1750 Chapoton became indebted to the mission for the same, but in 1845 the father began masses for his soul. In 1752 Dr. Chapoton resigned his post and retired to his farm. He had married in July 1720 Magdalene Frappere, whose family had lived in the same province in France with the Chapotons, but at the time of her marriage were living in Quebec. At marriage Magdalene was fourteen years old, but bore the doctor twenty-two children!! Of these, four died in infancy, two in childhood, five single in adult life, and eleven intermarried with prominent families. From his sons are descended the numerous branches of the Chapoton family in eastern Michigan and lower Canada. His second daughter, Madeleine, married Dr. LeGrande who in 1852 succeeded Dr. Chapoton as surgeon of the post.

Jean Chapoton died at his Detroit home November 12, 1760. L. C.

Pioneer Biography of Wayne County, Mich., Fred. Carslile, 1890.
Farmer's History of Detroit.
Jesuit Relations, vol. lxix.
Records of St. Anne's Church, Detroit.

Chatard, Pierre (1767–1848).

Pierre Chatard was born at Cape Francois, San Domingo, July 17, 1767 and educated in France, settling in Baltimore in 1797. He was a prolific writer, his paper, "An Account of a Case of Fistula Lachrymalis, with reflections on the different modes of operating in that disease," being the earliest Baltimore publication having reference to diseases of the eye. ("Medical Repository," vol. vii, p. 28.)

He held the Montpellier M. D. and was consulting physician to the Baltimore Hospital and member of the faculty of Washington University. He died in Baltimore on January 5, 1848.

H. F.

Early History of Ophthalmology. Friedwald, Johns Hopkins Hospital Bulletin, 1897.

Charlton, Thomas Jackson (1833–1886).

Thomas Jackson Charlton was born in Bryan County and died in Savannah, Georgia (where most of his professional life was passed), on December 8, 1886. He was the son of Dr. Thomas Jackson and Sarah Margaret Charlton. His grandmother was Emily, daughter of Thomas Walter, the author of "Flora Caroliniana," the first considerable work on southern botany. Dr. Charlton attended Franklin College, now the University of Georgia, and graduated from the Savannah Medical College, later becoming professor of obstetrics and clinical surgery there. While yet a student the yellow-fever epidemic of 1857 occurred in Savannah and he promptly volunteered his services, as he had previously given them in the Norfolk epidemic. He received a gold medal from that grateful people. Prac-

tising for a short time in Savannah, he received an appointment as assistant surgeon in the United States Navy, and was assigned to the sloop-of-war "Jamestown." When Georgia seceded he promptly resigned and reported for duty at home. He was commissioned surgeon in the Confederate States Navy; was sent on a secret mission to France, and on his return was assigned to the confederate cruiser "Florida," being captured on that vessel in the harbor of Bahia, Brazil. On the voyage to Chesapeake Bay, small-pox broke out on the United States vessel and Dr. Charlton, with the prompt manliness and humanity which characterized him, at once volunteered his services. These were gratefully accepted, and his devotion was so pronounced and so successful that after a short incarceration in Fort Warren, Massachusetts, the enemy treated him as the British had his great grandfather under similar circumstances and turned their backs while he walked out, with the understanding that he would not return south. Being a man of the highest sense of honor, he observed his parole, and went first to England and then to Halifax, Nova Scotia, returning to Savannah after the cessation of hostilities to enjoy a large practice to the end of his life. He was attending physician to the Savannah Hospital and when the epidemic of 1876 devastated Savannah, devoted himself with entire sacrifice to his people. Practising before the era of specialists, he nevertheless attained great reputation as a surgeon and in obstetrics and fevers. He was twice married, first to Julia Catherine Crane, daughter of Heman Averil Crane, and after her death to Julia Johnstone. His eldest son, Thomas Jackson, became a doctor in Savannah. J. B. B.

Cheever, Abijah (1760–1843).

Dr. Abijah Cheever was descended in the fifth generation from Ezekiel Cheever, master of the Latin School, Boston, who came to Boston from England in 1637, and taught Latin for seventy years, dying in 1708.

Abijah Cheever was born in Sangers, Massachusetts in 1760, his boyhood being passed in farm work. On the evening before the battle of Lexington he was employed in running bullets from a mould over a fire of hickory coals for the long Queen Anne muskets of his brothers who shared in the battle the following day. He graduated from Harvard College in 1779, then studied medicine and surgery as a profession, and obtained his M. D. in 1782. He was a student of Dr. John Warren.

In 1783 he was commissioned as surgeon in the Revolutionary War.

"By his Excellency John Hancock, Esq., governor and commander-in-chief in and over the Commonwealth of Massachusetts.

"To Abijah Cheever, Gentleman, Greeting. Having heard of your skill in surgery and reposing confidence in your ability and good conduct, I do by these presents constitute and appoint you surgeon on board the ship Tartar fitted out by this commonwealth for the service thereof. . . .

"Dated at Boston this thirteenth day of May in the year of our Lord one thousand seven hundred and eighty two, and in the sixth year of the Independence of the United States.

Signed, John Hancock."

In this privateer he made two voyages. In the first the Tartar captured four British merchant vessels. In the second voyage she was attacked by the British frigate Belisanus, and was herself captured. Dr. Cheever was sent to the old prison ship in New York harbor and confined some time. Exchanged later, after peace was proclaimed, he settled as physician and surgeon in Boston, at the then fashionable North End, married, and practised seventeen years. He then returned to Sangers, where he lived until his death at the age of eighty-three.

He was pensioned by John C. Calhoun, secretary of war, in 1818, as surgeon's mate in the army of the Revolution, and with the rank of captain of infantry of the continental line.

He published in 1787 a remarkable case of "Encysted Dropsy" (which now would be termed a Dermoid Cyst of the Ovary) with illustrations. This was demonstrated to the American Academy of Arts and Sciences.

He was a genial and much liked physician and surgeon. D. W. C.

Cheever, Charles Augustus (1793–1852).

This son of Dr. Abijah Cheever was born in Boston December 1, 1793, and entered Harvard in 1809 and took his A. M. in 1813. He had the good fortune to study medicine with Dr. John Warren and in 1815 with Dr. John B. Brown, and enjoyed the benefit of his large dispensary practice, then the only clinical opportunity in Boston.

In 1816 he received his M. D. and settled in Portsmouth, New Hampshire, where he was the leading surgeon for thirty-six years, until his untimely death in 1852. Previous to this he made a voyage to the West Indies to carry vaccination, then a new practice there. His material of vaccine was embodied in an Irish lad whom he vaccinated on starting and took with him to supply the vaccine virus. This trip was entirely successful. Portsmouth, New Hampshire, was a small old compact town of about seven to nine thousand people. It was intensely conservative, older physicians were abundant, and his progress in acquiring practice was extremely slow.

Although always somewhat impecunious, he lavished his scanty means in all expenses which would advance him as a doctor. He bought new books, was extravagant in new instruments, and disregarded cost for knowledge. He early attracted students, and always had from one to three under him.

He formed a good library, read and catechized his students, took them to see his cases, taught them to dissect and to prepare anatomical injections, dried specimens and skeletons, so that he collected for those times an unusual though small museum. Anatomical material could be obtained only by very expensive purchase, $25 to $50, from New York and Philadelphia (no railway transportation), or by illegal means.

The cadavers were obtained and dissected in the attic of his house. His home was the center of anatomical and surgical knowledge for thirty miles around, and over this area he was for thirty-six years known as The Surgeon. His work ranged from dentistry and obstetrics to the major surgical operations. Considering the limitations, ignorance, prejudice and timidity with which he was surrounded, it is remarkable that he undertook, for his first attempts, new and recently described operations.

He operated successfully for cataract, and to ensure it kept his patient in his own house and nursed him. He operated for strabismus, also removed breasts and tumors, amputated limbs. The first asepsis of subcutaneous surgery coming to his early knowledge, he operated for club-foot and tendon sections, and treated his patients by apparatus. He was among the first here to follow up a trephining by laying open the dura mater for hemorrhage or for abscess. No asepsis, no ether! nerve and audacity were required to assail these new problems; enlightened only by his own dissections and his own reading, he practised what he had never seen. The unaided natural senses of sight and touch guided a hand, erudite only by dissection, safely to the recesses of a quivering and moving patient.

Keen insight, intuition even, made him a noted diagnostician, esteemed as such by his contemporaries.

He died too early, shattered by domestic griefs which preyed on a sensitive nature. D. W. C.

Cheever, Henry S. (1837–1877).

Henry S. Cheever was born on August 8, 1837, at Exeter, Otsego County, New York, but in 1844 his family moved to Geneva, Illinois; in 1856 to Tecumseh, Michigan and in 1859 to Ann Arbor. The lad prepared for college at Tecumseh and graduated A. B. from Michigan

University in 1863 and M. D. in 1866, beginning practice in Ann Arbor, and quickly gaining a large clientèle. In 1867 he was appointed demonstrator of anatomy at the University; in 1868, lecturer on materia medica and therapeutics; in 1869, professor of materia medica and therapeutics and in 1872, elected professor of physiology at Ann Arbor and also in the Long Island College Hospital, Brooklyn, New York. During these years he continued his ever-increasing medical practice, but under pressure of superhuman work his health gave way with phthisis pulmonalis, and he went to Colorado, returning, however, in 1875 and essaying to resume the broken thread but soon went to pieces and resigned himself to his fate. He joined the Michigan State Medical Society in 1869 and remained a member till his death. He was an original worker and sought to verify book statements by experiment. His graduation thesis of "Catalysis" was based on his own experiments and brought out points not previously made. Later he conducted a series to demonstrate the influence of alcohol in modifying body temperature.

Dr. Cheever was about five feet ten inches tall, spare build with long limbs. His face was long and thin, covered by a scanty close trimmed beard of iron-gray color. Utterly wrapped up in his work, he gave to the uttermost to others. He was one of the best products of Michigan, and all who knew him never ceased to regret his early death. In 1863 he married Sarah E. Bissell of Tecumseh, who with two children survived him when he died at Ann Arbor, March 31, 1877, from phthisis pulmonalis.

His papers included:

"An Anomalous Case of Ovarian Cyst." ("Detroit Review of Medicine and Pharmacy," vol. ii.)

"Abscess of the brain." ("Detroit Review of Medicine and Pharmacy," vol. iii.)

"Puerperal Convulsion." ("Michigan University Medical Journal," vol. i.)

"Effects of Alcohol on the Animal Temperature." ("Michigan University Medical Journal," vol. i.)

"Colorado as a Sanitarium." ("The Peninsular Medical Journal," vol. ii.)

L. C.

Hist. of Mich. Univ., Ann Arbor, 1906.
Trans. Mich. State Med. Soc., 1877.
Trans. Amer. Med Ass., 1878.

Chew, Samuel (1806–1863).

Samuel Chew, born in Calvert County, Maryland, on April 29, 1806, was educated at Charlotte Hall, and graduated A. B. and M. A. from Princeton College. Afterwards he studied medicine under Dr. William Donaldson and took his M. D. from the University of Maryland in 1829, practising in Calvert County for about five years and then moving to the capital. In conjunction with Dr. Joshua Cohen, he established an Eye and Ear Institute in 1840, himself taking the ophthalmological work. In 1841 he became professor of materia medica and therapeutics in the University of Maryland and in 1852 he was professor of the principles and practice of medicine, which post he held until his death from pneumonia on Christmas day, 1863.

In addition to his other positions, he was dean of the Medical School, 1842–1844, and vice-president of the Medical and Chirurgical Faculty from 1859 to 1863.

Dr. Chew was a man of classical tastes and scholarly attainments. He was a frequent contributor to periodical literature, and delivered numerous lectures and addresses, many of which were published. His latest and most extensive work was a 12mo. volume, published in Philadelphia in 1864, and intended chiefly for medical students; it was entitled "Lectures on Medical Education." This work was left unfinished at his death but was completed and published by his son, Dr. Samuel C. Chew. The last words which he wrote in it were "*Sic itur ad astra*." He was also a co-editor of the "Maryland Med-

ical and Surgical Journal," the official organ of the Medical and Chirurgical Faculty in 1843. E. F. C.

See Cordell's History of the University of Maryland for portrait.

Childs, Henry Halsey (1783–1868).

Henry Halsey Childs, founder and president of the Berkshire Medical College and lieutenant-governor of Massachusetts, was the son of Dr. Timothy Childs, a surgeon from Pittsfield, Massachusetts, in the Revolutionary War and holder of an honorary M. D. from Harvard College. Henry was born in Pittsfield, June 7, 1783 and studied medicine with his father and practised with him until the latter died. The father had introduced the practice of inoculation in Pittsfield and now father and son substituted for it vaccination against strenuous protest. For some time previous to 1822 Henry Childs had pressed upon the Berkshire Medical Society the importance of establishing a medical college in the county, and the advantages of Pittsfield for its site, and in that year he joined with Daniel Collins and Asa Burbank in a petition to the Legislature for an act of incorporation. This was granted, and the Berkshire Medical Institution began its existence September 18, 1823, Dr. Childs taking the chair of theory and practice of medicine. He was the soul of the school and was instrumental in obtaining endowments, erecting buildings and collecting a library. In 1837, when the school was detached from Williams College, he was made president, and continued to direct its affairs until 1863 when he resigned because of advancing years. Dr. Childs served also on the faculties of the medical colleges at Woodstock, Vermont, and at Willoughby and Columbus, Ohio, where he gave courses of lectures each year. He was lieutenant-governor in 1843. In private life Dr. Childs was a fine man and much loved everywhere. He died in Boston at the home of his son-in-law, Elias Merwin, March 22, 1868.

W. L. B.

Com. Mass. Med. Society, vol. ii.

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Chipley, William Stout (1810–1880).

William Stout Chipley, alienist, was born in Lexington, Kentucky, October 18, 1810, the only son of the Rev. Stephen Chipley, a pioneer of Lexington, and he graduated from the Transylvania University in 1832, from 1854 to 1857 occupying the chair of theory and practice of medicine in the Transylvania University.

When he took charge of the Eastern Kentucky Insane Asylum in 1855, he found that institution overcrowded with incurables, epileptics, and feeble minded, huddled together without any attempt at classification and separation. These defects were not only remedied by Dr. Chipley, but largely through his efforts other institutions in Kentucky were erected.

He married Elizabeth Fanning in 1837 while he lived in Columbus, Georgia. By this marriage he had four sons and one daughter. He died February 11, 1880. A. S.

Am. Jour. Insanity, Utica, N. Y., 1881–2, vol. xxxviii (O. Everts).
Filson Club Publication, No. 20.

Chisolm, Julian J. (1830–1903).

Julian J. Chisolm of Charleston, South Carolina, studied medicine at the medical college of the state of South Carolina and after graduating there went to Europe to perfect himself in his chosen profession. Returning to Charleston he soon displayed great skill and ability as a surgeon and was appointed professor of surgery at the Medical College. Chisolm was one of the most famous surgeons of the Confederate Army. His "Manual of Military Surgery" became the text-book of the confederate surgeons and is a work of high merit. After the war he resumed practice in Charleston, but in 1869 removed to Baltimore, Maryland, where he was at once appointed professor of operative surgery and diseases of eye and ear on the medical side of the University of Maryland. In 1873 he abandoned surgery and devoted himself exclusively to his specialty, diseases of the eye and ear. In 1877 he founded the Presbyterian Eye,

Ear and Throat Hospital of Baltimore. A stroke of apoplexy compelled him in 1894 to retire from a most active and meritorious career and he died at Petersburg, Virginia, November 2, 1903. Chisolm was a man of strong personality, unbounded energy, a teacher of great power and full of enthusiasm for his calling. A. A.

J. Am. Med. Ass., Chicago, 1903, xli.
The Hospital Bull., Baltimore, 1910, vol. vi (Randolph Winslow).

Choppin, Samuel Paul (1828–1880).

Among the descendants of the pioneer families who settled in Louisiana and owned later some of the principal sugar plantations of the golden era on the banks of the great Meschaèbè were Paul and Eliza (Sherburne) Choppin, he of Creole parentage. Their son Samuel was born at Baton Rouge October 20, 1828 and had his preliminary education at Jefferson College, Louisiana.

At an early age he began to study medicine at the University of Louisiana, and after spending two years as resident student at the Charity Hospital, New Orleans, graduated as M. D. there in 1850, afterwards taking up a post-graduate course in Paris and in Italy, spending two years in these studies.

On his return he became demonstrator of anatomy in the University of Louisiana, and while there was appointed house surgeon to the Charity Hospital, soon becoming one of the ablest surgeons of the whole south.

Besides frequent contributions to medical literature, he edited the "New Orleans Medical News and Hospital Gazette." With a combative, energetic temper, he was not content to follow in beaten paths, he was a builder, a creator. And soon we see him with his colleagues, Drs. C. Beard, Cenas and others founding a new school, the New Orleans School of Medicine, and its short but brilliant career was only one of the many proofs of his energy and ability. Its success was interrupted by the Civil War. Through all the bloody battles of the confederacy he lent his entire time to the sick and wounded.

It was after the bloody battle of Shiloh when Beauregard made his masterful retreat to Corinth, that he needed reinforcements, and naturally chose Dr. Choppin to go to New Orleans to stir up the patriotism of his people.

The war over, Choppin returned to his native state beaten but not conquered.

With spirits undaunted, he went back ruined and bruised, to build up again his practice but, cheered by the love and admiration of his fellow patriots, he was successful.

Still, when the call to duty came again in 1874, during the painful and disgraceful days of the reconstruction, he was the first to raise his voice against the rapacious "Carpet Bag Federal Rule" in our city. In 1875 he was appointed president of the board of health and it is as such that he was best remembered. The dreadful epidemic of yellow fever took place in 1878 and, though according to present knowledge he is known to be mistaken, he pursued a really intelligent campaign against the epidemic. It was believed to be due to a germ or miasma or bacillus of infection, carried along in clothes, bedding, trunks, etc., the old fomites theory as it was then called. As he drained and disinfected gutters and low places and burnt tons and tons of tar and emptied barrels and barrels of carbolic acid in the gutters, he may have done some good in destroying the real carriers of infection.

He married first, in October, 1857, Selinia, daughter of Daniel Roberts of Guernsey, England, and after her death, in 1862, Amelia, daughter of Dr. James Metealfe of Adams County, Mississippi.

In 1853 he published notes on "Syphilis," translated from lectures by Ricord; and among his numerous articles two were of special interest:

"Ligation of the Brachial Artery," 1854, and "Removal of Uterus and Ovary," 1866.

His energetic and positive nature made him some enemies, but his whole-souled

love of the people and state caused the entire South to mourn on May 2, 1880, when he died of acute pneumonia.

L. C. B.

N. Orl. M. & S. J., 1879–80, n. s., vii.

Chovet, Abraham (1704–1799).

A dwarfish wrinkled old man, Abraham Chovet, anatomist, was on his death-bed one March morning in 1799, making a request eminently characteristic. "Do not have the passing bell tolled. I would not have sick folk disturbed by unnecessary noise." He was born in England May 25, 1704, educated in London, and in 1735 became demonstrator of anatomy in the United Company of Barbers and Surgeons, the earlier part of his life being spent in studying under the ablest anatomists of Europe. Some years before the Revolution he fled to Philadelphia from Jamaica to escape an insurrection of slaves, and in 1775 it was announced in Philadelphia that "Dr Chovet will begin his course of anatomical and physiological lectures in which the various parts of the human body will be demonstrated . . . on his curious collection of anatomical waxworks and other natural preparations." These lectures were seemingly popular, for Dr. John Morgan, writing on the "Art of making Anatomical Preparations by Corrosion" (1786), says: "Dr. Chovet, now resident in this city, hath indeed a good collection of wax preparations of different parts of the human body, which he made in his younger days and brought hither from Europe." These, with the Fothergill anatomical pictures, were given to the University of Pennsylvania and some of them may still be seen.

At the time of founding the Pennsylvania College of Physicians, Chovet, one of its twelve founders, was over eighty, and "at such an advanced age men are not invited to join in a new enterprise unless their qualifications are eminent in the estimation of their colleagues." Cynical and merry, Chovet was equally known as an odd character and an anatomist. In London he saved the life of a highwayman by opening the trachea before the hanging took place. In Philadelphia he always wore a small cocked hat closely turned up behind and carried a gold-headed Indian cane dangling from his wrist by a black silk string. The heels of his capacious shoes, well lined in winter season with thick woollen cloth, might be heard scraping the pavement at every step as he went along, always in a chronic hurry.

In Christ Church Cemetery, Philadelphia, Susannah Maria Penelope Abingdon, daughter of Dr. Chovet, lies buried with her father and mother, but the name of the mother is unknown. "That extraordinary man and eminent anatomist," her husband died, as stated, in March of 1799, of an acute disease.

His great grandaughter presented the Pennsylvania Hospital with a fine miniature in wax, on the back of which is scratched "Drawn May 25, 1784, by his servant Dr. Van Eeckhout." D. W.

An account of the Institution of the Coll. of Phys. of Phila. Dr. W. S. W. Ruschenberger, 1886.

A portrait is in the library of the Coll. of Phys. and Surg., Phila.

Christian, Edmund Potts (1827–1896).

Edmund Potts Christian, who practised chiefly as an obstetrician, came of old Philadelphian Quaker ancestry and was born at Friendsville, Susquehanna County, Pennsylvania on April 23, 1827. Educated at a Detroit academy, he graduated A. B. from Michigan University in 1847 and A. M. in 1850. To get the money for his medical course he served as clerk during the summer on various steamers and spent the winter studying, taking his M. D. at Buffalo Medical College, New York, in 1852. Five years of private practice in Detroit followed, then he went to Wyandotte, Michigan and stayed until he died.

From 1855–58 he was assistant editor of the "Peninsular Journal of Medicine" of Detroit, and a founder of the second epoch of the Michigan State Medical Society, and president of the third; also

a member of Detroit Medical Society; the Wayne Medical Society, and the Detroit Gynecological Society. Unlike most physicians, he kept, in a scholarly manner, careful clinical records of cases and from time to time laid these studies before his fellow doctors. He was one of the first to recognize milk as a potent factor in transmitting typhoid; while his fellow practitioners were tardy in accepting the correctness of these observations, he continued their teaching and practice till accepted. Dr. Christian was about five feet seven inches tall, slender build, short beard, keen blue eyes, alert, kindly expression, nervous movement, indefatigable worker, absolutely honest and without guile in all his relations.

In 1854 he married Mary H. Foster, who with two sons survived him; one, E. A. Christian, became a doctor. The father himself died in Wyandotte November 17, 1896, of arteriosclerosis with special involvement of the cerebrospinal vessels.

His papers included:

"The Epidemic Relationships of Zymotic Diseases as Indicating a Unity of Cause." ("Detroit Review of Medicine and Pharmacy," vol. i.)

"The Pathological Consequences Incident to Induced Abortion." ("Detroit Review of Medicine and Pharmacy," vol. ii.)

"On the Zymotic Diseases." ("Detroit Review of Medicine and Pharmacy," vol. v.)

"Notes on Ten Cases of Prolapsed Funis." ("Detroit Review of Medicine and Pharmacy," vol. v.)

"An Analysis of One Hundred and Eighty-nine Cases of Instrumental Obstetrical Cases." ("American Lancet," vol. x.)

"Postpartum Hemorrhage." ("American Lancet," vol. x.)

"Arrested Development of the Ovum by Reason of Mal-attachments and from Resulting Pathological Alterations of the Placenta." ("American Lancet," vol. xiv.)

"Fevers in Detroit and Vicinity in 1855." ("Peninsular Medical Journal," vol. iii.)

"Can Iodine Revive Mercury Latent in the System?" ("Peninsular Medical Journal," vol. iv.)

"Gestation and Parturition Complicated with Uterine Disease." ("Peninsular Medical Journal," vol. v.)

"Retained Blighted Fetuses." ("Peninsular Journal of Medicine," vol. xi.)

"Cases of Fetal Abnormalities and Monstrosities in my Practice with Observations on Embryonic Nutrition." ("Transactions of Michigan State Medical Society," 1876.)

"Criminal Abortion." (Peninsular and Independent Medical Journal," Detroit, vol. ii.)

"The Mortality of Children in Headlast Birth." ("Medical Age," Detroit, 1885.)

"Arrested Development of the Ovum by Reason of Mal-attachments and from Resulting Pathological Alteration of the Placenta." ("American Lancet," Detroit, 1890.)

"Craniotomy." ("Transactions Michigan State Medical Society," Detroit, 1894.)

"Medical Art in its Relation to Christian Civilization and Popular Intelligence." ("Transactions of Michigan State Medical Society," 1886.)

"Shortness of the Umbilical Cord a Cause of Retarded Labors and of Accidents." ("Transactions of Michigan State Medical Society," 1879.)

"Two Cases of Mal-presentation with Suggestions as to Their Cause." ("Transactions of Michigan State Medical Society," 1882.)

"Vaso-renal Changes as a Factor in the Causation of Still-births." (Reprinted from "Annals of Gynecology," Boston, Massachusetts, 1888.) L. C.

The Phys. and Surg. of the U. S. W. B. Atkinson, 1878.
Trans. Mich. State Med. Soc., 1879.

Claiborne, John Herbert (1828–1905).

The son of John G. and Mary E. (Weldon) Claiborne, he was born March

10, 1828, in Brunswick County, Virginia, and educated in local academies and at Randolph-Macon College, graduating A. B. in 1848, and receiving his M. A. in 1851. He entered the University of Virginia in 1848 and graduated in medicine in 1849, then attended lectures at the Jefferson Medical College, Philadelphia, and took his M. D. from that school in 1850.

He was a member of the Gynecological Society of Boston; a fellow-elect of the Victoria Institute of Great Britain; and was one of the founders of the Medical Society of Virginia and its president in 1878. He was also a member of the Southern Surgical and Gynecological Association and of the Tri-State Medical Association of the Carolinas and Virginia.

He settled in and began to practise in Petersburg, January 1, 1851. In 1855 he was elected to the lower house of the State Legislature, and in 1857 was elected a state senator, and served in that body until the beginning of the Civil War, when he was eventually commissioned major and surgeon, and assigned to duty with the twelfth Virginia Infantry. In May, 1861, while in the field, he was elected to the senate, and on December 1, 1861, was ordered by the secretary of war to take his seat. This he did, but immediately resigned and was given the duty of organizing and equipping general hospitals, chiefly in Petersburg, Virginia. In June, 1864, being the senior surgeon of the post, he was appointed executive officer and chief surgeon of all the military hospitals in Petersburg and vicinity.

He was a very able man. Not only was he a most skillful physician, but a man of broad general information and experience.

He married Sarah J. Alston, of North Carolina, in May, 1853, and had four daughters and a son, John H. Claiborne, Jr., who became a physician and practised in New York City as an oculist. In November, 1883, he married his second wife, Anne L. Watson, of Virginia, and had one son and a daughter.

After a sudden illness of a few days' duration, he died on February 24, 1905, in Petersburg.

He made some valuable contributions to medical literature, and besides published an interesting and valuable book of reminiscences entitled "Seventy-five Years in Old Virginia." A valuable publication of his of a professional character is "Reports from Private Practice." The following are some of his journal articles:

"Azoturia." ("Virginia Medical Journal," vol. ii.)

"Camphor as an Antidote to Strychnia." (Ibid., vol. iv.)

"Puerpnral Hemorrhagica." ("Virginia Medical Monthly," vol. v.)

"Clinical Reports of Skin Diseases." (Ibid., vol. v.)

"Typho-malarial Fever." (Ibid., vol. vi.)

"Incipient Phthisis and its Treatment." (Ibid., vol. viii.)

"The Place of Electricity in General Practice." ("Transactions of Medical Society of Virginia," 1893.)

R. M. S.

Physicians and Surgeons of America, Irving A. Watson.

Clark, Alonzo (1807–1887).

Two little incidents give the key to the character of this original thinker who had an inward assurance of his own powers. His father, not rich, offered him $1,000 to complete his education, and the lad said he would work his own way through. When growing old he was asked to retain the presidency of the College of Physicians and Surgeons, New York, but firmly declined, showing the same resolution in leaving off as in beginning. The father who offered his savings was one Spencer Clark, a leather merchant of Chester, which village he had founded and where Alonzo was born March 1, 1807. The boy got his education at the village school in Worthington; the Hopkins Academy at Hadley, and under Parson Hallock of Plainfield, finally taking his bachelor's degree in 1828 from William's College, Massachusetts. The discipline of teaching school fell to his lot as to that of

many young doctors to pay the way, and in 1835 he took his M. D. from the College of Physicians and Surgeons of New York. London and Paris and again twice there before 1840, sent him back to New York keen on pathology and microscopic studies, the microscope being then rarely used over here for professional purposes.

Some years spent in the wards and dead house of Bellevue Hospital gave him a power of diagnosis and a knowledge of morbid processes unequaled by any of his contemporaries, and his opinion gradually came to be valued by the physicians of the city and country. In the classroom his knowledge of his subject, his scholarly methods, commanded or rather were yielded, persistent attention. Auscultatory percussion, his management of typhus fever, and his treatment of peritonitis by opium may be mentioned as his valuable contribution to medicine. The idea of the first originated with Dr. Camman and he with Clark and Dr. C. T. Mitchell set to work to prove it by post-mortem experiments. Upon the dead body success was complete and in his papers Clark gives instances of the wonderful success in diagnosing rare cases of disease.

His management of typhus fever by removing the window sashes even in winter, heating the incoming air and strictest cleanliness in his ward at the Bellevue Hospital rapidly diminished the mortality. Then, as to peritonitis he dismissed venesection, leeches and mercurials and came to the conclusion that "a kind of saturation of the system with opium would be inconsistent with the progress of the inflammation and would subdue it," a conclusion fully demonstrated in his article on "Peritonitis" in "Pepper's System of Practical Medicine," vol. ii.

Like many other doctors who possess a vigorous constitution, he did not take enough rest. The disease from which he finally died dated back several years, a degeneration of the cerebral circulatory system, and he did not leave his house for six months before his death on September 13, 1887. Two little incidents are recorded of his decided turn of mind. When a student he was refused the daughter of a man who required more money with a son-in-law. When he became professor the father suggested the marriage. He wrote laconically: "Alonzo Clark, the student, couldn't; Alonzo Clark, professor, wouldn't."

Once when vertigo, a symptom of his last illness, seized him while lecturing, he dropped into a hastily fetched chair and held his head in his hands. Then, looking up, he said cheerfully "for many years I have held this chair and never until this moment occupied it literally."

Among his writings are found:

"A New Mode of ascertaining the Dimensions, Form and Condition of Internal Organs by Percussion." (Written with Dr. G. P. Camman, 1840.)

"On the Treatment of Puerperal Peritonitis by large Doses of Opium," 1855.

Lectures on "Typhoid Fever," 1878; lectures on "Cholera," 1866–7; on "Localized Peritonitis," 1878; on "Eruptive Fevers," 1880; on "Diseases of the Heart," 1884.

He held the professorship of pathology at Woodstock, Vermont, thirteen years; the chair of physiology and pathology, College of Physicians and Surgeons of N. York; was visiting physician, Bellevue Hospital; president of New York State Medical Society; member of New York Pathological Society of New York, and of the New York Academy of Medicine.

D. W.

Jour. Am. Med. Assoc., vol. ix, 1887.
Med. Rec., N. Y., vol. xxxii, 1887.
Tr. N. York Med. Ass., Concord, N. Hamp., vol. vi, 1888.

Clark, Andrew Gibson (1809–1902).

This old doctor, who remained unmarried and continued in practice until the burden of ninety-three years weighed too heavily upon him, was born in Winchester, Virginia, on September 24, 1809 and died November 8, 1902 at Parkers-

burg, leaving his property to found a hospital for the sick poor of Parkersburg, among whom he had worked all his life.

He had his medical education at the Transylvania University, Lexington, and studied under Dr. Hugh McGuire of Winchester. He was a close student and kept well ahead of the times and was held in high esteem. W. H. S.

Clark, John (1598–1664).

John Clark was born in England, 1598, and settled in Newbury, Massachusetts in 1638 and was admitted freeman May 22, 1639. About 1650 he removed to Boston and was much distinguished as a physician and a keeper of fine horses. He died in November 1664 leaving in his will among other things, stoves for saving firewood, for which the general court had given him a patent for life in 1652. Savage remarks: "How much these anticipated Franklin's invention of a hundred years later, I suppose can never be learned."

The founder of the Clark family of physicians in America, the subject of this sketch received a diploma in England for his success in cutting for stone, though nothing with reference to this is discoverable in print. He is supposed to have introduced a breed of horses into this country, long known in Plymouth as Clark's breed.

In his will he left his son John, besides his books and instruments, "horses, mares and colts, both in this colony of Massachusetts and in Plymouth colony." An oil painting of Dr. John Clark is now in John Ware Hall in the Boston Medical Library, having been bequeathed to the library by two maiden ladies, surviving relatives, and is referred to in the wills of the Clarks. It must have been one of the earliest portraits made in America.

W. L. B.

A Biographical Dict. of First Settlers of N. E. J. Savage, 1860.
A Genealog. Regis. of the First Settlers of N. E. John Farmer, 1829.
Amer. Med. Biog., 1828. James Thacher.

Clark, J. Henry (1814–1869).

J. Henry Clark was born in Livingston, New Jersey, June 23, 1814, and received his M. D. at the New York University in 1841 after having studied both there and abroad. He established himself in Newark, taking an active part in the local medical work, and while there wrote a history of the Newark cholera epidemic in 1849 and edited the works and biography of his father, the Rev. D. A. Clark, in 1855, also in 1856, he wrote a book on "Sight and Hearing, How Preserved and How Lost." His practice was chiefly ophthalmological and aural.

His death took place at his country house in Essex County, New Jersey, on March 6, 1869. H. F.

Trans. Am. Med. Assoc., vol. xxi.
Trans. Med. Soc. of N. J., 1869.

Clarke, Almon (1840–1904).

Almon Clarke was born in Granville, Vermont, October 13, 1840. When he was three years old his parents removed to Rochester, where he attended local schools, was a teacher himself when fifteen, and at nineteen read medicine with the noted Huntingtons, who continuously practised in Rochester for a hundred years. He attended lectures at Castleton, and lastly at Ann Arbor, where he graduated March 26, 1862. Returning to Vermont, Dr. Clarke began practice near Montpelier. The country was then astir with the excitement of war, and in August, 1862, Dr. Clarke found himself in camp at Brattleboro, as assistant surgeon of the tenth Vermont Infantry Volunteers. When the army was reorganized, Dr. Clark's regiment was transferred to the first brigade, third division, sixth corps. In this famous corps commanded by Sedgwick, and afterward by Wright, he served through the great battles of The Wilderness, Spottsylvania, North Anna, Cold Harbor, many of the fierce struggles before Petersburg (notably the last one, in which Richmond and Petersburg were captured), Sailor's Creek, Winchester, Fisher's Hill and Cedar Creek.

While in Burksville Dr. Clarke received his commission as surgeon of the first Vermont Cavalry.

In April, 1866, Dr. Clarke settled in Sheboygan County, Wisconsin. The roads were rough, the weather exposure severe in day and night service, and he found that his physical powers, somewhat impaired by army life, were not equal to the large demands that were made upon him, but he struggled on doing the best he could. For thirteen years he was physician to the County Insane Asylum. In 1877 he was employed by the Pension Bureau to do special work in four different states. He worked in Sheboygan until 1895, when he was appointed, by Gen. Franklin, surgeon of the Northwest Branch of the National Soldiers' Home.

In 1868 Dr. Clarke married Emma Josephine Adams who survived him. They had no children.

During the last years of his life he spent his winters in the south and his death (from dysentery) occurred there, but his body was taken to Sheboygan.

E. J. C.

Clarke, Edward Hammond (1820–1877).

Edward Hammond Clarke, physician, was born in Norton, Massachusetts, February 2, 1820, the ninth and youngest child of the Rev. Pitt Clarke, a congregational minister of Norton, descended from one of the early colonists who came from England and settled in the north of Wrentham. His mother, Mary Jones Stimson, his father's second wife, was very fond of literature and wrote many poems. Some of those preserved show, as Dr. O. W. Holmes says, a cultivated taste as well as warm affections.

On the death of Pitt Clarke his widow moved to Cambridge, Massachusetts, where Edward was fitted for Harvard College, entering with the class of 1840. An attack of hemorrhage from the lungs when he was in his junior year compelled him to give up study, and this same weak health proved a hindrance for some years.

With it all he was buoyant and optimistic in temperament and took up the study of medicine in Philadelphia because of the less harsh climate of that city. The M. D. was conferred upon him by the University of Pennsylvania in 1846. Upon graduation he accepted an offer to travel in Europe. Here he began the study of otology, a specialty to which he devoted himself in the early years of practice. Upon establishing himself in Boston he soon assumed a prominent position. His health was much improved though never strong. He is described by Dr. Holmes as having "all the qualities that go to the making of a master in the art of healing; science enough, but not so much in the shape of minute, unprofitable acquisition as to make him near-sighted; very great industry; love of his profession and entire concentration of his faculties upon it." In 1855 he was chosen professor of materia medica in the Medical School of Harvard University, succeeding the distinguished Jacob Bigelow. This office he resigned in 1872 and was chosen a member of its board of overseers. He continued in active practice until assailed by cancer of the intestine, of which he died November 30, 1877, after three years of almost constant suffering borne with extraordinary fortitude.

As a writer he contributed various articles on materia medica to the "New American Cyclopedia." In conjunction with Dr. Robert Amory he published, in 1872, a small volume on the "Physiological and Therapeutical Action of the Bromides of Potassium and Ammonium," and in 1876 "Practical Medicine" a brief and clear account of the progress of medical knowledge in the century just finished. His essay on "Sex in Education" provoked sharp antagonism and was much discussed and read. Another essay, "The Building of a Brain," was widely read but called forth less comment. In his later years he gave himself more and more to literature.

He married Sarah Loring, daughter of Jacob H. Loud, of Plymouth, in 1852, who died a year before him. They had two children, Mary Stimson, who died in

infancy, and Elizabeth Loring, who married Dr. Reginald Heber Fitz, Shattuck professor of pathological anatomy in the Harvard Medical School from 1879 to 1892. W. L. B.

Bos. Med. and Sur. Jour., vol. xcvii.
Biog. Encyclo. of Mass., in the 19th Cen. Met. Pub. and Engrav. Co., New York, 1879.
Private family memorials.

Clayton, John (1693–1773).

This botanist was born in England in 1686, educated there and came to Virginia in 1705, and for the rest of his life lived in Gloucester County, though it is said by Jefferson that he was a native of Virginia. Some say that he was not a physician, but we have it on the authority of Dr. J. M. Toner that he was educated to the medical profession, and was eminent in it. He was one of the leading botanists of his day, giving much time to botanical research and correspondence with Linnaeus, who did him the honor to name a genus of plants, Claytonia, the Spring Beauty, after him.

Whether or not a physician, it is only as a botanist that we have any record of his work. He had a noted botanical garden and prepared for the press a work of two volumes on botany and a "hortus siccus" of folio size, with marginal notes and directions to the engraver in preparing the plates for the proposed work. These were left in the charge of the county clerk of New Kent, and were unfortunately burned, together with the county records at the beginning of the Revolution. His long life was chiefly spent in botanical exploration and in the description of the plants of the colony, and as a practical worker he was probably without superior in his day, and is supposed to have added more to the catalogue of plants than anyone before him.

The fact that he was first assistant, and later for fifty years clerk of Gloucester County, would indicate that he was not a physician, or, at least, a practitioner. His father was an eminent lawyer, and for a time attorney-general of the colony, which is an argument in favor of Jefferson's claim that he was a native of Virginia. At the great age of seventy-seven he made a botanical exploring tour of Orange County, then largely a wilderness, and he is said to have visited almost every part of the colony in botanical research.

This old naturalist was a pious member of the Church of England. It was impossible, he declared, that a botanist could be an atheist, seeing, as he did, the infinite wisdom and contrivance displayed in the structure of the smallest plant. A scientist of world-wide reputation and a citizen of sterling integrity, after a long and useful life, he passed away on the fifteenth of December, 1773.

Numerous articles descriptive of the plants he discovered were published in the "Philosophical Transactions," London. Several of these treated of medicinal plants discovered, and others, of the different species of tobacco and their cultivation. His chief work was his fine "Flora Virginica," editions of which were issued from the press at Leyden in 1739, 1743, and 1762, and is referred to by all writers who treat of North American plants. John Frederick Gronovius, the celebrated Swedish naturalist, and the Dutch naturalists of the same name collaborated with Clayton on the book.

R. M. S.

Jefferson's Notes on Virginia.
Toner's Contributions to the Annals of Med. Progress.
Thacher's Amer. Med. Biographies.
Dict. of Nat. Biog.

Cleaveland, Joseph Manning (1824–1907).

Born in Newbury, Massachusetts, on the twenty-second of July, 1824, he had his early education at schools in Lunenburg, Massachusetts and New Haven, Connecticut and graduated B. A. from what is now Princeton University.

He took his M. D. at the College of Physicians and Surgeons, New York, in 1850 retaining his connection with the old New York Hospital on Broadway for three years. While resident there an

epidemic of ship fever occurred. Fifteen of the doctors were stricken with the dread malady, thirteen of them died, Dr. Cleaveland and one other being the only ones who recovered.

After leaving the hospital he was examining physician for the commissioners of immigration and during this time over nine thousand immigrants passed through his hands with hardly a case of mistaken diagnosis. About this time Dr. Henry Grinnell offered him the post of physician to the relief expedition which was going out to search for Sir John Franklin. This offer he declined and after engaging for a year or two in private practice in New York City, he and Dr. Cornelius R. Agnew were appointed physicians to the Great Cliff Mine on Lake Superior, where they had some fifteen hundred miners under their charge for a year or more.

Dr. Cleaveland's work as an alienist began when he became first assistant under Dr. Gray at the Utica Asylum, where he occupied a very responsible position and did able service.

He is, however, best known for his work in connection with the Hudson River State Hospital, at Poughkeepsie, New York. He was instrumental in getting the bill for such a hospital through the Legislature, and there was no part of the work of construction or organization after he was appointed superintendent in March, 1867, that did not come under his untiring supervision.

Dr. Cleaveland was the first to suggest that the old-time designation of asylum should be changed to that of hospital, and the one offense against the rules of the institution which Dr. Cleaveland with all of his well-known kindness of heart could not be persuaded to overlook in employé or staff officer, or anyone else under him, was that of unkindness to a patient.

The story is told of a contractor who once approached him with an offer of several thousand dollars as a commission. He was asked by the doctor if he could really afford to give all that out of his contract, and when told that arrangements had been made by which it could be done, Dr. Cleaveland replied, "very well, take that amount from your contract and let the state have the benefit of the saving. I am paid for my work and it is my place to see to it that you are not overpaid for yours."

For twenty-five years he remained in charge of the hospital, rarely taking even a day's vacation, but resigning in March, 1893, he passed the remainder of his days in the quiet of his own home in the city of Poughkeepsie, New York, where he died on January 21, 1907, J. E. S.

Clendinen, William Alexander (1819–1849).

William Alexander Clendinen graduated in the medical department of the University of Maryland in 1840. He died of cholera at New Orleans in 1849, having been seized with the disease while dissecting a victim of the epidemic. After his graduation he traveled extensively, devoting his time to the study of medicine.

In 1847 he was "Chef de la clinique oculaire" to Desmarres in Paris.

H. F.

Early Hist. of Ophthalmology, Friedenwald. Johns Hopkins Hospital Bulletin, 1897.

Clendenin, William (1829–1885).

The son of William and Mary Wallace Clendenin, he was born in Cumberland County, Pennsylvania, his people originally coming from Dumfries, Scotland. He had the hard fight which falls to the lot of many a student; he worked on his father's farm, was clerk in a dry-goods store, and finally attained his wish by being able to study medicine under Dr. John Gemmiel and, in 1848, to enter the Medical College of Ohio, graduating therefrom in 1850. When he settled in Cincinnati to practise he became intimate with Dr. Reuben D. Mussey and his son and was partner with young Dr. Mussey when the father retired.

In January, 1866, he married Sabra

A. Birchard of Cambridge, Pennsylvania, and had two children, Mary Caroline and William, the little daughter dying when she was four years old.

During the rebellion he held various positions, serving under Gens. Mitchell and Rosencrans and as medical inspector of hospitals. The consulship at St. Petersburg was offered him, but he had just accepted and wished to keep the professorship of the principles of surgery and surgical anatomy in the Miami Medical College. He was also professor of descriptive and surgical anatomy and of operative and clinical surgery in the same college, and on the surgical staff of the Cincinnati Hospital.

He died of acute pulmonary tuberculosis on Sunday morning May 3, 1885, in Cincinnati. M. S. M.

From a Memorial Sketch by Dr. W. H. Falls, 1886.

Cleveland, Emmeline Horton (1829–1878).

It was in 1638 that the Horton family left England for America and down through six generations of ancestors, men and women who held culture, courage, and honor high, Emmeline Horton traced her descent.

She was born at Ashford, Connecticut, September 22, 1829. As a child Emmeline showed hereditary tendency to phthisis, but apparently outgrew this. She was possessed of much personal beauty. Her father dying when she was nineteen it was largely owing to her own efforts in teaching that she made enough to go on studying. She entered Overlin College, Ohio, in 1850, graduated in 1853, and at once entered the Woman's Medical College of Pennsylvania with the intention of fitting herself to be a medical missionary with her husband, the Rev. Giles Cleveland whom she married in March, 1854. In the autumn she continued her medical studies and received her M. D. in 1855. Mr. Cleveland's health proved a barrier to their missionary hopes, and in 1856 the position of demonstrator of anatomy was accepted by Dr. Cleveland in her alma mater. Thenceforwards her rare gifts were used untiringly to the honor and uplift of her profession. The death of her husband in 1857 laid a heavy burden of sorrow upon her, the widow with her little son.

Intense prejudice then existed among the profession against the Woman's Medical School of Pennsylvania, and its non-recognition by the Philadelphia County Medical Society made the problem of securing adequate teachers very difficult; so in 1860 with the assistance of the founders of the Woman's Hospital of Philadelphia, Dr. Cleveland went abroad to fit herself as lecturer on obstetrics, and found in Europe the instruction and inspiration her own country could not afford, entering and graduating at the school of obstetrics, connected with the Paris Maternité. Some idea of the quality of her work is gathered from the fact that in addition to her diploma and in spite of the difficulties of study in a foreign language, she carried off five prizes, two of them firsts, credentials giving her ready access to any European hospitals. Availing herself of this she afterwards returned to the States, where the post of resident physician to the newly chartered hospital awaited her. From the chair of anatomy she was called to that of obstetrics, which position she held until death. Her surgical work in gynecology was brilliant, and history records her as the first woman ovariotomist. So good was her work, that only a few counter votes kept her out of the Philadelphia Obstetrical Society, but the year before her death a paper written by her was accepted and printed in their "Transactions."

Not in the fullness of years, but of achievement, Dr. Cleveland died of consumption at the age of forty-nine. When the end drew near she asked to be buried beside her friend Dr. Ann Preston; together they had wrought, together they would rest, and the desire was fulfilled in Fair Hill Cemetery.

A. B. W.

In Memoriam, The Woman's Journal, Boston, vol. ix.
Stuart, A. B., Pacific Medical and Surgical Journal vol. xxi.
Papers read at the Memorial Hour Commemorative of the late Emmeline H. Cleveland, M. D., at the Woman's Medical College, Phila., March 12, 1879.

Cleveland, Thomas Gold (1825–1873).

Thomas Gold Cleveland, a physician of Cleveland, Ohio, and one of that well-known family from which the city received its name, was born in Madison County, New York, May 21, 1825. His father, Daniel Cleveland, a prosperous merchant of Madison, who had married Julia R. Gold, having experienced a financial reverse, migrated in 1835 to Cleveland, Ohio. About the year 1843 the father with his family returned to New York, and settled in Utica, where his son worked under Dr. P. B. Peckham, with whom he studied medicine for three years. During this period too (probably in 1845–6), he attended a course of medical lectures in New York University, and eventually in the Cleveland Medical College, from which he received his M. D. in 1847.

He at once began to practise in Cleveland, and soon made himself known as a physician of ability and promise. In 1854 he married Miss Harriet A. Wiley, of Watertown, New York, by whom he had nine children.

On the outbreak of the Civil War he was appointed assistant surgeon to a regiment of "three months' men," and subsequently became surgeon to the one hundred and forty-first regiment, Ohio Volunteer Infantry, under Col. Hazen. In spite of failing health, Dr. Cleveland persisted, almost to the day of his death, in performing his duties, and it was lack of physical strength only which compelled him, though too late, to claim a few days of rest. He died of cardiac disease, December 3, 1873, greatly mourned.

Dr. Cleveland was city physician of Cleveland in 1855–6, and served also upon the city board of health for a considerable period. From the latter position he is said to have been removed in consequence of his firm and persistent advocacy of the pollution of the water of the city wells as the cause of an epidemic of typhoid fever. He was a member of the Ohio State Medical Society, and was professor of materia medica in the University of Wooster at the time of his death. No writings are known. H. E. H.

Transactions of the Ohio State Medical Society, 1874.

Cobb, Jedediah (1800–1860).

Born on February 27, 1800, at Gray, he entered Bowdoin College, Brunswick, Maine, in September, 1816, graduating in 1820. Of his family nothing is known. Later he went to Boston, where he became a private pupil of Dr. George C. Shattuck. He took his M. D. at Bowdoin College September, 1823, then went to Portland, Maine, with the intention of practising but had been there only a few months when he was appointed professor of theory and practice of medicine in the Medical College of Ohio at Cincinnati.

His journey was long and tedious, for when he reached Pittsburg no steamer could be found small enough for the low stage of water in the Ohio, consequently he was obliged to take passage with several other gentlemen in a common flat-boat. A part of their duty consisted in rowing their little craft and cooking their own food. After nearly two weeks of hard work they reached the "Queen City." His first course of lectures in the Medical College of Ohio was delivered in the winter of 1824–5, and the second the following year, when he was transferred to the chair of anatomy. This he held until his removal to Louisville, Kentucky, in 1837, to take the chair of anatomy in Louisville University.

In 1838 Dr. Drake was added to the faculty.

In 1852 Dr. Cobb resigned and re-entered the Medical College of Ohio with an entirely new faculty of which Dr. Drake was a conspicuous member. The session had hardly commenced before Drake died; and towards spring the health of Dr. Cobb failing, he considered it his duty to resign, bidding a final farewell

to medical teaching. In the spring of 1854 Dr. Cobb settled on a small farm at Manchester, Massachusetts.

In consequence of not being engaged in practice, Dr. Cobb acted for many years as dean of the several faculties with which he was connected, and his accuracy as an accountant was proverbial. In 1830 he visited Europe, partly at the instance of the Medical College of Ohio, to make purchases for its museum and library.

In 1836–37 he delivered two courses of lectures on anatomy at Bowdoin College. He had the greatest aversion to writing, hence has left nothing literary.

He married in 1826 Ann Maria Merrill, and had two sons and a daughter. He died in Manchester, Massachusetts, November 16, 1860 of an ulcerated stomach.

A. G. D.

"Necrological Notice of Jedediah Cobb, M. D." By Samuel D. Gross, M. D., North American Medico-Chirurgical Review, January, 1861.

Cochran, Jerome (1831–1896).

Jerome Cochran, medico-jurisprudentist, was born at Moscow, Tennessee, December 4, 1831, and graduated from Nashville University in 1861. During the war he was surgeon in the confederate army. In 1865 he settled in Mobile, in which city he practised for a number of years, and for the last fifteen years of his life in Montgomery.

Dr. Cochran was an energetic worker in the field of forensic medicine and public hygiene. In 1873 he was appointed chairman of the Committee on Public Health of the State Medical Association, and in that capacity did much and excellent service. He drafted in 1875 the "Act to Establish Boards of Health in the State of Alabama," and in 1877 the "Act to Regulate the Practice of Medicine in the State of Alabama."

In 1868 he was elected professor of chemistry in the Medical College of Alabama, and in 1873 his professorship was enlarged to that of "chemistry, public hygiene, and medical jurisprudence," which he held until death, after a long illness on August 17, 1896.

Dr. Cochran was a man of many friends. Odd as he was in many of his ways, his eccentricities only the more endeared him to those who knew and loved him, and these were many because of his never-ceasing energy and ever watchful vigilance in his care for the public health.

T. H. S.

Journal American Med. Assn., 1896. (portrait), xxvii.
Stone's "Eminent American Physicians and Surgeons," Indianapolis, 1894 (portrait).

Cochran, John (1730–1807).

John Cochran, born in Chester County, Pennsylvania, director-general of the military hospitals of the Continental Army, received a careful general education and studied medicine under Dr. Thompson of Lancaster. At the outbreak of the French and Indian War he enlisted as surgeon's mate in the British army, where he did creditable service and acquired that skill and experience which came in good stead during the war of the Revolution. Retiring to private life he practised medicine in New Brunswick, New Jersey, and at the outbreak of the war of Independence offered his services to the colonies and was employed in the hospital department. On the personal recommendation of Washington, Cochran, in 1777, was appointed physician and surgeon-general to the army of the middle department. He displayed such marked ability that he was elected director-general in 1781, when Shippen resigned that office. At the close of the war Cochran retired and resumed practice in New York. Soon after Pres. Washington appointed him commissioner of loans for the state of New York, which office he held for several years. He died April 6, 1807, at Palatine, New York.

A. A.

Pilcher, Surgeon-generals of the Army, Carlisle, Pa., 1905.

Cochran, Joseph Plumb (——1905).

Joseph Plumb Cochran, a son of missionary parents, was born in Persia and

sent to America when he was fifteen, that he might receive the preparatory education necessary for admission to the medical department of Yale University where he afterwards took his M. D. After a course in Bellevue and Long Island College Hospitals he returned to the country of his parents' adoption. Cochran's knowledge of the Persian, Turkish and Syrian languages, with a slight knowledge of Kurdish gave him an influence he would not otherwise have had and made it possible for him to train native physicians. It was largely through his efforts that the Westminster Hospital was founded in 1880, with the Harvard annex in 1890. That Cochran was appreciated by Persians is shown by the Shah's gift of the decoration of the "Order of the Lion and the Sun," in 1880. That he gave his life generously to the people among whom he worked was seen in the sympathetic throngs of all races who attended his funeral when he died, August 15, 1905. M. K. K.

Cocke, James (1780–1813).

James Cocke, medical teacher and anatomist, was a native of lower Virginia and came from a wealthy and influential family. He was born about 1780 and enjoyed superior advantages in being a pupil of Sir Astley Cooper, at Guy's Hospital, London. He graduated M. D. at the University of Pennsylvania in 1804, when his thesis was "An Attempt to ascertain the Causes of the extraordinary inflammation which attacks wounded cavities and their contents." This attracted considerable attention from its bold and original views. In it he ably defended the propriety and practicability of ovariotomy, the first advocacy of this operation in America, according to Quinan. It was published a second time in 1806. He settled in Baltimore about the close of 1804, and entered into partnership with Dr. John B. Davidge early in 1807, lecturing on physiology to the private class of medical students founded by the latter. With Drs. Davidge and John Shaw, he assisted in founding the college of medicine of Maryland, and later in advancing it to the rank of a university, in which he held the chair of anatomy from 1807 to his death in 1813. He died of fever October 25, at the very hour at which he was to have delivered the opening lecture of the course in the new building of the university. He was buried in Kent County, Maryland. He was a young physician of rare virtues and promise, and his loss was a most serious one to the Maryland profession and her rising university. In 1805 he reduced a dislocation of the humerus of seventeen weeks, and three days' standing, a feat that gave him great éclat. He possessed also marked business capacity and devised the ways and means for carrying on the work of the college. He married Elizabeth Smith of Kent County, Maryland. E. F. C.

Cocke, Dr. William (1672–1720).

William Cocke was born in Sudbury, Suffolk, England, of "reputable parents" in 1672 and educated at Queen's College, Cambridge, but it is not known in what year he came to Virginia. He was probably a practitioner in Williamsburg in the early years of the eighteenth century, for he acquired the reputation of being "of undisputed skill in his profession and of unbounded generosity in his practice."

For several years in the latter part of the reign of Queen Anne, and in the first of those of King George I (say, from 1710 to 1720) he was a member of the Colonial Council and secretary of state for the colony. He was "learned and polite" and was held in high esteem by the gentlemen of the colony, and by Alexander Spotswood, the Governor. He died suddenly in 1720 while sitting as judge in the General Court in the Capitol, and he was buried at the west side of the altar in Bruton Church at Williamsburg, in which is a tablet to his memory, from the inscription on which the facts here related are derived. R. M. S.

Coffin, Nathaniel, Sr. (1716–1766).

This pioneer among medical men was descended from Tristram Coffin of Brixton County, Devon, born in 1605. He came over with his wife Dionis Stevens and his mother and settled in Salisbury, Massachusetts. Ultimately he and his family moved to Nantucket for purely agricultural purposes. He became chief magistrate of that island in 1671 and at his death left seven children and sixty grand children.

Nathaniel Coffin was born in Newburyport, Massachusetts, in the year 1716, was educated in the common schools there, studied medicine under the guidance of Dr. Tappan, and went to practise medicine in Maine in 1738. In the year 1739 he married Patience Hale, by whom he had eight children, one of whom, Nathaniel Jr., became as celebrated in medicine as his father before him.

Dr. Coffin, Sr., before long obtained a large practice, covering Wells and Kennebunk on the west, to the Kennebec River settlements on the east, so that what with bad roads and endless miles of travel, his medical life was difficult beyond imagination. He was often called to operate upon patients who had been scalped by the Indians during the French wars, but who had partially recovered. By the Indians also, in return for professional services rendered them gratuitously when injured, wounded, or torn by wild beasts, he was universally respected, so that when he was compelled to pass through their territory on his way to white patients in the outlying settlements they always provided him with a safeguard and the best possible conveyance through almost pathless forests.

The only operation done by him so far as recorded was ligation of the axillary artery in a case of injury to the arm of a man with his scythe when mowing. The man was regarded as dead, but after the ligature had been applied he gradually recovered.

Carrying on his work amid discouraging surroundings and far distant from opportunities to freshen his mind by study, he kept in touch with the progress of medicine by inviting to his hospitable home the young ship surgeons just out from England. Many of these had lately graduated from the famous London hospitals, and from them Dr. Coffin eagerly imbibed everything new. In return for this, he took them to see his patients, so that they could study something more than diseases occurring on board ship.

Excellent at the sick bedside, Dr. Coffin was better still as a surgeon, in practice, accidents, and emergencies.

The year of 1763, which found him but forty-seven, brought with it a slight stroke of paralysis, due to hard work and many years of exposure to a most inclement climate. Never knowing but that he might die any day, he persisted in sending to London his son Nathaniel, destined to become in later years one of the most brilliant ornaments of the medical profession of Maine.

This foresight was well rewarded, for the son went and returned well equipped and the elder man at the end had the pleasure of seeing his sacrifice rewarded, and when unable to do much work he handed it over to his son.

He died early in January, 1766, not quite fifty-five, and the name of Nathaniel Coffin, Sr., deserves perpetual remembrance in the annals of Maine, for he was a pioneer, skillful far beyond the average, and a man of extraordinary self-reliance.

J. A. S.

Thacher's Medical Biography.

Coffin, Nathaniel, Jr. (1744–1826).

A distinguished son of the first Nathaniel Coffin, Nathaniel Jr. was born in Portland, Maine, May 3, 1744, and after such education as the schools then afforded, studied the rudiments of medicine with his father. When nineteen he was sent to England where he walked the London hospitals under Hunter, Akenside, and others of medical fame, and returning home after nearly three years abroad, began to practise.

On the retirement and death of his

father he was well qualified, although still very young, to succeed to his extensive and difficult practice. As the population increased, and physicians settled in the outlying towns, young Coffin had to ride on horseback over the bad roads, yet had ever more and more to do as consultant in his native town.

In 1770 he married a daughter of Isaac Foster, of Charlestown, Massachusetts, and had eleven children.

He early inhaled the spirit of independence, and was very active in the war of the Revolution. When Portland was threatened with bombardment by Mowatt, Coffin was sent on board his ship as one of the town commissioners to remonstrate against the outrage, but all in vain, for the bombardment took place with frightful results. Dr. Coffin went into the country with the exiles, and did his best to alleviate their sufferings during that inclement season of the year. He also worked vigorously the entire winter among the numerous sick. During the entire war he took care of all the wounded and sick who were brought into Portland on men of war or privateers.

Coffin was soon at the head of his profession; prompt, always ready, steady of hand, bold as an operator, and doing things that no other doctor in those days dared to attempt. He was an excellent surgeon. Some of his operations were done in his eightieth year. It may be remarked that he was ambidextrous with the knife, so that his operations were performed rapidly and skillfully. He was also a forceful and diligent practitioner. His advice was greatly sought for not only as a physician, but as a man of honor and well versed in business affairs. An honorary M. D. was given him from Bowdoin College, and he was a member of the Massachusetts Medical Society, president of the Maine Medical Society, and, for a long series of years, hospital surgeon for all the marine patients in the Portland district.

In the papers of Dr. Jeremiah Barker we find him mentioned as the most skillful surgeon east of the Massachusetts Bay Colony. He had large success in tapping for dropsies, and in fractures. He did many trephining operations, and in one instance performed this operation twice on the same individual with a finally perfect recovery. He also performed what we now call Chopart's amputation of the foot in a case of tetanus with fortunate results . . . . He suffered considerably with gout in the latter part of his life, and it is stated in one old letter that he often used to walk in the grass when the dew was on it with good results. This would antedate Father Kneipp's treatmeut by some eighty years! A fine looking man, with polished manners, urbane, healthy, captivating in his behavior to everybody, his services, owing to his exceeding good health and his long experience, were valuable to the last. In 1823 and 1824 he had attacks of asthma, which terminated in a general breaking up of his constitution. He remained in the same condition for another year, then failed rapidly and died October 18, 1826, at eighty-two, and dying on the fifty-first anniversary of the destruction of Portland, which he survived so long yet remembered so clearly to the last. He had practised sixty years, and continued his good work nearly to the end. J. A. S.

Thacher's Med. Biog.

Cogswell, Charles (1813–1892).

Charles Cogswell was born in Halifax, Nova Scotia, May 12, 1813, a descendant of ancestors who had come from Massachusetts and settled in Cornwallis, Nova Scotia about 1761.

Educated at King's College, Windsor, he graduated in arts in 1831, and took his professional course at the University of Edinburgh where he graduated M. D. in 1836, subsequently studying in London and Paris.

He then settled in his native city, where he was a valued member of the profession for many years, but he went to London, England, where he became

a consulting physician and lived there till his death in 1892.

He was elected an extraordinary member of the Royal Society of Edinburgh in 1839, and was president of the Medical Society of Nova Scotia in 1864.

Possessing ample means, Dr. Cogswell did not engage in general practice in Halifax, but devoted his time and talents to improving the status of the profession, to promoting the construction of hospitals, and to works of charity. It was said of the family that they were noted for piety, talent and benevolence. He was chiefly instrumental in the organization of the first medical society in Nova Scotia and also contributed many standard works and provided a liberal endowment for what is known as the Cogswell Medical Library, now in the Halifax Medical College. Dr. Cogswell was also a strong advocate of athletics, especially favoring aquatic sports. He presented the city of Halifax with the land for a small park, and devoted considerable wealth to the endowment of King's College, Windsor, and to improvements in his native city.

In the early part of his career he gave much time to original research and in 1839 was awarded the Harveian prize in London for the best dissertation on "The Physiological Action and Medicinal Properties of Iodine and its Compounds." This essay was published and was for many years regarded as the best authority on the subject, and in 1851 he contributed a valuable paper to the Medical Society of London on the "Endosmotic Action of Medicines."

He married Frances Mary Goodrich in 1848 but had no children.

D. A. C.

Cogswell, George (1808–1901).

George Cogswell, son of Dr. Cogswell who married the daughter of Gen. Joseph Badger of Gilmanton, was born on February 5, 1808, at Atkinson, New Hampshire and after studying in the medical side of Dartmouth College and with David Mussey he graduated M. D. from that college and was given its honorary M. A. in 1865. He settled in Bradford, Massachusetts, and was about the first physician there to make intelligent use of auscultation and percussion in diagnosis, and, always eager to keep up with the times, he went in 1841 to visit European clinics and on returning became the leading operator in the country, and had well appointed anatomical rooms in his own house.

In 1851, owing to ill health, he gave up all work save surgical and consultive and was successful in this when his life closed at Bradford on April 21, 1901. His first wife was Abigail Parker who died in 1845, his second, Elizabeth Doane. Of the nine children born of Elizabeth, the eldest, George Badger, became a surgeon. C. D. C.

The Cogswells in America.
Successful New Hampshire Men.
There is an oil painting in the Bradford Academy, New Hampshire.

Cohen, Joshua I. (1801–1870).

Joshua Cohen, born in Richmond, Va., 1800, graduated at the University of Maryland in 1823, after having been a student in Dr. Nathaniel Potter's office, and soon after devoted himself to the study of ear disease. He was an intimate friend of Dr. George Frick, the oculist, and, like him, had wide interest in science beyond the domain of medicine. Thus for a time he became professor of mineralogy in the academic department of the University of Maryland. He was much interested in her Medical and Chirurgical Faculty, was the treasurer from 1839 to 1856, and president from 1857–58; also an active member of the Maryland Academy of Sciences. He practised until about 1851, devoting himself almost exclusively to otology, and his reputation as an aurist was considerable.

In 1840 he established, in connection with his friend, Dr. Samuel Chew, an eye and ear institute in Baltimore.

Dr. Cohen was one of the earliest, perhaps the first aurist in this country. He has left us but one publication which

pertains to diseases of the ear. It is entitled "Postmortem Appearances in a Case of Deafness" ("American Medical Intelligencer," July, 1841, to July, 1842, p. 226, vol. i). He died in Baltimore in 1870. H. F.

Early Hist. of Ophthalmology, Friedenwald. Johns Hopkins Hospital Bulletin, 1897.

Cole, Richard Beverley (1829–1901).

Among the pioneers of medical education in California Beverley Cole is well worthy of remembrance. He was born in 1829 in Manchester, Virginia, his parents removing to Philadelphia soon afterwards. After graduating at Jefferson Medical College before reaching his twentieth year, he married, in 1848, Miss Eugenie Bonaffon of Philadelphia, and started practice in that city. A year or two later the new gold fields of California began to attract the world's attention, and among the eager westward throng was young Beverley Cole. He reached San Francisco by way of Cape Horn in 1851, opened an office there, and quickly acquired a prominent place in both medical and civic circles. The Vigilance Committee made him surgeon-general of their forces in 1852, and subsequently he was appointed surgeon general of the state of California.

In 1858 he became professor of obstetrics and gynecology in the University of the Pacific, the beginning of an unbroken career of successful tutorial work. In 1866 he accepted the same chair in the faculty of Toland Medical College, retaining it after that institution became the medical department of the University of California, in 1873 and until his death, in 1904.

Throughout this long sequence of years as a teacher of obstetrics, Dr. Cole maintained a position in the front rank.

His practice was for many years limited to gynecology, always keeping pace with the rapid development of this science.

Dr. Cole was a member of the Royal College of Surgeons, England, and a fellow both of the Obstetrical Society of London and the British Gynecological Society, also president of the American Medical Association, 1895, and editor of the "Western Lancet," 1873–6.

In matters relating to public health he took an active interest, serving repeatedly on the city Board of Supervisors and on the municipal and state Boards of Health. It was mainly through his initiative and effort that a new city and county hospital was built to replace the unhygienic structure at North Beach.

He succumbed to arteriosclerosis on January 17, 1901, two daughters surviving him. His three other children died in infancy. W. H. M.

Colden, Cadwallader (1688–1776).

This doctor, "a truly great philosopher and a very great and ingenious botanist," who came to be lieutenant governor of New York, was the son of the Rev. Alexander Colden, minister in Dunse, and was born on the seventeenth of February, 1688, educated at and taking his M. D. from Edinburgh University.

Attracted by the fame of William Penn's colony, he came over to America and practised in Pennsylvania for seven years, then returned to England. While Colden was in London Dr. Edmund Hally was so pleased with a paper of his on "Animal Secretions" that he read it before the Royal Society and introduced the writer to many learned men who became Colden's intimate friends.

From London he made a short visit to Scotland, long enough, however, to get him a wife (Miss Christie), then he returned to Pennsylvania but eventually settled in New York, and became a public character, holding in succession the offices of surveyor-general, master in chancery, and lieutenant governor, duties carried out in strong royalist spirit even to the extent of trying to found a party of landowners similar to the House of Lords. Yet this politician doctor never lost his hold on science and in 1751 appeared his most readable but least scientific work "History of the Five Indian Nations of Canada, 1727," followed ten years later by his

"Account of Diseases prevalent in America," and his essay on the "Cause and Remedy of the Yellow Fever," so fatal in New York in 1743.

He must have worked hard even in those comparatively leisured days, for he translated the letters of Cicero, wrote a purely scientific "Treatise on Gravitation," 1745 (afterwards enlarged into "The Principles of Action in Matter") and devoted all the remaining time to be spared from official duties to his well-beloved study of botany, maintaining withal "with great punctuality" a correspondence with learned friends such as Linnaeus, Gronovius, Fothergill, Collinson, Franklin, Bard and Garden, delighting to write to Franklin about electricity and suggesting, according to Franklin, the idea and plan of the American Philosophical Society.

The Linnaean System was introduced by him into America only a few months after its publication in Europe. To the author himself he sent a description of some three or four hundred American plants and Linnaeus gracefully acknowledged the gift by publishing the record in his "Acta Upsaliensa" and naming a genus of boraginaceous herbs of the tribe Ehreticœ after him (Coldenia), though a prettier version is that Miss Jane Colden sent him a specimen and he named it after her, a compliment he was fond of paying ladies and Lady Ann Monson had the same perpetuation in the Monsonia. This same Miss Jane taught Dr. Samuel Bard to love botany when he stayed with her as a boy, an obligation he gratefully refers to.

Colden made up his mind in 1775 that the stamped paper made necessary by Grenville's stamp act should be used, but the official distributor of stamps refused to receive it, so Colden went off to Fort George with a garrison of marines. When the New York populace protested he ordered the marines to fire. They would not and the people seized Colden's carriages and burned them along with Colden and the devil in effigy. The following year brought the Declaration of Independence, but Colden had already retired to a large grant of land called Coldenham, near Newburgh, where he wholly bent himself to science, especially botany and mathematics. His home was a rendezvous for all learned men; his greatest pleasure was to receive them, and there, on September 28, 1776, he died, leaving a son who distinguished himself as a mathematician and philosopher.

D. W.

Am. Med. and Philos. Register, vol. i.
Dict. of Nat. Biog. H. Morse Stephens.
Memorials of Bartram and Marshall, Darlington.
Correspondence of Linnaeus. Sir J. Edw. Smith.

Coleman, Asa (1788–1870).

He was born July 20, 1788, and studied medicine under his father, an ex-surgeon of the Continental Army living in Glastonbury, Connecticut, and was almost literally born into medicine, being the fifth doctor in his family, two sons subsequently following in his footsteps.

Dr. Coleman settled in Troy, Miami County, Ohio, in May, 1811, and in the fall of that year was licensed to practice by the Censors of the First Medical District of Ohio; this license bears the signature of Daniel Drake.

In September, 1811, he was commissioned surgeon in the state militia, and was rapidly promoted to surgeon-major (1816) and to a lieutenant-colonelcy (1818).

He represented his district in the State Legislature in 1816 and 1817, thus serving as a member of the first session held in the new Capital (Columbus).

His name is appended to the call for the first organization of the physicians of this district of which there is a record.

He died in Troy, Ohio, February 25, 1870. W. J. C.

Coleman, Robert Thomas (1830–1884).

An army surgeon and obstetrician, he was born in Hanover County, Virginia, on September 3, 1830 and studied medicine at the University of Virginia, taking the degree of M. D. and then going to the

Jefferson Medical School in Philadelphia, where he took an M. D. in 1851.

He next served for three years in Blockley Hospital, and returned to Virginia, in 1854, and settled in Richmond. Soon afterwards he was elected lecturer on clinical medicine in the Blockley Hospital Medical Institution, but declined the position. He practised in Richmond until the beginning of the Civil War, then entered the serviee of the confederacy as surgeon of the twenty-first Virginia Regiment, and upon the organization of the famous "Stonewall Brigade," was appointed its surgeon-in-chief

After the war he returned to Richmond and resumed practice, and upon the reorganization of the Medical College of Virginia, was elected professor of obstetrics, a position he held until his death.

He was a charter member of the Medical Society of Virginia and a member of the Richmond Academy of Medicine.

His army record was excellent, and at one time he is said to have been the highest ranking officer in the medical corps of the confederacy.

He married a Miss Irvine and had a son and a daughter. The son, Burbage Coleman, was a physician, but died of consumption early in his career, and the father died in Richmond after an illness (chronic nephritis) which confined him to the house for several months, on March 4, 1884. He made few contributions to medical literature. So far as we can find the following are the only articles:

"Management of Labor in Presentations of Head and Hand." ("Virginia Clinical Record," vol. i.)

"Puerperal Convulsions." ("Virginia Medical Monthly," vol. v.) R. M. S.

Va. Med. Monthly, vol. x, 1883.

Comegys, Cornelius George (1816–1896).

Cornelius George Comegys was born July 23, 1816, on an ancestral farm, called "Cherbourg," in Delaware, his father one Cornelius Parsons Comegys, governor of Delaware from 1838–1841. The family deseended from Cornelius Comegys, who came from Holland to America in 1661, and settled on the east shore of Chesapeake Bay, in Kent County, Maryland. The mother of Cornelius George Comegys was Ruhamah Marim, also of English ancestry.

Cornelius George, passed his early life on the farm, and after many vicissitudes and trying various trades, he matriculated at the University of Pennsylvania, where he graduated in 1848. Having taken his M. D. he practised for a year in Philadelphia, then removed to Cincinnati, Ohio, where, by his successful treatment of the Asiatic cholera in the epidemic of 1849, he gained great distinetion. Feeling the need of a wider clinical study, he went abroad in 1851 to spend a year in the medical schools of London and Paris. In the former, his especial instruction was at Guy's Hospital; and in Paris, he was a special student of Charcot, chief of La Charité.

Upon his return to Cincinnati in 1852, he gave a course of lectures on anatomy in the College of Physicians and Surgeons, and then joined in the organization of the Miami Medical College as professor of the institutes of medicine. He held this same chair in the Medical College of Ohio, with which the Miami College united five years later, until 1868 (with the exception of the years 1860–4) and in 1857, was lecturer in clinical medicine at the Cincinnati Hospital.

He was one of the founders of the Cincinnati Academy of Medicine, and twice served as president. He was a member of the Medico-Chirurgical Society, the Cincinnati Medical Society, Mississippi Valley Medical Association, honorary member of the Philadelphia College of Physicians and the Delaware State Medical Society; chief of the medical staff of Christ's Hospital, Cincinnati, from its beginning until his death. He labored earnestly and persistently for the creation of a department of public health up to that time.

His published literary works were two translations from the French: "The History of Medicine," by Renouard (1856), and "Lectures on the Pathological Anat-

omy of the Nervous System—Diseases of the Spinal Cord," by J. M. Charcot (1881). In addition, he was the author of numerous papers published in the medical press—two of them especially attracted much attention: one, "On the Pathology and Treatment of Phthisis" (1854), referred to in the American edition of "Watson's Practice," and in "Copeland's Dictionary" (American edition); and the other, "On Cool Bathing in the Treatment of (Infantile) Enterocolitis," "Philadelphia Medical Times" (July, 1875)—of which Prof. H. Woods said, in 1877, after having practised it extensively during the hot summer of 1876, "It must be granted to Dr. Comegys the credit of having introduced one of the most life-saving improvements in modern therapeutics." Other papers were: "Conservative Value of Fever and Inflammation" (published in the "Transactions of the Cincinnati Medico-Chirurgical Society," 1854); "The Treatment of Asiatic Cholera" ("American Journal of Medicine," 1866); "Reports of Cases of Brain Tumors" ("Philadelphia Medical and Surgical Reporter," 1870), and others.

In 1875 he made an address before the Alumnal Association of the University of Pennsylvania upon the subject, "A Healthy Brain Necessary to a Free Will," which attracted much attention.

On October 3, 1839, he married Rebecca Turner Tiffin, of Chillicothe, Ohio, daughter of Edward Tiffin, M. D., the first governor of Ohio, and had six children: Ellen Tiffin, Mary Porter, Cornelius Marim, Edward Tiffin, William Henry, and Charles George Comegys.

Two of the sons, Edward Tiffin and William Henry Comegys followed their father's profession.

Dr. Cornelius George Comegys died of uremia, on February 10, 1896.

A. G. D.

"Physicians and Surgeons of America," 1896, by Irving A. Watson.
"Cornelius G. Comegys, M. D. His Life and Career in the Development of Cincinnati for nearly half a Century," 1896, by Charles G. Comegys, B. A., B. L.

Condict, Lewis (1773–1862).

Lewis Condict, one of those who assisted in the first decennial revision of the United States Pharmacopœia, was born in Morristown, New Jersey, March 3, 1772 and died in his native town in his ninetieth year, May 26, 1862. He was a son of Peter Condiet and a deseendant of John Condict who emigrated to this country from Wales and settled in Newark, New Jersey in 1678, and was the youngest of three children. His father died during his childhood, and his mother placed him under the care of his uncle, the Hon. Silas Condict of Morristown.

Although not college bred, he was well armed in his fourteenth year to begin the study of medicine with Dr. Timothy Johnes, of his native town. Subsequently he attended lectures at the University of Pennsylvania, where he took his M. D. in February, 1794, immediately beginning practice in Morristown, New Jersey, and living there until his death. In 1798 he married Martha, daughter of the Rev. Nathan Woodhull, D. D., of Newtown, Long Island. His second wife was Bettina, a daughter of John Elmendorf of Millstone, New Jersey. Of his children three sons became physicians, all of whom were graduates of the College of New Jersey, Princeton, Silas L., Nathan W., and Lewis.

Through his intimacy with Benjamin Waterhouse, the friend and co-adjutor of Sir William Jenner, (then looked upon as a charlatan), Condict boldly vaccinated in one hand and inoculated with small-pox the other hand of his one-year-old daughter, the case becoming immune.

Subsequently an act was passed by Congress, through the instrumentality of Dr. Condict, which allowed vaccine virus to be passed through the mails free. From 1805 to 1810 he was a member of the State Legislature and speaker from 1808 to 1810.

In 1816 and again in 1819 he was president of the Medical Society of New Jersey, organized 1766, the first state medical society in the United States, its charter coming from George III.

On January 4, 1830, while again a member of Congress, he was elected president of the First Decennial Pharmacopœial Convention held in Washington, District of Columbia, and the president of the Pharmacopœial Convention which convened ten years later, in 1840.

In 1853 he was elected second vice-president of the American Medical Association and was an original member of the New Jersey Historical Society, contributing many papers of great value.

The responsibilities of political station did not diminish his interest in his profession, for he was always enthusiastic in laboring for its advancement His life was not only moral but consistently religious. H. L. C.

A Sketch of the Life of Lewis Condict, M. D., Dr. Henry L. Coit.

Conklin, Henry Smith (1813–1889).

A native of Champaign County, Ohio.

Henry Smith Conklin was born of Scotch-Irish parentage on July 8, 1813, and in 1833 began the study of medicine under Dr. Needham, of Springfield, Ohio, and Dr. Robert Rodgers, of the same place.

His first course of lectures was attended at the Medical College of Ohio in the winter of 1835–1836. He began to practise in Sidney, Ohio, in 1836, where he continued until his death in 1889. In 1860 he was elected President of the Ohio State Medical Society, of which he was one of the founders.

On invitation by Gov. Dennison, he assisted in organizing the medical departments of the first Ohio regiments which went to the front on the outbreak of the War of the Rebellion.

He was commissioned surgeon to Gen. Fremont's infantry body-guard (Benton Cadets), and served during a portion of the Missouri campaign, but resigned when Fremont was relieved from command of the department.

Two of his sons studied medicine.

W. J. C.

Conner, Phineas Sanborn (1839–1909).

Soon after Dr. Conner's sudden death in April, 1909, five of his medical confrères came together to tell a meeting how they had known him: one spoke of his surgical ability; one of his teaching powers; another extolled him as a firm friend; a fourth for his somewhat austere but absolutely honorable disposition, and the fifth spoke of him as an example in work to the student. Many others said kind and true things of the lad who was a son of Dr. Phineas Conner and his wife Eliza Sanborn and born in August, 1839, at West Chester, Pennsylvania. When he was two he was brought to Cincinnati, and at twenty he graduated from Dartmouth College, then on to the Medical College of Ohio and Jefferson Medical College, graduating from the latter in 1861. After holding several military appointments he settled down in Cincinnati to practise.

As a surgeon he was possessed of rare diagnostic acumen, unusual skill. His contributions to medical literature are exceedingly numerous and valuable, and cover a period of thirty-five years, from 1870 to 1905, touching upon almost every branch of surgery.

As an operator Dr. Conner was exceedingly bold. He was particularly fond of operations for the removal of cancer of the upper jaw. In the wide field of gunshot wounds, upon the broad subject of the diseases of the blood-vessels, on the management of head injuries, there was no man in the country, while Dr. Conner was at his best, whose judgement, was more reliable.

He had great fondness for books, engravings and etchings. With complete freedom from all ostentation, he at one time collected precious stones, which, he preserved unmounted, for the delectation of his friends.

Dr. Conner married December 17, 1873, Julia E. Johnston, of Cincinnati, who died in 1899. The children were Edith Johnston, Phineas Sanborn, a physician, who died in 1906, and Helen Elizabeth.

He was made professor of surgery in the

Dartmouth Medical School in 1878, retaining his chair there for twenty-four years, delivering his lectures during the summer. For over thirty-five years he was on the staff of the Good Samaritan Hospital of Cincinnati, and from 1874 to 1895 on that of the Cincinnati Hospital, after which he was made emeritus professor, and served as one of its trustees for many years. He was a member of the city, county, state and national medical societies, and had served as president of the American Surgical Association, of the American Academy of Medicine, of the Ohio State Medical Society. He was one of the associate editors of Keen and White's "American Text-book of Surgery." To Ashhurst's "International Encyclopedia of Surgery" he contributed monographs on "Gunshot Wounds" and "Injuries and Diseases of Muscles, Tendons and Fascia;" to Pepper's "System of Practical Medicine" one on "Tetanus;" to Dennis's "System of Surgery" one on "Gunshot Wounds," and in the "Clinic," the official organ of the Medical College of Ohio, and other medical journals appeared some thirty good articles on operative surgery.

D. W.

Daniel Drake and His Followers, Dr. Otto Juettner.
The Lancet Clinic, Cinn., Apr. 10, 1909.

Cooke, John Esten (1783–1853).

He was born on the second of March, 1783, while his parents were on a visit in Boston. His father, Stephen Cooke, was a physician of Virginia and a surgeon during the Revolutionary War.

He began to study medicine under his father and graduated from the University of Pennsylvania in 1805. After graduation he settled in Warrenton, Fauquier County, Virginia, but in 1821 moved to Winchester. Just before leaving here he was engaged with Dr. McGuire in organizing a medical school. In 1827 he was called to the chair of theory and practice of medicine in Transylvania as successor to Daniel Drake. Largely, if not entirely, in view of Dr. Cooke's ideas, which Drake strongly opposed, Cooke first attracted public notice through an article on autumnal fever published in the "Medical Recorder," 1824. He was the first professor of the Transylvania University to prepare a systematic work on any branch of medicine. His "Treatise of Pathology and Therapeutics" forms two octavo volumes of about 540 pages each, but the third volume of this work never appeared. His essays in the "Transylvania Journal" and the "Medical Recorder," would make another volume.

In 1827 he became associated with Dr. Charles Wilkins Short as co-editor of "Transylvania Journal of Medicine and the Associate Sciences," a journal issued by the medical faculty of Transylvania University. As editor, he with Charles Caldwell was the most potent factor in shaping medical thought in his time and throughout the southwest.

In 1837 he was elected to the chair of theory and practical medicine in the Louisville Medical Institute, which became the University of Louisville. The best description of him as a man is given by Lunsford P. Yandell. Stern and sometimes even harsh in his intercourse with the world, Dr. Cooke was gentle, tender, and child-like in his religious affections, in the domestic circle, and in social intercourse with the friends he loved.

Dr. Cooke's manner as a lecturer was not pleasing. His utterance, if not painful, was hesitating and difficult. But it was not many weeks before most of his pupils were so charmed with the simplicity and compendiousness of his th ories that homely elocution was forgotten.

The theory which made him celebrated he elaborated during his long and solitary rides in Virginia. It consisted of a universal origin of disease, viz., cold or malaria. These weakened the action of the heart and produced an accumulation of blood in the vena cava and large veins. The congestion principally affected the liver. Largely because of this

he favored the use of calomel. He was credited with saying "If calomel did not salivate, and opium did not constipate, there is no telling what we could do in the practice of physic."

It is interesting to note that one holding such views could become the successor of Daniel Drake and continue so for a number of years.

In spite of strong opposition to these views from outside quarters, to which were added, as time passed, opposition within his school, he continued so to teach until he was pensioned by the faculty on the request of the students.

As an extreme example of his therapy, he administered thirteen tablespoonfuls of calomel in a case of cholera in the course of three days. The case terminated fatally, but he repeated the same in another case with a happier ending.

He died October 19, 1853, of some chronic pulmonary disease, and in his last illness he bled himself copiously and purged himself thoroughly with calomel.

He wrote:

"Account of the Inflammatory Bilious Fever Which prevailed in the Summer and Fall of 1804 in the County of Loudoun, Virginia," 1805.

"A Treatise on Pathology and Therapeutics," 2 vol., 1828.

"Essays on the Autumnal and Winter Epidemics," 1829. A. S.

The Life and Writings of John Esten Cooke, by Lunsford P. Yandell, "American Practitioner," July, 1875.

Coolidge, Richard Hoffman (1820–1866).

Born in Poughkeepsie, New York, Richard Hoffman Coolidge, surgeon of the United States Army, studied medicine in New York and was commissioned assistant surgeon in the army in 1841. During the Mexican War he was assistant medical purveyor. In 1849 he was assigned to duty in the surgeon-general's office at Washington. Here he compiled the "Statistical Report on the Sickness and Mortality in the Army of the United States from 1839 to 1855" and the "Army Meteorological Register," published in 1855. He was also one of the co-editors of the American edition of Beck's "Medical Jurisprudence." In 1860 he was promoted to the rank of surgeon and appointed medical inspector in 1862, rendering meritorious services on the battlefields of South Mountain, second Bull Run, Gettysburg and Resaca, and in 1865 he was ordered as medical inspector of the department of North Carolina to Raleigh, where he died in the following year. Coolidge was a modest and courteous gentleman, loved by all his fellow officers. A. A.

N. York M. J., 1866, ii. Tr. Am. M. Ass., Phila., 1867, xviii.

Cooper, Elias Samuel (1822–1862).

Elias Samuel Cooper, surgeon and founder of the first medical college on the Pacific coast, was born in Somerville, Ohio, 1822, a brother of Dr. Esaias Cooper of Galesburg, Illinois. He began to study medicine at the age of sixteen in Cincinnati, Ohio, and received his M. D. from the St. Louis University, Missouri, first practising medicine in Danville, Illinois, but moving to Peoria in 1844. He was president of the Knox County, Illinois, Medical Society in 1853 and spent the year 1854 visiting various European clinics. In 1855 he went to San Francisco, and in 1856 was instrumental in organizing the Medical Society of the State of California.

He founded in San Francisco in 1858 the first medical college on the Pacific coast, known as the Medical Department of the University of the Pacific, which was afterwards re-organized as the Medical College of the Pacific and later as Cooper Medical College by his nephew Dr. Levi Cooper Lane. In 1860 he began publishing the "San Francisco Medical Press," a quarterly journal of medicine and surgery, edited after his death by Dr. L. C. Lane and Dr. Henry Gibbons. Most of his published writings appear in this journal and in the "Northwestern Medical and Surgical Journal," the "California State

Journal of Medicine" (1856) and the "Transactions of the Medical Society of the State of California" (1858).

Cooper was a bold, enthusiastic and original surgeon who, soon after his arrival in San Francisco, gained a reputation as a daring operator by a sensational operation in which he successfully removed a breech-pin of a fowling piece from beneath the heart.

He announced a number of new surgical principles of which the following may be mentioned:

1. "Atmosphere admitted into joints or other tissues is not a source of irritation or injury except where it acts mechanically as in veins, the thorax, or in the abdomen, reducing temperature."

2. "The only true mode of treating ulceration of bone within a joint is to lay the joint open freely, keeping it open by packing with lint."

3. "Opening of joints early in case of infective matter burrowing in them is far more imperiously demanded than opening of other parts thus affected."

4. "There are no known limits beyond which a tendon will not or cannot be reproduced after division provided the parts are made to heal by granulation."

Much of Dr. Cooper's operative success was doubtless due to his free use of alcohol on his instruments, on his hands and on the parts to be operated upon, and for purposes of irrigation after operation.

He successfully removed uterine myoma suprapubically; ligated the innominate artery, the patient living forty days, dying then of secondary hemorrhage; strongly advocated the use of silver wire for ununited fractures and successfully wired the fractured patella and olecranon, and removed a large sarcoma of the clavicle, taking away a large portion of the sternum.

It is of particular interest at this time to note that in the first annual announcement published of the medical department of the University of the Pacific (1859) Cooper offered a course in operative surgery on animals as a valuable means of instruction in surgery and in which the students were required to pass an examination. Of his own experiments on dogs the admitting of air into the jugular vein and subsequently resuscitating the dog by aspiration of the air from the ventricle is not least remarkable.

Cooper ligated the abdominal aorta in a number of dogs, but they all dying, he devised an instrument for the gradual obliteration of the abdominal aorta. The dog on which the instrument was tried lived four days after the artery was completely closed, this being accomplished gradually during seven days. In subsequent dissection Dr. Cooper found evidences of the establishment of collateral circulation.

Dr. Cooper announced a new cure for aneurysm consisting of cutting down on the sac and sewing it up from the outside, and reported a case of popliteal aneurysm cured in this way. He advocated the ligation of arteries with their accompanying veins as being less dangerous than ligation of the veins alone, and reported the successful ligation of the external iliac artery and vein. He also reported the effective reproduction of a tendon destroyed for four inches of its length by laying open its sheath, permitting the interval to fill by means of granulation tissue. He operated for club-foot by cutting all contracted soft parts down to the bone, much as was later done by Phelps of New York. After wrenching the club-foot into proper position he held it by moulding heavy sheet lead about it.

E. R.

San Francisco Med. Press, 1862, vol. iii.

Cooper, William D. (1820–1897).

William D. Cooper, physician, was the son of Leroy D. Cooper, a farmer of Culpeper County, Virginia, and born in that county on December 28, 1820.

He was educated in the schools of his native county, and for several years was himself a teacher in the local schools. In 1842 he began to study medicine with a physician, and in 1845 graduated from the University of Pennsylvania, then

settled at Morrisville, Virginia in 1845 and began at once to build up a large country practice.

He was a member of the Medical Society of Virginia, and was in 1882 elected president of the State Society, and made an honorary member the year following.

Dr. Cooper married in June, 1845, Miss Mattie F. Henry, daughter of Fountain Henry, Esq., of Culpeper County.

Catarrh of the stomach with liver complications caused his death on October 30, 1897, at his home in Morrisville, Virginia.

His contributions to medical literature were not numerous, but were of considerable value. The following may be read with interest:

"Presidential Address." ("Transactions of Medical Society of Virginia," 1883.)

"Protracted Labor." ("Virginia Medical Monthly," vol. xi.)

"Carious Destruction of Two Cervical and Dorsal Vertebræ; Death; Post-mortem." ("Transactions of Medical Society of Virginia," 1888.)

R. M. S.

"Transactions of Medical Society of Virginia," 1898.

Cornett, William T. S. (1805–1897).

William T. S. Cornett, who did good work as a pioneer physician with only a few books and common sense, was born at Carrolton, Kentucky on July 11, 1805. His early life presented the too common combination of a widowed mother with a bright son and little money. For three years he compounded drugs with a general practitioner then studied medicine at Transylvania University, and when nineteen, funds being exhausted, offered his medical services to the sick in Dearborn, Indiana. Where was his license and diploma? asked the local censors. He obtained them in examination before them. Then this lad of twenty was, for three years, the only doctor in Versailles, Ripley County, Indiana, with the books of Cullen and Thomas as guides and plenty of cholera, dysentery and fever to give him experience. He was of opinion that remittent and intermittent fevers, so common in that thickly timbered and swampy district, were as specifically different as small-pox and measles. He noted, before the days of quinine, chronic intermittents were common, lasting six months or even a year, but remittent fever killed the patient or subsided within a given time, and if there was unity of cause there should be a unity of effect. Like Dewees the obstetrican, he also held to bleeding as a relief in blood pressure on the brain in puerperal convulsions. His contributions to medical literature were chiefly in the "Transactions of the Indiana State Medical Society" and in the southern and western journals. When in the state senate he obtained a grant to start a lunatic asylum, and a farm was purchased and converted into one. ("Senate Journal," 1843.)

He held an M. D. from the University of Louisville and also from the Central medical College of Indiana.

After forty years of hard work in Versailles he removed to Madison, always retaining his interest in medical progress. His energy found vent in geological studies and collecting specimens. He had two children by his wife Mary Mason, a native of Bristol, England.

W. R. D.

Corss, Frederic (1842–1908).

Frederic Corss, born in Athens, Pennsylvania, January 16, 1842, was a son of the Rev. Charles L. Corss, Presbyterian minister, and of Ann Hoyt Corss. He was descended from James Corss of Greenfield, Massachusetts, who died in 1696.

He graduated A. B. from Lafayette College in 1862 and took his A. M. in 1865 and his M. D. from Pennsylvania University in 1866. In the same year he settled in Kingston, Pennsylvania, where he continued up to the time of his last illness. Here, in 1872, he married Martha S. Hoyt, who survived him.

Dr. Corss was well equipped for the practice of medicine. His ancestry, his early training, his educational advantages and scholarly attainments all had their influence in moulding the physician. He was particularly interested in scientific studies, especially in the geology of the county in which he lived, and was popular as a lecturer. Although a busy man and actively engaged in strenuous labors, he found time to prepare papers for his County Medical Society, for the Lehigh Valley Society, and for the Wyoming Historical and Geological Society, all of which have been published in the various transactions of these bodies and elsewhere. He died in Kingston, Pennsylvania, on April 1, 1908.

E. R.

Cotting, Benjamin Eddy (1812–1898).

Benjamin Eddy Cotting, surgeon, born at West Cambridge (Arlington), Massachusetts in 1812, was the descendant on his mother's side of a rector of Cranbrook Church, Kent, England, in 1630. He studied at Harvard and there took his A. B. in 1834; his A. M. and M. D. in 1839. This same year he had to amputate a cancerous breast without anesthesia, and graphically relates the scene. He was present nine years later at the first public demonstration of ether as an anesthetic in the Boston General Hospital.

He was president of the Massachusetts Medical Society; honorary member of the Connecticut and of the New Hampshire Medical Societies; member of the Boston Obstetrical Society, and corresponding member of the Medical Society of Athens, Greece, and of the Academy de Quiriti, Rome, Italy.

His writings included:

"Simple Apparatus for Fracture of the Thigh," 1861.

"Disease, a Part of the Plan of Creation," 1865.

"Historical Sketch of the Obstetrical Society of Boston. Biographical Sketches of Deceased Members," 1881.

"A Murderer's Dying Confession disproved by Surgical and Anatomical Facts," 1889.

Boston M. and Surg. J., 1897, vol. cxxxvi. (A bit of professional reminiscence.)

Cowling, Richard Oswald (1839–1881).

A native of Georgetown, South Carolina, of English descent, Richard Oswald Cowling was born on April 8, 1839 and entered Trinity College, Hartford, Connecticut, in 1858 and graduated there, being made adjunct to the professor of mathematics even in his sophomore year.

On returning home from an European trip in 1862, his inclination was for civil engineering, in which line he did some very good work; but he gave that up and began to study law. While convalescing from typhoid fever, he chanced to read Watson's "Practice of Physic," which so impressed him that he decided to take up medicine, so in 1864 entered the University of Louisville with Dr. George Bayless, professor of surgery, as his preceptor. After attending one course of lectures there, he graduated at the Jefferson School, Philadelphia, in 1866. In the autumn of 1868 he was made demonstrator of anatomy in the University of Louisville, and a few years later, adjunct to the chair of surgery. He there discharged his duties so well that the next session he was elected to the chair of surgical pathology and operative surgery. In 1879 he was made professor of the science and art of surgery, and this position he held until his death.

He was the founder of the "Louisville Medical News," a weekly journal, the first number of which appeared on New Year's day, 1876. This journal was soon in the front rank of the best medical periodicals. Dr. Cowling contributed many valuable articles on surgery to the medical journals, but the only sustained scientific work which he published, was a little volume entitled "Aphorisms in Fractures."

There was nothing small about Dr. Cowling, he was a big man in every sense of the word, in person, mind and heart.

He had a most attractive personality, a magnificent physique, and a figure that would attract attention anywhere.

As a lecturer, he was fluent, earnest, forcible. As a writer, brilliant, broad, witty and comprehensive. He was president of the College of Physicians and Surgeons of Louisville, and chief surgeon of the L. C. & L. Railway.

Dr. Cowling married Mary, daughter of Col. Samuel B. Churchill, who with three daughters survived him when he died suddenly at Louisville on April 2, 1881, from heart complication following acute rheumatism. W. O. R.

Am. Pract. Louisville, 1882, xxv (D. W. Yandell).

Coxe, John Redman (1773–1863).

As a scholar and collector, as writer and chemist, John Redman Coxe, born in Trenton, New Jersey, in 1773, is better remembered than as a physician.

When a little boy he was educated under the care of his grandfather, Dr. Redman in Philadelphia. This relation had studied in Europe as a medical student and seems to have liked English methods best, for he sent his grandson to English schools and on to Edinburgh when sixteen to begin classical studies under a chosen teacher. There the surgeon with whom he boarded induced him to attend the hospital lectures.

In his autobiography he says: "After fifteen months in Edinburgh I returned to London in 1789 and attended two courses of anatomy and chemistry at the London Hospital and in 1790 left England to more directly study medicine under Dr. Benjamin Rush, and stayed with him until I obtained my degree in the University of Pennsylvania of doctor of medicine in 1794." During the yellow fever in 1793 in Philadelphia so great was the number of patients that he fought the plague side by side with Dr. Rush and seldom saw fewer than thirty to fifty a day. For "his skill, fortitude, patience and perseverance, and humanity" during that hard time, Dr. Rush gave him a "Commentary on Boerhaave."

Redman seems to have had "travel fever" rather badly. In 1794 he went for another three years to London, Edinburgh and Paris, and then returned to Philadelphia to act on the hospital staffs and attend the dispensary.

One thing done by Coxe did much to destroy ignorant prejudice against vaccination. A warm enthusiastic advocate of it, he was the first to use it in Philadelphia, and in 1801 vaccinated himself and his baby son Edward Jenner, thus doing much to establish confidence in the new preventative. In 1829 he succeeded in cultivating the true jalap plant, so that its real character and position might be determined.

The success of the "New York Medical Repository," then seven years old (1804), made Coxe think of publishing a quarterly, "The Medical Museum," with a section called the "Medical and Philosophical Register."

It had a fine début, for the best doctors contributed good papers and the "Museum" had a vigorous existence until 1811, paving the way for similar journals, while being itself the first uniformly issued periodical in Philadelphia.

His biographers give Coxe place as unique among the medical men of Philadelphia and the founder of medical journalism, but it is said he was too much "under the influence of earlier systems and became the most notable illustrator of the conservative teaching of an older time, though this in no way affected the good he did as the inaugurator of medical journalism."

Dr. Coxe died in Philadelphia, March 22, 1863, at the advanced age of ninety.

He was professor of chemistry, University of Pennsylvania, 1809; professor of materia medica and pharmacy, 1819; editor of the "Medical Museum," "The American Dispensary," and a Medical Dictionary," 1808.

His writings included:

"Practical Observations on Vaccination," Philadelphia, 1802. Late in life he issued an exposition of the works of Hippocrates. Philadelphia, 1846, and

an essay on the "Origin of the Circulation of the Blood," Philadelphia, 1834.
D. W.

Amer. Med. Times, N. York, 1864, n. s.
Boston Med. and Surg. Jour., 1850.

Craig, Benjamin Faneuil (1829–1877).

Born in Watertown, Massachusetts, the eldest son of Gen. H. K. Craig, chief of ordnance, United States Army, he was educated in Boston schools and finished at the University of Pennsylvania, graduating B. A. in 1849 and M. D. in 1851. Inspired with an earnest interest in chemical and physical science, he desired to perfect himself in this rather than engage as a medical practitioner, and immediately after graduation went abroad and studied in London and Paris. Returning in 1853, he was appointed professor of chemistry in the Georgetown Medical College and lectured there for five years. In 1858 he was appointed to the chemical laboratory of the Smithsonian Institution.

On the outbreak of Civil War it became necessary to engage a consulting chemist for the immense transactions that devolved on the purveying department of the army medical staff, and Craig was chosen. The various reports and innumerable analyses that he prepared were necessarily confidential; but had they appeared in scientific journals, they would outweigh the material on which many prominent modern scientific reputations are founded.

After the close of the war Craig continued in charge of the chemical laboratory of the Army Medical Department, and in addition supervised and collected the meteorological observations reported by medical officers at various points. In 1873, at the request of the secretary of the treasury, he made two voyages to Europe to make a series of elaborate experiments on the air of the steerage in emigrant steamers, with a view of establishing regulations for more sanitary conditions. For a year before his death on April 10, 1877, he was engaged in drawing up a report of the influence of climate on the health of troops, designed as an addition to the medical history of the war.

He was a member of the American Association for the Advancement of Science, and an associate or correspondent of other learned bodies. His published works are few, but his printed papers are models of conciseness and precision, and include:

"Products from the Combustion of Gunpowder under Different Pressures." ("Journal Science and Arts," 1866, vol. xxxi.)

"Report on Nitrification," presented to the Smithsonian Institution in 1858 (in "Smithsonian Annual Report," 1861).

"Remarks on the Comparative Mechanical Energy Developed by the Combustion of Gun Cotton and Gunpowder in Fire Arms." ("Smithsonian Annual Report," 1864.)

"Variations in the Temperature in the Human Body" (read before the Philosophical Society of Washington), "American Journal of Sciences and Arts," 1871, vol. ii).

"Determination of the Zero Point." ("American Chemist," 1873, vol. iii, p. 325.)
D. S L.

Boston Med. and Surg. Jour., 1877, xcvi.

Craig, James (1834–1888).

This obstetrician was born in Glasgow, Scotland, but came to the United States when seventeen, first staying a while in Canada then graduating at the University of the City of New York, afterwards settling in New Jersey for the rest of his life. He was eminently successful as an obstetrician in over 4,000 cases without the loss of a mother. He invented the elastic ligature for the umbilical cord in 1861; elastic electrodes in 1881, introduced hydrate of chloral as an hypnotic to the profession in New Jersey, and was the first to demonstrate hydriodic acid as a curative in acute inflammatory rheumatism.

He was attending physician to the St. Francis Hospital, a member of the New York Medico-legal Society, and a frequent contributor to the medical journals.

His death occurred on February 10, 1888, after an illness of nineteen hours from hemorrhage, the result of gastric ulcer. He left five children, three daughters and two sons; one son, Burdette P., followed his father's profession.

D. W.

Med. Reg. State of N. York, Albany, 1888.

Craik, James (1730–1814).

This physician-general of the United States Army was born at his father's country seat, Arbigland, near Dumfries, Scotland, and studied medicine at Edinburgh, emigrating to the North American colonies, and practising medicine first in the West Indies and later in Virginia, where he formed a connection with the young planter and surveyor, George Washington, and established a friendship disturbed only by the death of Washington. He was appointed surgeon of the Virginia Provincial Regiment in 1754, of which Washington held the command, and was present at the battle of Great Meadows and also at Monongahela, where he dressed the wounds of the ill-fated Braddock and many others. At the close of the Braddock campaign and upon the formation of the Virginia Provincial Army Craik continued in the service as the chief medical officer, and remained in the service until the disbandment of the forces at Fort Pitt, 1758. During the time that he practised medicine in Charles County, Maryland, Washington and he continued their intimacy and made famous exploring trips into the west which were noteworthy even in those adventurous days.

An active patriot in early Revolutionary times, he became assistant medical director of the hospitals in the Middle Department at the solicitation and special nomination of Washington, and organized the medical department of the forces of Count Rochambeau, becoming the junior of the four chief army hospital physicians and surgeons, taking the seniorship, second in rank to the director general. This position he held until mustered out at the end of the war in 1783, after personally participating in many of its most important events, including the capitulation at Yorktown. Through his agency the Conway Cabal against Gen Washington was exposed.

Shortly after being mustered out at the close of the Revolutionary War, he took up his home at Alexandria in order to be near his friend's Mount Vernon home, until 1798, when war with France seemed inevitable and Washington was again summoned to lead the army. But he made the appointment of Craik as the head of the medical department one of the conditions of his own acceptance of the command, and the latter was duly commissioned physician-general, retaining the office until the army was disbanded in 1800. Some months before the official severing of his relations with the military establishment, however, he had returned to his Virginian home where he was soon called upon to attend his old friend in that illness which, on December 14, 1799, deprived the country of its most illustrious citizen. Craik survived him fifteen years, a time passed partly in active practice and at the last in retirement.

L. S. P.

Irvings' Life of Washington. Thacher, American Medical Biography. Toner, Medical Men of the Revolution. Pilcher, Journal of the Association of Military Surgeons of the United States, vol. xiv, 1904—portrait—and the Surgeon-generals of the United States Army, Carlisle, Pa., 1905—portrait.

Craik, Robert (1829–1907).

Robert Craik was dean of the medical faculty of McGill University from 1889 to 1901 and directed its affairs during that important period. He was professor of clinical surgery from 1860 to 1867; professor of chemistry from 1867 to 1879; professor of hygiene from 1889 till 1902, holding the minor positions of demonstrator of anatomy in 1856; curator of the museum in 1859; and registrar in 1869. He entered the Montreal General Hospital in 1854 as house surgeon, and after six years' service was ap-

pointed attending physician in 1860. Beginning as a student in McGill University, and graduating with honors at the head of his class in 1854, his connection with it, as student, teacher, and governor, was continous and close until his death on June 28, 1907. He was a member of Quebec Board of Health and consulting physician to the Royal Victoria Hospital from 1896, and for many years was recognized as the chief family physician in Montreal, but he had interests apart from medicine. He was a man of many social graces, an excellent speaker, and wrote with admirable style. Dr. Craik was born near Montreal, April 22, 1829, and was in his seventy-eighth year at the time of his death, the immediate cause of which was pulmonary tuberculosis. He married in 1856, Alice, eldest daughter of the late Alexander Symmers, of Dublin, Ireland, who died childless in 1874.

A. M.

Crane, Charles Henry (1825–1883).

Born in Rhode Island, surgeon-general of the United States Army, he was a son of Col. I. B. Crane, first United States Artillery. He studied at Maple Grove Academy and later at Yale College, from which institution he obtained the degrees of A. B. and A. M., graduating in medicine at Harvard Medical School in 1847 and soon after entering the United States Army as assistant surgeon. He served for several years on the Pacific coast and later on in New York City. Crane rendered faithful and meritorious service during the Civil War. He was promoted to the rank of surgeon in 1861 and was medical director of the department of the south until 1863, in which year he was assigned to duty in the surgeon-general's office at Washington. Crane was appointed surgeon-general of the United States Army July 3, 1882 He died suddenly October 10 of the following year. His portrait is in the library of the surgeon-general's office at Washington.

A. A.

N. York M. J., 1884, xl.
Med. News, Phila., 1883, xliii.

Crane, William Henry (1869–1906).

William Henry Crane was born in Cincinnati on March 17, 1869, the son of Henry L. Crane, who came to Cincinnati from New Albany, Indiana, and Harriet Lupton, of Cincinnati. Dr. Crane went to the public schools of Cincinnati and the University of Cincinnati, where he received his B. S. in 1891, immediately after entering the Medical College of Ohio (the medical department of the University of Cincinnati) and graduating with high honors in 1893. For the next two years he served as interne in three of the city hospitals before entering on active practice. His interests had always been along the lines of natural science, and he had early taken up and pursued with particular zeal the study of chemistry. In the earlier years of practice, Dr. Crane devoted much time to original research along the lines of physiological chemistry, and soon after beginning practice, was made instructor in physiological chemistry in the Medical College of Ohio. In 1898 he became professor of chemistry, which position he held up to the time of his death. In 1902 Dr Crane took charge of the municipal laboratory of the city of Cincinnati, and during his four years there completely revolutionized the workings of the laboratory.

His tragic death, which occurred in May, 1906, at the Academy of Medicine, happened as he was just in the act of demonstrating a new cream thickener, which he discovered. He suddenly fell to the floor lifeless. He was an active member of the American Chemical Society, and for some time was president of the Cincinnati branch. Among his publications was a laboratory text-book of methods of "Physiological Chemistry," which was adopted as a standard work in several schools. Dr. Crane's interests were not limited to his chosen fields of medicine and chemistry, he always retained his interest in zoology and botany, and was an amateur photographer of rare skill, an excellent linguist and a thorough musician. Perhaps his chief characteristic was his attractive personality.

Dr. Crane married on April 26, 1902, Emilie Esselborn, and had one child, Paul Willard, born in 1904. A. F.

Crawford, John (1746–1813).

John Crawford, introducer of vaccination into America, born in the north of Ireland May 3, 1746, was the second of four sons of a protestant clergyman, all of whom became professional men. His brother Adair being physician to St. Thomas' Hospital, London, and professor of chemistry at Woolwich.

At seventeen he entered Trinity College, Dublin, and afterwards went to the Leyden University, where he graduated M. D. He then made two voyages to the East Indies as surgeon in the East India Company's service. About 1778 he was married and shortly after received an appointment as surgeon to the Naval Hospital on the Island of Barbadoes, a position of great responsibility. In 1780 a terrible hurricane devastated the island, whereupon he furnished aid and medicines to the afflicted inhabitants without stint and without compensation. In 1781 he returned to England on account of bad health and during the voyage lost his wife. In 1790 he received from the Dutch government the appointment of surgeon-major to the colony of Demarara in South America; there he had charge of a military hospital of sixty to eighty beds. In 1796 he went to Baltimore. Here he helped forward the founding of the Baltimore General Dispensary, 1801; the penitentiary, 1802; the Bible Society, and the Baltimore Library. He delivered courses on natural history at the College of Medicine in 1811 and 1812, and his introductory lecture on "The Cause, Seat and Cure of Diseases" is extant. He held high rank in his profession, being censor, examiner, orator, and member of the committee to publish the "Transactions of the Medical and Chirurgical Faculty," and consulting physician to the Board of Health and City Hosiptal.

He was among the very first in America to use vaccine virus, which he did in the summer of 1800, a date contemporaneous with that of its use by Dr. Waterhouse, of Massachusetts, who has been given the credit of its first use in the Western Hemisphere. He wrote many medical articles of great interest and value in the medical journals of the day.

What most rivets attention on John Crawford is his remarkable research into the cause of disease. As early as 1790 he conceived—entirely independently—the idea of a living contagium—minute animalculæ gaining access to the human body and there depositing germs to develop and produce disease. He ransacked the whole realm of nature and brought together a great mass of evidence to prove this theory which he maintained, notwithstanding its unpopularity and prejudice to his professional success, with all the ardor of absolute conviction. He pointed out that man, notwithstanding his superior nature and possession of a soul, was subjected to the same laws as the lower animals. He enunciated the doctrine of universal parasitism. He argued convincingly from the known to the unknown, and declared prophetically that while the minute animalculæ could not then be demonstrated, they are not beyond the reach of human ken and in due time would be recognized. He compares the action of the seeds of disease to the vegetable seeds—each of which gives rise to its respective plant, and to that only. He not only held these views, but displayed his consistency by carrying them out to their legitimate conclusion—he applied them to the prevention and treatment of disease. The bigotry and prejudices of his contemporaries compelled him to publish his opinion in a non-medical, periodical, "The Baltimore Observer," in which they appeared in 1806 and 1807 under the heading "Quarantine." We may conclude that John Crawford made an independent discovery of this theory, and so far as is known to me he is the first in all history who investigated it in a thorough and scientific manner.

John Crawford died in Baltimore on May 9, 1813, after a short illness and was

buried in Westminster churchyard. He was survived by one daughter, who married Maximilian Godefrey, an eminent French architect of Baltimore with whom she returned to France. Dr. Crawford's library is preserved in the University of Maryland. His articles are to be found in the "American Medical Repository," the "Baltimore Observer," and the "Medical and Physical Recorder," Baltimore; in Schultz's "History of Freemasonry in Maryland," vol. ii, 1885, and in Cordell's "Medical Annals of Maryland." There is a crayon portrait and an MS. work on Tropical Diseases in the library of the Medical and Chirurgical Faculty. E. F. C.

Crawford, John Barclay (1828–1894).

John Barclay, son of John B. and Elizabeth (Thompson) Crawford, was born at Crawford, Orange County, state of New York, January 2, 1828. His earliest American ancestor, James Crawford, was with Gen. Wolfe at the capture of Quebec by the British, and an officer in the Continental Army in the Franco-English War. At the beginning of the Civil War, Dr. Crawford entered the United States Army as assistant surgeon and was promoted to be surgeon of the Fifty-second Regiment, Pennsylvania Reserves. He began to study medicine in Elmira, New York, finishing at the College of Physicians and Surgeons, New York City, in 1850 and beginning to practise in 1851, at Hawley, Pennsylvania, but in 1852 removed to Wyoming, Luzerne County, and practised there, with the exception of the time spent in the army, until 1870, when he went to Wilkes-Barre and stayed until his death, October 7, 1894. In 1852 he married Sarah Hammond, of Horseheads, New York, who died in 1878, leaving him a daughter.

Dr. Crawford was a member of the Pennsylvania State Medical Society, also consulting surgeon and physician to the Wilkes-Barre City Hospital and president of the Luzerne County Medical Society. He was a profound thinker, a close reasoner, a gifted and fluent speaker, and a writer of more than ordinary ability. Two good essays entitled "Gunshot Wounds during the War," and "Malaria in the Wyoming Valley," attracted attention, and bore the marks of critical examination and patient research. E. R.

Crosby, Dixi (1801–1873).

Born in Sandwich, New Hampshire, February 7, 1801, he was the son of Dr. Asa and Betsey (Iloit) Crosby.

He worked upon the farm and attended the district school. In 1818 his father removed to Gilmanton, New Hampshire, where young Dixi attended the local academy, afterwards being employed for a time as a clerk in a store and in teaching public and singing schools. In 1819 he went to New York and was occupied with his brother Asa in mercantile pursuits; an unsuccessful venture in New Orleans satisfied his taste in this direction and he returned home and began with zeal to study medicine with his father. Anatomy and surgery had for young Crosby special charms, and the ardor with which he threw himself into these branches of his studies showed early fruits. From the day he began anatomy, his practice and study went hand in hand, fearless and original, ready in expedients and ingenious in their use, he observed, he resolved, and he acted.

In the first year of his study he accompanied his father to a consultation in the case of a man whose leg had been frozen, and whose condition was extremely critical. It was agreed by the older physicians present that if amputation had been done earlier it might have saved the patient's life, but that now it was too late to attempt it. Young Dixi urged that the operation be performed, but the elders shook their heads. He even proposed to perform it himself, but this was received with a storm of disapproval, in which his father joined and the thing was pronounced impossible. The doctors departed, leaving the young student to watch the patient during the few hours he had to live. During the night young

Crosby succeeded in reviving his patient's courage so as to make a last effort for life. The next day the limb was removed and the patient recovered.

His second year of study brought out still more the resources of the young surgeon; once both father and son, while visiting a patient at night in a distant village, were suddenly called to a case of extensive laceration of the leg with profuse hemorrhage. No instruments were at hand, so the son called for a carving knife, which he sharpened on a grind stone and finished on a razor strop, filed a hand saw, amputated the leg, dressed the stump, left the patient in safety and drove home with his father to breakfast. The man recovered.

Before a nature so fearless and so fertile in expedients, obstacles speedily vanish, and young Crosby found himself in possession of a large and responsible practice when twenty-three and before taking his medical degree.

In 1823 he graduated from the Dartmouth Medical School, and for the next ten years remained in Gilmanton in practice with his father, then on to Merideth Bridge, now Laconia, New Hampshire, where he stayed three years, until he was called to the chair of surgery at Dartmouth. As an instructor he was clear, direct and definite, imparting to his pupils his own zeal and teaching them his own self-reliance.

The practical view was always his, and the dry humor with which he never failed to emphasize his point at once fixed it in the memory of the class.

His love of nature was as instructive and as thorough as his knowledge of men. He studied the habits of birds and insects and his rooms resembled those of a naturalist.

Of his special operations here are a few: In 1824 he devised a new and ingenious method of reducing metacarpo-phalangeal dislocation. In 1836 he removed the arm, scapula and three-quarters of the clavicle at a single operation, for the first time in the history of surgery ("Republican Press Association," Concord, New Hampshire, 1875). He was the first to open an abscess of the hip-joint.

Crosby was not a rapid operator. He often said, "an operation, gentlemen, is soon enough done when well enough done."

Having reached man's limit of three score years and ten, he withdrew from active practice and in 1870 resigned his chair in the college.

All his life he was an ardent advocate of temperance, and active in the towns in which he lived in securing the enforcement of the liquor laws. His last days were passed peacefully and quietly, though he sometimes said he would like to fight the battles and enjoy the pleasure of professional life over again.

He died peacefully, on the twenty-sixth of September, 1873.

He married in 1827 Mary Jane Moody of Gilmanton and had two sons, Prof. Alphemo Benning Crosby and Dr. A. H. Crosby. I. J. P.

Boston Med. and Surg. Jour., 1873, vol. lxxxix.
Tr. N. Hampshire Med. Soc., Concord, 1874. (C. P. Frost.)

Crosby, Thomas Russell (1816–1872).

Thomas Russell Crosby, ninth son and twelfth child of Dr. Asa Crosby, and the half brother of Drs. Dixi and Josiah Crosby, was born in Gilmanton, New Hampshire, October 22, 1816.

His early education was at Gilmanton Academy and at Dartmouth College. In addition he found leisure for his favorite studies of medicine and natural history. Pursuing these, he was able to take the degrees of A. B. and M. D. at the same time, in 1841.

After living six months with his brother Dixi, he went to Campton, New Hampshire, but finally settled in Manchester, New Hampshire, in 1843, entering at once upon a large practice. In about a year he found himself the victim of lead poisoning in its worst form, and for the next ten years suffered all the indescribable tortures of distorted joints, colic, and broken health generally. Finding he could not recover in Manchester,

where the water supply was bad, he removed to Hanover in 1852. In 1858 he once more took up active practice, and on the breaking out of the Civil War believed it his duty to consecrate his medical skill to his country.

Upon entering the service he was at once put in charge of the Columbian College Hospital, in Washington. He assumed the responsibility of the position with the determination that the men who came under his charge should have their rights, and faithfully did he carry this out.

He remained in charge of this hospital until after the close of the war and the sick and wounded were able to be transferred to their homes. The next year he was appointed professor of general and military surgery and hygiene in the National Medical College, which position he filled until 1870.

His lead poison had twisted and deformed his right wrist and hand so that he had only the use of the thumb, the index and second finger, while the wrist was firmly anchylosed in a semi-flexed position, yet Dr. Crosby did his own operations in the hospital.

At the close of the war he returned to Hanover, and entered once more upon general practice.

In February, 1843, he married Louisa P., only daughter of Col. Burton of the United States Army, but had no children.

Dr. Crosby came from a family that had been physicians for three generations, and inherited the family love for the profession. He possessed uncommon skill in diagnosis and prognosis, and it might be said that he almost had an intuitive perception of the nature of occult diseases.

He is buried in Dartmouth College Cemetery at Hanover. I. J. P.

Tr. N. Hampshire on Soc. Manchester. 1872.

Culbertson, Howard (1828–1890).

Howard Culbertson, surgeon, was born in Zanesville, Ohio, February 24, 1828, a son of the Rev. James Culbertson, Presbyterian minister.

Thrown at an early age upon his own resources by the death of his father, he worked for a time in a machine shop at Cincinnati, Ohio. This work proved too severe for his somewhat frail constitution, and being of a studious disposition, he gave it up and for a short time read medicine with Dr. Lyman Little of Zanesville, in 1848 entering the Jefferson Medical College, from which he graduated in 1850.

From the time of his graduation until 1862 he practised in his native city, acquiring a more than local reputation, especially in diseases of the eye; but in 1862 he left his rapidly growing practice to enter the army as an assistant surgeon and was assigned to active service at Rolla, Missouri, where he immediately set to work to improve conditions, succeeding so well under adverse circumstances that in a year he was assigned to take charge of Harvey General Hospital at Madison, Wisconsin. Here he did some of his most successful operating, which is recorded and favorably commented on in the "Medical and Surgical History of the War of the Rebellion."

In 1865 he left the volunteer service with the rank of brevet lieutenant colonel, and joined the regulars as captain and assistant surgeon, serving at Louisville as medical director of Taylor barracks, at Memphis, and at Jefferson barracks, St. Louis. From there he was ordered to Baton Rogue, but climatic conditions completely prostrated him, and he was compelled to go on the retired list, with health permanently undermined.

Returning to Zanesville in 1869, he again took up private practice, devoting most of his time to his chosen specialty, diseases of the eye, and soon became one of the leading oculists of the state. For several years he was professor of ophthalmology in the Columbus Medical College, Columbus, Ohio.

Dr. Culbertson invented a number of instruments for use in both general and ophthalmic surgery. Among these were a meerschaum probe for bullets, used in the army, and a prismoptometer for test-

ing eyes. Although comparatively an invalid, he worked incessantly, and it was during the last twenty years of his life that his most important work was done.

In 1862 he received the gold medal of the Ohio State Medical Society for an essay on "The Use of Anesthetics in Midwifery," and in 1876 published the greatest work of his life, a book entitled "Excisions of the Larger Joints of the Extremities." This was published as the prize essay of the American Medical Association for that year, and at the time was the most exhaustive treatise on the subject. He also wrote and published a great many articles for medical journals both in America and England.

He married Maria Louisa Safford, daughter of Dr. Elial T. Safford of Parkersburg, West Virginia, November 16, 1854, and had seven children, one of whom, Louis R., following in his father's foot-steps, practised ophthalmology in Zanesville, Ohio.

The father died at Zanesville, June 18, 1890, of infirmities acquired by overwork and exposure in the service of his country. J. G. F. H.

Culbertson, James Cox (1840–1908).

He was born on December 19, 1840, at Culbertson Mills, Miami County, Ohio, son of William and Mary Ann Cox Culbertson whose people came originally from Scotland. James was the eldest of seven children.

In August, 1860, he went to Cincinnati and began to study medicine under Dr. John Davis, attending lectures during the session of 1860–61. April 19, 1861, he volunteered as a private in the fifth Ohio Volunteer Infantry—the first troops enlisted under the call of Pres. Lincoln—and went to Camp Harrison and later to Camp Dennison then on, in 1861, with the regiment to West Virginia. Dr. Culbertson was detailed to act as medical officer to three companies sent to French Creek. Soon afterwards he was detailed as hospital steward at Seminary Hospital, Romney, Virginia and held many medical army appointments until 1864. Owing to the illness of Dr. Clendenin, much of the responsibility devolved upon Dr. Culbertson. In September, 1864, he entered Bellevue Hospital Medical College, and in October the vacancy occurred of senior assistant in the New York City Lunatic Asylum to which after a competitive examination he was elected. Arriving at the asylum, he found his predecessor had died of typhus fever, and the junior assistant was sick. That night the superintendent, Dr. Ranney, was attacked, and died five days later, leaving Dr. Culbertson the only acting medical officer. While thus employed he found time to attend lectures at Bellevue Hospital Medical College, and graduated there in March, 1865.

In April, 1865, he resigned and went to Cincinnati and soon after to Chicago, with a view to making it his home, but in October returned to Cincinnati and immediately began practice. On December 23, 1873, Dr. Culbertson purchased the "Lancet and Observer," a monthly journal long established. From that time medical journalism was the principal business of his life, although for a number of years he took an active part in municipal affairs. In October, 1875, he purchased the "Indiana Journal of Medicine," published in Indianapolis, and united it with the "Lancet and Observer." In June, 1878, he took over "The Clinic," a weekly journal founded by the Medical College of Ohio in 1871; a journal which numbered among its editors, James T. Whittaker and Roberts Bartholow. The title of the consolidated journal was changed to "Lancet and Clinic," and in 1904, to "Lancet-Clinic," Finally, in 1881, he bought the "Obstetric Gazette." From 1891 to 1893 he was editor of the "Journal of the American Medical Association," and lived in Chicago.

He was professor of the theory and practice of medicine in the Cincinnati College of Medicine and Surgery from 1893 to 1902, and exceedingly active in the advancement of the interests of the University of Cincinnati.

In 1899 he published "Luke, the Beloved Physician," a work which showed much research into the life and character of the Apostle. During his active life he wrote and published more than 4,000 pages of editorials.

On May 3, 1865, Dr. Culbertson married Virginia B. Clark, of Cincinnati, but on July 11, 1866, she died suddenly. April 10, 1873, he married Sarah Pogue, of Cincinnati and had three children: Henry Coe, James Clark and Margaret Elizabeth. Mrs. Culbertson died September 2, 1884, but June 18, 1888, Dr. Culbertson married Sophia W. Brown, who survived him. He died June 4, 1908 of arteriosclerosis. A. G. D.

There is a portrait in the Surg.-gen's. Lib. Wash., D. C.
Daniel Drake and his Followers. Jeuttner, Cinn.

Cullen, John Syng Dorsey (1832–1893).

John Syng Dorsey Cullen, surgeon, was the son of Dr. John Cullen, a Dublin man and one of the founders of the Medical College of Virginia.

He was born in Richmond, and educated in the best schools in Virginia and New York and at the University of Virginia, graduating in medicine, 1853. After this he spent some time in a hospital in Philadelphia, and then continued his studies abroad. Upon his return home he settled in Richmond and practised with Dr. Charles Bell Gibson.

When the war began in 1861 he became surgeon to the first Virginia infantry, and soon afterwards was appointed medical director of the first or Longstreet's corps. During the time of the battles around Richmond (June, 1862), he was assigned by Gen. Robert E. Lee the position of acting director of the army of northern Virginia.

Soon after the close of the war he was elected professor of diseases of women and children in the Medical College of Virginia, and when Dr. Hunter McGuire retired in 1885, was chosen his successor in the chair of surgery, and was also made dean of the faculty, both of which positions he filled until death.

He was a member of the Southern Surgical and Gynecological Association; charter member of the Medical Society of Virginia, and at one time president of the Richmond Academy of Medicine.

Dr. Cullen was a man of handsome and attractive personage, a skillful physician and surgeon and an excellent teacher, and had the full confidence and esteem of his patrons.

He married Jenny, daughter of John Maben, Esq., of Richmond.

After a protracted illness from chronic nephritis, he died in Richmond on March 22, 1893.

His contributions to medical literature were numerous and valuable. The following are the titles of some of them:

"Three Cases of Chopart's Operation Modified." ("Virginia Clinical Record," vol. i.)

"Traumatic Tetanus." (Ibid., vol. i.)

"Resection of the Os Calcis and Experimental Treatment of Necrosed Bone with Sulphuric Acid." (Ibid., vol. i.)

"Hepatic Abscess." (Ibid., vol. ii.)

"An Excision of the Os Calcis," (Ibid., vol. ii.)

"Disease of Bone." ("Virginia Medical Monthly," vol. i.)

There is a photograph in the family.

R. M. S.

Trans. Med. Soc. of Va., 1893.
Dr. J. N. Upshur's Medical Reminiscences of Richmond.

Cunningham, Francis Deane (1836–1885).

Francis Deane Cunningham, surgeon and ophthalmologist, the son of Dr. John Cunningham, of Goochland County, Virginia, was born in that county in 1836, and received his collegiate education at the University of Virginia and graduated in medicine from the Medical College of Virginia in 1857 and from the University of New York in 1859. For a time he was house surgeon in the Brooklyn City Hospital, and spent some time in 1859–60 studying in London and Paris, giving special attention to ophthalmic surgery. Upon his return home he settled in Richmond, Virginia.

When the Civil War began he entered the confederate army and was commissioned surgeon July 19, 1861, and was first assigned to duty with the thirtieth Virginia Infantry. During the course of the war he held several important positions, and at its close was inspector of the hosiptals at Richmond, Virginia. In 1868 he was elected professor of anatomy in the Medical College of Virginia, and for a number of years served as a member of the City Board of Health. He had the honor of election to the presidency of his local society, and in 1876, to that of the Medical Society of Virginia. He built up a large practice, devoting special attention to surgery and ophthalmology.

He married on September 21, 1864, Agnes Campbell Gordon, and of the two children born, one died in infancy, the other, a son, became a physician, Dr. R. H. Cunningham, in New York City.

Some three years before his death Dr. Cunningham contracted dysentery, which becoming chronic, gradually sapped his strength until it became exhansted, and he died in Richmond in September, 1885.

He was one of the co-editors of the "Virginia Clinical Record" and contributed some valuable articles to that journal, as well as to other medical periodicals. Appended will be found the titles of some.

"Case of Diffuse Aneurysm of the Thigh with Ligation of the Common Femoral." ("Virginia Clinical Record," vol. i.)

"Urethral Stricture." (Ibid., vol. i.)

"Excision of the Eyeball." (Ibid., vol. i.)

"Defective Vision, etc." ("Transactions of the Medical Society of Virginia," 1872.)

"Case of Wound Involving the Knee-joint with Complete Division of the Ligamentum Patellæ." ("Virginia Medical Monthly," vol. iv.)

"Sarcoma of the Iris." (Ibid. vol. iv.)

"Rupture of the Vagina." (Ibid. vol. v.)

"Presidential Address." ("Transactions of the Medical Society of Virginia," 1877.)

A good photograph of him is in possession of his son. R. M. S.

Trans. Med. Soc. of Va., 1885.
Med. Reminiscences of Richmond, Dr. J. N. Upshur.
Trans. Am. Surg. Assoc., 1886, vol. iv.

Curtis, Edward M. (1840–1874).

Edward M. Curtis was born in Warren, Vermont, February 16, 1840, but while engaged in his medical education the Civil War broke out and he joined the first Vermont Regiment. He soon returned to his studies and graduated at the University of Vermont in 1862 and in 1863 was commissioned assistant surgeon in the sixth Vermont Infantry, in 1864 surgeon to the fourth brigade and then division surgeon, serving until the close of the war. From the army he went to New York where he studied diseases of the eye and ear under Agnew, Noyes, and Knapp. He endeavored in 1867 to engage in special practice in Oswego, New York, but was obliged to take up general medicine. In 1870, his health failing, he repaired to Colorado, where he recovered sufficiently to resume practice as a specialist in Sacramento. His health again suffering, he engaged as surgeon for a trip across the Pacific, but he died in Sacramento May 12, 1874.

His literary services to ophthalmology were well received. He was a member of the American Ophthalmological Society and generally respected as an ardent student and practitioner. H. F.

Trans. Am. Medical Asso., vol. xxix, 1878.
Trans. Med. Soc. California, 1874–5.

Curwen, John (1821–1902).

John Curwen, alienist, who devoted his life to that uphill work, the care of those whose reason is only fitfully illumined by gleams of intelligence, was born in Lower Merion, Montgomery County, Pennsylvania, on September 20, 1821. After a public school education and some time at the Rev. Samuel Phinney's Academy, Newburgh, New York, he went to and graduated from Yale College (1841), then studied medi-

cine with Dr. William Harris of Philadelphia, graduating from the University of Pennsylvania in 1844 with a thesis on "Scrofulous Ophthalmia." In this year he became assistant physician for the Insane in Pennsylvania Hospital and resigned in 1849, engaging in general practice and attending the hospitals until 1851 when he was made superintendent of the State Lunatic Hospital in Harrisburg.

His little volume, "A Manual for Attendants in Hospitals for the Insane" (1850) was translated into Dutch, and he also wrote, beside his concise reports, "A History of the Association of Medical Superintendents of American Institutions for the Insane from 1844 to 1884" (1885).

His appointments included: President of the State Medical Society of Pennsylvania; member of the Pennsylvania State Medical Society; honorable member of the California State Medical Society, and he had the LL. D. from Jefferson College.

On August 2, 1849, he married Martha P. Elmer of Bridgton, New Jersey, who died May 12, 1873. John Curwen himself died on July 2, 1902.

D. W.

Biographies of the members of the Rocky Mountains Med. Assoc., J. M. Toner.

Cushing, Henry Kirke (1827–1910).

Henry Kirke Cushing, obstetrician and gynecologist, grandson of Dr. David Cushing and son of Dr. Erastus Cushing, was born in Lanesboro, Massachusetts on July 29, 1827. His father came to Cleveland in 1835 and practised there forty years, and Henry Kirke, after taking his B. A from Union College in 1848, followed in his father's steps after graduating M D. from the University of Pennsylvania in 1851.

He was successively professor of obstetrics and diseases of women and children; professor of gynecology, and emeritus professor of gynecology in the medical department of Western Reserve University; a trustee of Western Reserve University, which in 1884 conferred upon him the honorary degree of LL. D. He served in the Civil War as surgeon-major in the Seventh Ohio Volunteer Infantry and retired from active practice about twenty years before his death from paralysis, which occurred on February 12, 1910.

In the medical societies, especially the smaller ones, which he seemed particularly to enjoy, he was always at his best. His extensive reading and his large and varied experience made him able to speak intelligently and authoritatively on any subject.

It is difficult to appreciate medical conditions at the time Dr. Cushing began practice. It was a critical period characterized by a low average standard of preparation for medicine; medical relations were too frequently personal; medical societies poorly developed; medical education was in the depths, being practically entirely in the hands of proprietary schools. This was not peculiar to Cleveland, but was typical of conditions all over the land. During this period the strong personal and powerful influence of Dr. Cushing was exerted at all times toward the elevation of professional standards.

Besides being an eminently successful practitioner his energies were ever directed towards the advancement of scientific medicine; a fitting tribute in this respect was the naming in his honor the new laboratory of experimental medicine of the Western Reserve University.

He married Betsey M. Williams in 1852; she died in 1903, leaving him with six children, William E., Alice K., Henry P., Edward F., George B., and Harvey, who, with Edward, followed his father's profession.

Personal Communication.

Cushman, Nathan Sydney Smith Beman (1810–1890).

This thin, erect, dignified and skillful country doctor, with so many names, deserves a place among the medical worthies of Maine, although he left but few, if any, remembrances of his practice,

unless we include the numerous infants he brought into the world, through the mediation of women and his great obstetrical skill.

He rarely, if ever, wrote a medical paper, but travelled far and wide around Wiscassett, and did excellent surgical and medical work for many years.

He was born in Wiscassett August 26, 1810, lived and died there. He was educated at the Academy, taught school for a while in order to earn some money, and finally attended medical lectures at the Medical School of Maine, where he graduated in the class of 1836. He left an almost unequalled record for a country practitioner of five thousand obstetric cases. His fame in medicine may rest upon the fact that as a common country doctor, in a small town, he reduced skillfully eight hip-joint dislocations, amputated twice at the knee-joint for gangrene, both patients being over eighty years of age. They lived several years after the operation and died of some other affection.

He was fond of referring most diseases to an over-loaded liver, equally fond of giving calomel as a cure, and was excessively opinionated and obstinate in these two beliefs.

It is said of him that he attended his very last case of confinement while suffering from the epidemic influenza. To its insidious influence he finally succumbed a day or two later, from double pneumonia.

He departed from the scenes of his busy life January 24, 1890, in Wiscassett, to which town, and to its people, he had devoted, with untiring energy, his entire life. J. A. S.

Trans. Maine Med. Assoc., 1891.

Cutbush, Edward (1772–1843).

Born in Philadelphia, Pennsylvania, Edward Cutbush, surgeon of the United States Navy, obtained the degree of M. D. at the University of Pennsylvania in 1791 and for seven years was attending physician of Pennsylvania Hospital. In 1799 he entered the navy and for several years held the position of chief surgeon of the Mediterranean fleet. Returning to the United States he was stationed chiefly at Washington. In 1829, after thirty years of faithful service in the navy, he resigned his position and retired to Geneva, New York, where he was elected professor of chemistry and dean of the medical faculty of the college. Besides a number of articles in various medical journals he published a volume entitled "Observations on the Means of Preserving the Health of Sailors and Soldiers" (1808), which, in its time, commanded considerable attention. A. A.

Williams, Am. Med. Biogr., Greenfield, 1845.

Cutter, Ammi Ruhamah (1705–1746).

Ruhamah is a woman's name, and in the early days of the Cutter family belonged to an aunt of the Rev. Ammi Ruhamah Cutter of North Yarmouth, in the district of Maine. This gentleman, named half for an uncle and half for an aunt was the father of Dr. Cutter of Portsmouth, and a doctor of medicine himself, as will be worth explaining and describing before drawing a portrait of his wider known son.

To begin with his first title the Rev. Ammi Cutter was the son of Samuel and Rebecca Rolfe Cutter of Cambridge, Massachusetts, and baptized there May 6, 1705. He graduated from Harvard in the class of 1725 and after studying divinity, received a call from the church at North Yarmouth at a salary of £120 in silver, together with a parsonage not then finished and a large wood lot. He did his best to teach his flock in a church abounding in cracks through which the chilly wintry air circulated much to their discomfort, and had before long the good fortune to marry Miss Dorothy Bradbury, originally from Newburyport.

After a year or two the parson's creed began to be "offensive" to his people, the church sat "uneasy" beneath his theology, and he was asked to resign. Immediately upon leaving the pulpit he

studied medicine and practised it with success the rest of his life. His legible handwriting hand long attracted attention, and he was for that reason, among others, chosen agent for the town and was repeatedly delegated to the General Court at Boston. Another office held was that of Indian agent, and while thus serving he compiled a vocabulary of words in two Indian languages, Pequot and Ossipee, a work of great value in bargaining with the natives. Dr. Cutter must have been of a patient nature and genial in his manners or he would not have been chosen for this post in which so much dominating suavity was needed in those troublous times.

When the first expedition against Louisbourg was determined upon, Dr. Cutter was chosen captain and surgeon, and sailed with Col. Moulton's York Regiment in March, 1745. His medical services during the campaign were highly commended, and after the capture of the fortress he was left in charge as surgeon-in-chief and commanding officer. The autumn of 1745 was sickly with fever, which became epidemic in February, 1746, and in March Dr. Cutter fell its victim, leaving considerable property, for one of his sons inherited for his share alone a thousand acres of woodland and seventy English sovereigns.

Among North Yarmouth documents of this era, very curious are those relating to the Parson's wood lot, which one would think Mr. Cutter would have abandoned on resigning his pastorate. But he argued that the people had not paid his salary, and until paid he should hold on to the lot. Moreover, as a settler he was entitled to a lot which he had never received and until the town made over that to him he should hold on to the parson's. To such settlement the parties could never agree. His widow petitioned the General Court to the same effect, and while waiting for a decree cut off the best of the timber.

This first Dr. Ammi Ruhamah Cutter, as we have a right to entitle him after his several years of medical practice and his Colonial War record, left four children, one of whom was Dr. Ammi Ruhamah Cutter of Portsmouth, New Hampshire, celebrated in the Colonial and Revolutionary Wars and in medicine in New Hampshire.

J. A. S.

Cutter Genealogy.
Baxter. Documentary History of Maine.

Cutter, Ammi Ruhamah (1735–1820).

Celebrated for his Colonial War and Revolutionary medical services, Ammi Ruhamah Cutter was born in North Yarmouth in the district of Maine March 15, 1735, and graduated at Harvard in the class of 1753. While there he made the acquaintance of a number of young men from Portsmouth, particularly that of John Wentworth, afterwards Sir John, governor-royal of the province of New Hampshire, with whom he maintained a very intimate friendship and to whom he was body physician until the governor was exiled to Halifax at the beginning of the Revolution. These college boys probably suggested to Cutter that he should study medicine with Dr. Clement Jackson who had lately moved to Portsmouth from Hampton, New Hampshire. At all events, as early as 1754 we find a letter from John Wentworth, still at Cambridge, addressing Cutter as doctor, although he was then less than twenty years of age.

Although Dr. Cutter had ridden about with Dr. Jackson for some time and had often been sent many miles collecting bills for his preceptor, in which expeditions he got nothing but ill treatment, his first case only came to him September 21, 1755, when he removed nine bits of bone from the leg of a wounded negro and in his diary wrote these famous words, "I did it myself."

Though very young, he was appointed in that year surgeon for the rangers, and in 1756 went with Col. Meserve's regiment on the expedition against Ticonderoga.

Early in 1757 he was reappointed surgeon and in April set out for New

York on horseback to take part in an expedition against Lonisbourg, as his father before him had done. Upon his arrival he was nominated a surgeon of the Carpenters (a sort of corps of miners and sappers) and of three companies of Rogers' rangers on the salary of five shillings a day and rations.

Arriving at Halifax, time was wasted in councils of war, sickness broke out, a powerful French fleet arrived before Louisbourg for its protection and ultimately the ill-managed expedition set sail for New York having accomplished absolutely nothing . . . . Arriving home, Dr. Cutter rode with his troops to Fort Edward, fell ill and went on sick leave to Albany, and finally we find him once more in North Yarmouth, when on January 14, 1758, his mother made him a present of some of his father's books, among which we note Blackmore "On Spleen and Vapors," Fuller's "Dispensatory," and some classics in English, Greek and Latin.

Sir Ralph Abercrombie's and Wolfe's expedition against Louisbourg being finally ready in 1758, Dr. Cutter joined it as surgeon, sailing in a vessel called a scow and named the "Halifax," reached the rendezvous off Canso in fourteen days, on June 10, was off Louisbourg, where he saw a hundred men drowned in attempting a landing, and remained on medical duty until the fortress surrendered.

Later on the small-pox became epidemic, the Col. Meserve of his regiment died, George King, a friend from Portsmouth, became totally blind in both eyes, and Dr. Cutter finally fell ill himself.

After a long convalescence, Dr. Cutter reached Portsmouth, and on November 2, 1758, married Hannah, daughter of Charles and Mary Kelly Treadell of Portsmouth.

In 1759 Dr. Cutter was interviewed by Gen. Stark and Amherst and implored by Maj. Rogers to go out once more as surgeon, but he had had enough of war. From this time to the outbreak of the Revolution we find him mostly at home, importing for one thing, Cortex Peruviana, from London, building up an excellent practice, performing surgical operations and doing his share towards the settlement and improvement of New Hampshire. Thus we find him attending as physician-in-chief his old friend Sir John Wentworth at Wolfe-Borough when that town (named after his hero) was dedicated. Again, he was in evidence when this royal governor attended the first commencement at Dartmouth in 1771.

When the medical service of the United States was re-organized in 1777 Dr. Cutter was appointed physician-general of the eastern department with the charge of two hospitals containing some three hundred beds at Fish-kill and Peeks-kill-on-the-Hudson.

While on hospital duty Dr. Cutter fell ill and worried his family and associates for a while, but he was soon at work again.

Returning at the end of a year from this army service, Dr. Cutter devoted the rest of his life to his patients and to his family of ten children, one of whom, William, worked with him when properly skilled.

In his time he was looked upon as a shade more skillful than any other physician thereabouts. To occasional medical visitors from out of town he liked to show his interesting cases and was very proud of one particular case of pulmonary tuberculosis, in which metastasis into an eye occurred. The sight was lost but the patient never complained again of the constitutional disease.

He was elected an honorary member of the Massachusetts Medica Society in 1783. Harvard gave him the honorary degree of doctor of medicine in 1792. He served faithfully as president of the New Hampshire Medical Society more than once.

He passed away December 8, 1820, aged eighty-five. His widow surviving him until January 20, 1832, when she died, aged ninety-seven.

Born in the house in Portsmouth in which Dr. Cutter practised for several years, it has interested the writer more than usual to write out a few facts concerning the old doctor's varied medical career. J. A. S.

The Cutter Genealogy, 1871–1875.
MSS. of Dr. Jeremiah Barker.

Cutter, George Rogers (1840–1891).

George Rogers Cutter of Brooklyn, New York, began his studies in ophthalmology as resident surgeon of the New York Eye and Ear Infirmary and was connected with the institution for twenty-one years. His linguistic attainments were of a high order. His publications are the translations of Frey's "Histology" (1876), and a "Dictionary of the German Terms used in Medicine" (1879). He became a member of the American Ophthalmological Society in 1887 and died in 1891. H. F.

Trans. Am. Oph. Soc., vol. vi.

D

Dabney, William Cecil (1849–1894).

This physician of Huguenot descent, the name originally D'Aubigné, was born in Albemarle County on July 4, 1849. His father was a planter in that county and had married a Miss Gordon of Scotland.

His early education was obtained at home from private tutors, then he entered the University of Virginia in 1866, and studied medicine for two years, graduating in 1868. For one year he was in a Baltimore hospital as resident physician; and for another at Big Lick, now Roanoke, Virginia. On account of his health he then returned to Albemarle County and farmed for two years, after which he resumed practice in Charlottesville.

He was a member of the Medical Society of Virginia, the Association of American Physicians, and, the Southern Surgical and Gynecological Association. In 1886, professor of the practice of medicine and obstetrics in the University of Virginia, which chair he filled with benefit to the university until his death.

He married Jane Belle Minor in 1869, and had nine children, seven of whom, three sons and four daughters, survived him. One son, William M., became a physician.

Dr. Dabney died at his house in the University of Virginia, of typhoid fever, August 20, 1894.

A prolific writer, he contributed many translations from French and German medical journals, and original articles to medical literature, of which the following are a few of the most important:

"The Value of Chemistry" to the "Medical Practitioner," Boylston prize essay, 1873. "Maternal Impressions" ("Keating's Cyclopedia of the Diseases of Children," 1889). "An Abstract of a Course of Lectures on the "Practice of Medicine." A syllabus of lectures on "Obstetrics" and one on "Medical Jurisprudence" for the use of his students. "The Physiological Action and Therapeutic Uses of the Water of the Greenbriar White Sulphur Springs" ("Gaillard's Medical Journal," April, 1890). During his professional life he contributed more than thirty articles to medical journals. These are to be found in the volumes of the "American Journal of Medical Sciences," "Philadelphia Medical News," "New York Medical Record," the medical journals of North Carolina and Virginia, and in the "Transactions of the American Medical Association" and the medical societies of Virginia and North Carolina. R. M. S.

Trans. Med. Soc. of Va., 1894.
Alumni Bulletin of the Univ. of Va., vol. i, No. 3.

Da Costa, Jacob Mendez (1833–1900).

One of the best claims of the American medical world to notoriety is the fact that so many foreigners have not only studied but stayed in the States. One who did good work here was Jacob Mendez Da Costa who came of an old Portuguese family long resident in London. But Jacob was born on St. Thomas Island, West Indies, February 7, 1833 and educated in Europe, chiefly in Dresden. In 1849 he came on to Philadelphia because his mother was there and shortly after began to study medicine in Jefferson College and also under Prof. Mutter. He must have been a good worker as, during his second year, he was, with his friend John H. Brinton, appointed demonstrator of the tumors and other specimens removed by Dr. Mutter at his clinics.

In 1852 he took his M. D. at Jefferson Medical College and after that spent over a year in the universities and hospitals of Paris and Vienna, finding time also to cultivate his talent of painting, an art

which he knew would prove of use in his preparation of class-room sketches and diagrams. Not yet twenty-one, he was determined to fit himself for a teacher; he was not only eager to know things but how to teach them, and he worked under all that was brilliant in Paris, thence going to Prague and Vienna to study more particularly pathology and diseases of the heart and lungs, then back to Paris for a while before settling in Philadelphia, where the first work he was invited to take was at the Sumner Association for Medical Instruction, long famous for extramural teaching, and he also organized classes in physical diagnosis and clinical teaching which were popular. When in 1864 the chair of the theory and practice of medicine became vacant in Jefferson College he was elected and in 1872 succeeded Prof. Dickson in the chair of practice. His bedside methods, his diagnostic accuracy, his skill in the use of remedies, his wide and well ordered knowledge of medicine, and his still greater knowledge of men made his influence felt upon the physicians who worked with him and those who were to follow.

He was not a great writer, but when he had something to say, said it well and lucidly. Of his one treatise, "Medical Diagnosis," nine editions appeared during his lifetime, and it was translated into several languages. His literary ability and professional skill were recognised by Jefferson College, the University of Pennsylvania and Harvard University who all gave him their LL. D. Someone has called him "the physicians' physician," a title which means much. In 1892 there was a meeting at Dr. Weir Mitchell's house to arrange for two portraits of Da Costa, for the College of Physicians of Philadelphia and the Jefferson Medical College, and so great was the number of subscribers that money had to be returned.

In 1892 he withdrew from active teaching except for a short clinical course at the Pennsylvania Hospital, but his interest was maintained until his death from heart disease which happened on September 11, 1900 at his country house, Ashwood, near Villa Nova.

In April, 1860, he married Sarah Frederica Brinton and had two sons. His wife died many years before he did. One of his bequests was a fund to the University to found a retiring fund for professors of long service.

His writings occupy over two columns of the "Surgeon-general's Catalogue," Washington, District of Columbia, which, besides articles on diseases of the respiratory tract and some on Bright's disease, gives his "The Physicians of the Last Century," Philadelphia, 1857. and his "Medical Diagnosis," Philadelphia, 1864.

Among his many appointments was that of lecturer at Jefferson College, 1864; professor of medicine and clinical medicine, 1872; emeritus professor, 1891; president of the Association of American Physicians; twice president of the College of Physicians, Philadelphia; honorary member of the Medical Society of New York and that of London; president of the Pathological Society of Philadelphia.

Autobiography of S. D. Gross.
Atkinson's Phys. and Surgs. of the U. States.

Dalton, John Call (1825–1889).

John Call Dalton was born at Chelmsford, Massachusetts on February 2, 1825, educated at Harvard University, where he received his B. A. in 1844 and M. D. in 1847, and early devoted himself to the study of physiology. In 1851 his essay on the "Corpus Luteum of Pregnancy," which obtained the prize offered by the American Medical Association, at once established his reputation as an able investigator in physiology. Shortly afterwards he was appointed professor of physiology in the University of Buffalo, and, it is said, was the first in this country to use vivisection in class teaching. He resigned this chair in 1854 to accept a similar one in the Vermont Medical College, and three years later he accepted the chair of physiology in the Long Island College Hospital, and in 1855 held the same chair in the College of Physicians

and Surgeons of New York, until 1883, when he retired from active teaching and accepted the presidency of the college.

During the war he served in the army, first in April, 1861, as surgeon of the New York seventh regiment, and in August he was appointed brigade surgeon, and served until March, 1864, when he returned to New York City and re-entered upon his duties at the College of Physicians and Surgeons.

Dalton was a member of the National Academy of Sciences and of numerous medical societies. He was an earnest student and able writer. His "Treatise on Human Physiology," the first edition of which was published in 1859, always enjoyed marked popularity, and was at once adopted as a standard text-book in all of our medical schools; it went through seven editions, the last published in 1882. He also wrote a "Treatise on Physiology and Hygiene for Schools," etc., (which was published in 1868 and was translated into French); "The Experimental Method in Medicine;" "Doctrines of the Circulation;" "The Topographical Anatomy of the Brain," a beautifully illustrated atlas of which only two hundred and fifty impressions were printed, and copies of which are now highly prized.

A list of his writings is in the Surg.-gen. Cat., Wash., D. C.
Med. Record, N. Y., 1889, xxxv.
N. Y. Med. Jour., 1889, vol. xlix.
Nat. Acad. Sc. Biog. Mem. Wash., 1895, vol. iii. (S. W. Mitchell.)

Daly, William Hudson (1842–1901).

William Hudson Daly, army doctor and laryngologist, was born in Indiana County, Pennsylvania September 11, 1842, the son of Scotch-Irish parents, Thomas and Helen Mar Daly. When he was seventeen both parents died, and when the Civil War began he fought as a confederate in the fifteenth Virginia Volunteers and was present in most of the big battles from Big Bethel to Lee's Mills. After peace was proclaimed he entered Jefferson Medical College and was later assistant surgeon United States Army in the army hospital at Whitehall, Pennsylvania, and in the military hospital in Savannah, Georgia, Hiltenhead, South Carolina, and Jacksonville, Florida. He then entered the University of Michigan, graduating there in 1866 and settling down to practise in Pittsburg, Pennsylvania, but in 1878 went to Europe, and for a year devoted his time to the study of diseases of the ear, nose, throat and chest in the schools and hospitals. In 1868 he was appointed physician to the Reform School of Pennsylvania; in 1871 as surgeon-in-chief of the eighteenth Division, Pennsylvania national guards; and for many years was visiting physician to the Western Pennsylvania Hospital in Pittsburg and the Pittsburg Free Dispensary. Though he engaged in the general practice of surgery and medicine, he gradually restricted himself to the treatment of diseases of the nose and throat, of which specialty he might be said to have been the father in America.

In 1894 he was president of the American Laryngological Association and in 1897 president of the American Laryngological, Rhinological and Otological Society. In 1881 he was president of the Allegheny County Medical Society.

He was a member of the British Laryngological, Rhinological and Otological Association; the Société Française de l'Otologie, de Laryngologie, et de Rhinologie.

He contributed much to the literature of medicine and especially on the subject of laryngology. Among others may be mentioned a paper which appeared in the April, 1882, issue of the "Archives of Laryngology" on "The Relation of Hay Asthma and Chronic Nasophryngeal Catarrh," of which Sir Morel Makenzie said in an editorial in the "London Journal of Laryngology and Rhinology," August, 1887: "There can be no doubt that Dr. Daly may justly be regarded as the founder of the surgical school of rhinology in America, which has at the present day so many distinguished representatives, by his having drawn

forcible attention to the importance of intranasal surgical treatment." His contributions to medical literature numbered over half a hundred and embraced many subjects.

At the outbreak of the Spanish War Dr. Daly was appointed major and chief surgeon, United States Volunteers and assigned to duty on the staff of Gen. Nelson A. Miles.

On June 22, 1896, he married Athalia Cooper, daughter of James N. Cooper, a steel manufacturer of Pittsburg. Two children were born, both of whom died in infancy, Mrs. Daly died November 22, 1899.

After the death of his wife his friends became aware of a gradual change in his previously jovial disposition. He suffered from insomnia and shortly before his death, on June 9, 1901, developed delusions of varied character under the influence of which he ended his life by suicide. At the time Dr. Daly possessed a considerable fortune which he devised by will for the establishment of a "Home" to provide for girls dependent upon their own exertions for support.

This "Athalia Daly Home" was opened in Pittsburg November 1, 1907, and bore the fruit which Dr. Daly, in his philanthropy, had hoped for.

His portrait is in the meeting hall of the Allegheny County Medical Society, at the Pittsburg Free Dispensary.

A. K.

Penn. Med. Jour. June, 1901.

Damon, Howard F. (1832–1884).

Howard F. Damon, M. D., was born in Boston, 1832, graduated in arts from Harvard in 1858, and received his medical degree from his alma mater in 1861. He was one of the twenty-nine original members of the American Dermatological Association, but never took a very active part in its proceedings.

Shortly after graduation he was appointed physician to the skin department of the Boston City Hospital and in 1860 published a small brochure entitled "Neuroses of the Skin," also in 1869 editing an "Atlas of Skin Disease," besides being an occasional contributor to dermatological literature.

In an old medical journal of 1869 is advertised "Dr. Damon's photographs of The Diseases of the Skin, with letterpress description, put up in a neat portfolio $12." These pictures, considering the date, are wonderfully good.

Some of his articles can be found in the "American Journal of Syphilology," edited by H. M. Henry, and in the "Archives of Dermatology," edited by L. D. Bulkley.

Dr. Damon died September 17, 1884.

J. M. W.

Dana, Israel Thorndike (1827–1904).

If you look at a certain picture of this successful physician at the age of forty, you are struck by its interrogative aspect. He looks as if asking of you the answer to an interesting problem. The profile is bold, the forehead coming forward at an acute angle, and from that the nose, so that the whole effect is striking and strong.

The career of this man was noteworthy. He was born in Marblehead, Massachusetts, June 6, 1827, the youngest of fourteen children of the Rev Samuel and Henrietta Bridge Dana. Graduating at the Marblehead Academy, he spent two years in an office in Boston, afterwards studying medicine at the Harvard Medical School where he graduated in 1850. He also took a course of lectures at the College of Physicians and Surgeons, New York.

Two years' study in Paris and Dublin followed and Dana began to practise in Portland, Maine, 1852, laboring there carefully. In 1856, with the assistance of Dr. William Chaffee Robinson, and Dr. Simon Fitch, of Portland, he established the Portland School for Medical Instruction, and continued with it, in one chair or another, until his death. He also established the Portland Dispensary for the treatment of the poor. From 1860 to 1882 he was professor of materia medica at the Medical School

of Maine, and from 1862 to 1892, was for most of the time professor of the theory and practice of medicine. He was very active in assisting in the foundation of the Maine General Hospital, and from its opening until he retired from practice, was at the head of the medical staff.

In 1868 he was president of the Maine Medical Association, for which he wrote the annual oration, and year after year a long list of carefully written medical papers, among which were included one on dropsy, a second on the pathology of phthisis, and a very able one on pneumonia in 1893, when he was sixty-six. He gradually became interested in diseases of the heart and lungs, of which he made a specialty.

Dr. Dana twice married, first, September 28, 1854, to Carrie Jane Starr, and again in October 26, 1876, to Carolina Peck Lyman who cared for him devotedly in his declining years. He had ten children, of whom three died young. The lives of three others were brought to a sudden close after reaching maturity. The last and heaviest blow of all came at a time when his health was already beginning to fail from advancing years, in the tragically sudden death of his son, Dr. William Lawrence Dana, who, a most promising surgeon, went home from a medical meeting in the best of health and was found dead the next morning. From that time there was to be no recovery for the devoted father. He became affected about four years before his death with a gradual loss of mental power, and died April 13, 1904. J. A. S.

Trans. Maine Med. Assoc., 1904.

Danforth, Samuel (1740–1827).

Samuel Danforth was born at Cambridge, Massachusetts in August, 1740. He was the son of Samuel Danforth (Harvard College, 1715), probate judge of the county of Middlesex, who married a Miss Symmes and was descended from Samuel Danforth the elder who came to Roxbury from England in 1634, and was second on the list of fellows of Harvard College, 1650–1654, and in the college catalogue from the year 1634 to 1758.

Samuel's early life was passed in Cambridge. He graduated from Harvard in 1758 and studied medicine with Dr. Rand, the elder, either in Charlestown or Boston. In 1790 Harvard conferred the honorary M. D. upon him. It is probable that his medical opinions were influenced by Dr. Philip Godfrid Kast. He began to practise in Weston, Massachusetts, but soon removed to Newport, Rhode Island. He returned to Boston in a year or two, married a Miss Watts, of Chelsea, Massachusetts, and settled in Boston.

He was an original member of the Massachusetts Medical Society and its president from 1795 to 1798. He made no claim to a knowledge of surgery, but was a resourceful practitioner of medicine. His manners were polished but not formal, and his carriage attractive, yet commanding. He used few remedies and those only whose effects were obvious and powerful, calomel, opium, ipecacuanha and peruvian bark being his favorites. On one occasion he was called to visit a number of persons who had been hurt by the fall of a house frame and on arriving found another practitioner engaged in bleeding the injured. "Doctor," said the latter, "I am doing your work for you." "Then," said Dr. Danforth, "pour the blood back into the veins of these men."

He died November 16, 1827, at the age of eighty-seven, in his house in Bowdoin Square. His portrait by Gilbert Stuart is in Sprague Hall in the Boston Medical Library. W. L. B.

Hist. Har. Med. School. T. F. Harrington.
Genealog. Reg. of the First Settlers in N. E. John Farmer, 1829.
Bos. Med. and Surg. Jour., vol. i, 1828.
Com. Mass. Med. Soc., vol. iv.

Darby, John Thomson (1836–1879).

John Thomson Darby, surgeon, was born at Pond Bluff Plantation, Orangeburg County, South Carolina, December 16, 1836. His parents were Artemus Thomson Darby, a physician of some

repute, his mother, Margaret Cantey Thomson.

He was educated first at Mount Zion Institute, Winnsboro, South Carolina, and thence in the year 1856 went to the South Carolina College in Columbia, then to the Medical College of Charleston, and completed his medical course at the Jefferson Medical College in Philadelphia where he graduated with honor.

Returning to the south at the beginning of the Civil War he was immediately appointed surgeon to the Hampton legion.

Upon Hampton's promotion to a cavalry brigade Dr. Darby was assigned to the staff of Gen. I. B. Hood, serving through every grade until he finally became medical director of the Army of the West. In 1863 he was sent by the government of the confederate states on a secret mission to Europe, from this he returned successful.

At the close of the war he went to Germany where he received an appointment on the medical staff of the Prussian Army, thus utilizing the experience acquired on southern battlefields.

In the campaign against Austria in 1866 Dr. Darby assisted materially in the organization of the hospital and ambulance corps for which he was highly commended and received well merited praise.

Upon his return from abroad he was immediately elected professor of anatomy and surgery at the University of South Carolina, in Columbia, where his reputation as a surgeon increased and in 1874 he held the chair of surgery in the University of the City of New York.

He married Mary Cantey, daughter of General John G. and Caroline Hampton Preston. He died in New York City of pyemia, leaving one son and two daughters.

The epitaph in Trinity Churchyard, Columbia, bears the true record of his life.

"Renowned in his profession
Honored as a patriot
Beloved in all relations of life."

R. W. Jr.

Darlington, William (1782–1863).

Born in Chester County, Pennsylvania, doctor, botanist and author, Darlington was one of a famous group of scientists exploring, writing and keeping up a keen scientific correspondence with each other from Europe to America, from America to Europe; news of fresh plants, packets of seeds, graceful congratulations were sent, Linnaeus being the brightest star and one whose opinion was first sought.

The seeming hardship of having to work on a farm, the out-door life, may have indirectly helped William Darlington's botanical interests. His great-grandfather, Abraham Darlington, had come over from England when a young man to Pennsylvania, and settled near Chester. William was the eldest child of Edward and Hannah Townsend Darlington and one of five sons. He had simply a common school education and, hungry for more, persuaded his father to let him study medicine with Dr. John Vaughan of Wilmington, Delaware. He took also private French lessons, studied hard at Latin, Spanish and German and received his M. D. from the University of Pennsylvania in 1804.

He had the good fortune of being able to attend the botanical lectures of Dr. Benjamin S. Barton, and it is easy to imagine the shoots of his botanic ideas taking root in the firm earth of accurate knowledge.

A voyage to India as ship's surgeon gave him leisure for study and reflection, but does not seem to have given him "travel fever" also, for the following year he settled down to practise in West Chester after marrying Catherine, daughter of Gen. John Lacey of New Jersey.

In 1812 international science yielded to international strife and Darlington became major of the "American Grays," organized to defend Philadelphia. Shortly after he figures as a politician advocating the abolition of slavery, and, resigning, receiving the thanks of the secretary of war and a nomination as visitor to West Point. He serves on the

Board of Canal Commissioners to unite two great lakes with the Atlantic, yet in the midst of much civic business he finds time to botanize and found the Chester County Cabinet of Natural Science and publish his "Flora Cestrica" or catalogue of plants growing round West Chester, Pennsylvania. Also with some confrères he founds and becomes president of the Medical Society of Chester County.

That which pleased him most was the perpetuation of his name in flower form. Prof. De Candolle of Geneva named a genus after him, but it did not prove to be sufficiently distinct, and another friend, Prof. Torrey of New York, dedicated to him a finer plant, of the order Sarraceniaceæ, which grows in California. Darlington certainly deserved the honor, for a more generous man never lived. This was shown in his gathering together all the letters and memoranda of Dr. William Baldwin, a zealous botanist, who died still young while on an expedition up the Missouri. He called the book "Reliquiæ Baldwinianæ," 1843, and six years later made all botanists his debtors by his loving work shown in "The Memorials of John Bartram and Humphry Marshall," 1849, the careful foot-notes alone constituting valuable references to the botanical side of that period. But in between these two volumes came another written as a result of his observation of the unscientific farming going on around him, a book which proved of genuine utility; this was his "Agricultural Botany," 1847.

Moreover, he willed that his herbarium and all his botanical works should go to his own county museum, and these are still in the museum of the West Chester State Normal School, now too little known, like many another collection, but while the donor lived they were a source to him of continual pleasure, adding zest to his correspondence with fellow botanists on both sides the Atlantic, and learned societies—more than forty of them—elected him a member.

The loss of a soldier son of fever off the African coast and of his wife occurred in 1845–6, and in the spring of 1862 Darlington had a slight attack of paralysis, followed in 1863 by another from which he died on Thursday, April 23, 1863, nearly eighty-one years old and with mind still unimpaired. He was buried in Oaklands Cemetery, Philadelphia, and on his tomb was carved:

Plantæ Cestrienses
quas
dilexit atque illustravit
Super Tumulum ejus
Semper floreant.

A portrait is to be seen in "The Botanists of Philadelphia," Harshberger, 1899, and in the Van Kaathoven Collection of Portraits, Surgeon-general's Library, Washington, District of Columbia. D. W.

Tr. Med. Soc. Penn., Phila., 1863.

Daugherty, Philander (1835–1904).

Dr. Philander Daugherty, a pioneer Kansas surgeon, was born on March 10, 1835, in Greencastle, Indiana. His father came from Ireland when a boy and afterwards married Harriett McNary of Marysville, Kentucky, but died when Philander was four and the boy did as most medical aspirants have done, just got what education he could between farm work and then taught school. But when sixteen he studied medicine with his uncle, Dr. William McNary, in Martinsville, Illinois, then attended Rush Medical College, taking his M. D. there and finally settling down to practice and remaining in Junction City, Kansas, for thirty-five years.

He was one of the first in Kansas to take up antiseptic and aseptic surgery in Kansas and of the first to do total extirpation of the breast for carcinoma, his pioneer surgical work being remarkable for the period in which it was done. He also wrote a considerable number of articles, not only on his own subjects but in political, sociologic and philosophic vein.

On March 4, 1855, he married Susan

Alice Mitchell and had one son and three daughters. His second wife (in 1870) was Mrs. Sarah Sage, but he had no more children. Daugherty died of apoplexy on May 23, 1904 at his own home.

M. M. C.

Daveis, John Taylor Gilman (1816–1873).

This careful and punctilious physician, one of the earliest practitioners in diseases of the eye in Maine, was born in Portland, Maine, March 21, 1816, the son of Charles S. Daveis, a distinguished lawyer, and Frances Ellen Gilman, a daughter of Governor Gilman, of New Hampshire.

Gilman Daveis, as he was generally called, was educated in the public schools, studied medicine in Portland under the direction of Dr. John Taylor Gilman, graduated with honor from the Jefferson Medical School of Philadelphia, and received the *eundem* degree from the Medical School of Maine in 1863, when a little over twenty.

Immediately after, he settled in Portsmouth, New Hampshire, practised there for five years, and then returned to Portland, where he practised successfully for thirty years. Among the cases which early helped him to local fame and practice was one of club-foot, which he cured after it had been repeatedly treated in vain by others, and also a successfully operated case of squint. As an oculist he gained more than a local recognition, and did many successful operations. He read before the Maine Medical Association, one or two excellent papers on ophthalmology.

He owned an excellent medical library, and read abundantly on contemporary literature, in fact was one of the best read physicians in Maine.

He wore a broad black tie, in a bow knot, and his coat always had a black velvet collar. Small tabs of beard ornamented each cheek, and he had a radiant, agreeable face.

It is curious that so little can be learned concerning a man so widely known, but an anecdote of this fashion may not be out of place.

A physician calling upon Dr. Daveis in a hurry to ask him to attend a consultation rushed into the office without scraping his feet. Thinking that the doctor was behind him, and not turning his head around, he said. "I want you to come just as soon as you can, to see a patient in an emergency." He turned his head, but no Dr. Daveis was to be seen. He moved to the office door, and saw the doctor approaching with a pan and brush to take from the hall rug some bits of mud left by the thoughtless physician in his hurry to get advice for a suffering patient.

The death of this physician came without a warning, for while preparing to operate upon a patient, he was seized with a violent pain in the right shoulder, which rapidly extended downwards and involved his entire side, so that he had to leave his patient and take to his bed. Pneumonia set in, and he died in a few days on May 9, 1873. J. A. S.

Trans. Maine Med. Assoc., 1873.

Davidge, John Beale (1768–1829).

This surgeon, founder of the University of Maryland, was born in Annapolis in 1768, his father an ex-captain in the British Army, his mother Honor Howard of Anne Arundel County. At an early age he was deprived of his father, and his mother wanted to apprentice him to a cabinet-maker. But, resolved to have an education and obtaining aid from friends and coming into possession of some slaves through the death of a relative, he entered St. John's College and there took his A. M. in 1789, beginning to study medicine with Drs. James and William Murray, of Annapolis, and spent several years in Edinburgh, when he devoted himself especially to the study of anatomy. His voyage to Scotland was made in a sailing vessel, and among his shipmates were Drs. Hosack, Brockenbrough, and Troup; and they, encountering very rough weather, were compelled to work hard at the

pumps to keep the vessel from sinking. From motives of economy, like many students of the time, he took his degree (April 22, 1793) at Glasgow rather than Edinburgh. About this time he married Wilhelmina Stuart, of the Firth of Solway, a lady several years his senior. After practising for a short time in Birmingham, England, he returned to Maryland, and finally selected Baltimore as his permanent home. In 1797 a severe epidemic of yellow fever raged in the city and there was a public discussion of the disease by the physicians in the newspapers. Davidge bore a prominent part, and early in the following year republished his views in a volume which was freely quoted in later works upon the subject.*

He was one of the first attending physicians to the Baltimore General Dispensary on its foundation in 1801. In 1802 we first note his advertisement of private courses of medical lectures, and these courses were continued annually until 1807, when, being joined by Drs. James Cocke and John Shaw, his school was chartered as the College of Medicine of Maryland. In 1813 a charter for a University was obtained, and this institution became the department of medicine, Dr. Davidge holding the chair of anatomy or surgery from 1807 to his death in 1829, and for a number of years he was also dean.

In person, Prof. Davidge is represented as being short and stout, with blue eyes, florid complexion and homely, rugged features, small hands and feet and a graceful carriage. He walked with a slight limp after 1818, in consequence of a fracture of the thigh bone. His lectures were described by Prof. Lunsford P. Yandell as being "models of simple elegance," but "he seemed to forget the English idiom the moment he took pen in hand." His style of writing was stiff, affected and obscure, and marked by obsolete modes of spelling and expression. He had very positive views on medical subjects and believed menstruation to be a secretion of the uterus excited by ovarian irritation. He opposed the support of the perineum on the ground that nature is sufficient for her own processes. He also declared himself against the speculum uteri because it smacked of immoral curiosity.

His first wife dying, Dr. Davidge married Mrs. Rebecca Troup Polk, widow of Josiah Polk, of Harford County, Maryland, who survived him with four of his children, a son by his first wife and three daughters by his second.

He died at his house in Lexington street on August 23, 1829, of malignant disease of the antrum of Highmore.

His most important writings were: "Treatise on Yellow Fever," 1798; "Nosologia Methodica" (in Latin), two editions, 1812 and 1813; "Physical Sketches," two volumes, 1814 and 1816; "Treatise on Amputation," 1818. He edited "Bancroft on Fevers," 1821, and a quarterly journal entitled "Baltimore Philosophical Journal and Review," 1823, of which only one number appeared. His important operations were amputation at shoulder-joint soon after 1792 (Recse); ligation of the gluteal artery for aneurysm; ligation of the carotid artery for fungus of the antrum; total extripation of the parotid gland, 1823. He invented a new method of amputation which he called the "American."

E. F. C.

His great-great-grandson, Walter D. Davidge, an attorney of Washington City, has an oil painting of him.

Cordell, Historical Sketch of University of Maryland, 1891; Cordell, Medical Annals of Maryland, 1903.

* Trans. Internat. Med. Congress, 1876.

Davidson, John Pintard (1812–1890).

John Pintard Davidson was born in Pinckneyville, Mississippi, December 8, 1812, the son of Dr. Richard Davidson, of Virginia, a surgeon in the United States army, who came to New Orleans in 1804. John Pintard took his M. D. at the University of Pennsylvania in 1832 and returned immediately to New Orleans and entered the Charity Hosptial.

At the outbreak of hostilities between the North and South, he went out as captain of the Alexander Rifles, Crescent Regiment, commanded by Col. Marshall J. Smith.

During the epidemic of yellow fever in 1875 at Shreveport, he was one of the experts selected with Drs. Bruns and Choppin to be sent to that place. He was also sent to Brunswick, Georgia, as an expert on fever and also sent to the plantations below New Orleans, when the National Board of Health pronounced an epidemic prevailing to be yellow fever. Dr. Davidson declared the fever at both places to be "rice fever," a fever peculiar to those living on and cultivating rice plantations. He was president of the State Board of Health in 1880 and chairman of the Board of Medical Experts on yellow fever.

One remarkable trait was his forgetfulness of himself when the lives of others were concerned. About the year 1848 or 1849 Asiatic cholera broke out on the plantation of Mr. Calhoun, some miles above Alexandria, on Red River. He was called in, and upon investigation found that a large number of the slaves were being fed on rotten meal; he at once separated the well from the sick, and moved all to the pine woods and changed their food and water, after which he lost not a single case, but came near losing his own life. He was stricken with the disease, and in trying to reach the house of a friend was found on the roadside by a faithful servant, who took him to Dr. L. Lucketts, where he was for several days at death's door. During the epidemic of yellow fever in 1853, he sent all his children out of town and filled his house with sick, and was, during the greater part of the time, the only physician about.

He was prominent in all the state medical societies and once served as president of the New Orleans Medical and Surgical Association.

New Orleans Med. and Surg. Jour., 1891–2, n. s., vol. xix.

Davidson, William (1810–1875).

William Davidson, counted one of the most learned men of his time in southern Indiana, was born in 1810 in Wick, Caithness, Scotland, and went as a boy to the parish school and afterwards to Edinburgh University, becoming a licentiate of the Royal College of Surgeons there in 1833 and taking his M. D. in 1835. While a student he became acquainted with Sir James Simpson and the friendship lasted through life.

In 1835 Davidson came to the United States, landing in New York provided with letters of introduction to James Gordon Bennett and other prominent Scotsmen who advised him to practise in New York, but, preferring a western home, he settled first in Kingston, Ohio, where he married Malinda Griffiths, whose people had come from Wales to Pennsylvania with William Penn, then, finally, in 1837 moved to and remained for the rest of his life in Madison, Indiana.

During the Civil War he acted as surgeon to an Indiana regiment and to a military hospital as Munsfordsville, Kentucky.

It is a matter of record that the claim to priority in the use of chloroform in labor west of the Alleghany Mountains should be accorded either to Dr. Davidson or Prof. Miller of the University of Louisville, but I, as pupil of Davidson, can confidently give him the credit.

Apart from his diagnostic skill and ability as a lecturer Dr. Davidson was a thorough classical scholar and book-lover and wrote a little for the medical journals; a good scientist too, particularly in geology and botany. The Orthis Davidsonia was named after him. A courtly goodlooking man, he was welcomed as guest or friend. He had four children, Victoria, Anne, Marion and William R. who became a doctor. These, with his wife, were all living when Dr. Davidson died of cerebral hemorrhage on August 12, 1875. L. J. W.

Davis, Edward Hamilton (1811–1888).

Better known as an archeologist than a doctor, Edward Hamilton Davis

was born in Ross County, Ohio, January 22, 1811, graduating from Kenyon College in 1833, and in medicine from Cincinnati Medical College in 1838. Davis settled in Chillicothe and continued in practice there until 1849, when he removed to New York City, and lived there until his death. His youth was spent in the Scioto Valley, so renowned for its ancient earthworks, and the first school he ever attended was located on a mound near the Circleville group. Living in the same county, and cognizant of the labors of Mr. Atwater and other pioneer explorers, his attention was directed at a very early age to the subject of American antiquities. From 1829 to 1833, while a student at Kenyon College, he conducted a series of explorations in the mounds of that vicinity, an account of which was given in a paper read before the Philomathian Society. Afterwards, by request of the professors, this paper was enlarged, and delivered as a literary performance at the college commencement of 1833.

During that year he had several interviews with Daniel Webster, then making a tour of the West. That great statesman was deeply interested in the subject of western antiquities, and was pained to witness their rapid disappearance by the plow of the pioneer. He suggested the formation of a society to purchase and preserve some of the most remarkable works of the mound builders. The opinion of such a man was well calculated to stimulate the youthful mind of Davis to continue these researches. For fifteen years he was diligently engaged in making surveys, opening mounds, collecting and arranging the results of his labors.

In June, 1845, Mr. E. G. Squire went to Ohio under an engagement to edit the" Scioto Gazette,." a weekly paper, at a yearly salary of $450. He remained in Ohio less than two years. Losing his position as editor, he was invited to Davis's house where he spent several months assisting in arranging and copying out the voluminous notes and observations made previously by Davis, also making drawings and diagrams with descriptions of the work jointly examined by them. Prof. Joseph Henry, secretary of the Smithsonian Institution, having become interested in the subject, an arrangement was made with Davis to have his notes and observations published at the expense of the institution; Davis and Mr. Squire to receive each $1,000.

A portion of Davis's collection was sent to New York in order to have engravings made, printing done, etc., and Mr. Squire engaged to superintend the drawings, maps, etc., and edit the observations made by Davis, the latter continuing his practice in Chillicothe. In 1848 the result of his extensive explorations appeared in a work entitled "Ancient Monuments of the Mississippi Valley," which formed the first volume of the "Smithsonian Contributions to Knowledge." "By E. G. Squire and E. H. Davis." While editing this work Mr. Squire prepared and read before the Ethnological Society a paper embodying the principal facts of the new book, and it was published with their proceedings. This caused great dissatisfaction, and Prof. Henry came near throwing up the whole thing. He also, unbeknown to Henry or Davis, placed his own name before that of Dr. Davis on the title page. Dr. Davis paid Mr. Squire's board during the time of printing the work. Mr. Squire received fifty copies, the same number as Dr. Davis. Dr. Davis bore the entire expense of these investigations, viz., the traveling, surveying, and opening of over two hundred mounds, amounting without any allowance for time to nearly $20,000. All the remuneration he ever received for all his time, labor and expenditure was fifty copies of the book, given him by the Smithsonian Institution, and the $10,000 received for his collection, purchased by Mr. Blackmore, of England, who

built a museum for its reception and dedicated it to his native town, Salisbury, where it now remains. Unfortunately for Davis, he placed his fifty copies in a bookstore for sale, and soon afterwards a fire in the store destroyed them. So far as the "Ancient Monuments" are concerned, the above facts show who was the originator and ruling spirit in the getting up of this great work. Davis contributed to the medical journals, and in 1850 prepared a "Report on the Statistics of Calculous Diseases in Ohio." In 1841 he operated successfully on a man thirty-five years old for strabismus, and always claimed that his was the first one of the kind in Ohio.

Davis came to New York in 1849. In 1850 he was elected professor of materia medica in the New York Medical College and lectured there for ten years. Failing health compelled him to retire from practice and the chief cause of his death, May 15, 1888, was debility from old age. He left four children, two sons and two daughters. His remains were taken to Chillicothe, Ohio, and placed by the side of his wife.

Med. Reg., State of New York, Albany, 1888.

Davis, John Staige (1824–1885).

This anatomist was the son of John A. G. and Mary J. Terrell Davis, his father, a lawyer of Charlottesville, Virginia, who in 1830, being elected to the chair of law in the University of Virginia, removed with his family to that institution. John was born in Albemarle Co., October 1, 1824.

In the cultured and refined atmosphere of the university he acquired his education, graduating M. A. before the completion of his sixteenth year. One year later, on the fourth of July, 1841, he took his M. D. there and after spending eighteen months in the study of practical medicine in Philadelphia, settled in Jefferson County, Virginia, December, 1841. Here he practised until January, 1847, when, having been elected demonstrator of anatomy in the university, he returned to Charlottesville.

From January, 1845, to July, 1856, he filled the position of demonstrator of anatomy in the University of Virginia, and in the latter year was elected professor of anatomy, materia medica and botany. With the exception of the chair of botany, which in 1867 was transferred to another school, he held this professorship until his death. He was commissioned July 3, 1861, surgeon in the Confederate States Army, and served as such in the military hospital at Charlottesville.

Dr. Davis was one of the greatest teachers of anatomy America has known; "As a practitioner," says a colleague, "he was not only fully abreast of the latest advances in medical science, but was also skillful and judicious in their practical application." He was, moreover, possessed of a beautiful Christian character and the highest sense of duty. He was a churchman without cant, a Christian without hypocrisy.

Dr. Davis was twice married, first to Lucy L. Blackford, who died on the first of February, 1859, leaving a daughter and a son, Dr. William B. Davis of the United States Army. His second wife whom he married the second of September, 1865, was Caroline Hill. Three children were born, the eldest of whom was John Staige Davis who became professor of medicine in the University of Virginia.

Dr. Davis died at his home in the university on the seventeenth of July, 1885, of pneumonia, secondary to hemiplegia, in the sixty-first year of his age.

There is a portrait of Dr. Davis in the posession of his son, Dr. John Staige Davis, Jr., at the University of Virginia.

J. H. C.

Sketch of the Late John S. Davis, by John H. Claiborne, A. M., M. D., Alumni Bulletin of the University of Virginia, vol. i, No. 3. Trans. Med. Soc. of Virginia, 1885.

Davis, Reese (1837–1895).

Reese Davis was born July 5, 1837 of Welsh parentage in Warren, Bradford County, Pennsylvania, the ninth child in a family of eleven. His father being a farmer, young Reese had only such

edutacional advantages as his winter attendance at the district school afforded. However, after a somewhat rudimentary education, at the age of twenty-one he entered the Susquehanna Collegiate Institute at Towanda to prepare for college. One year was spent at Marietta College in Ohio, and he graduated from Hamilton College at Clinton, New York, in 1863. Then followed one year in the Medical School of Michigan University. He entered the Bellevue Hospital Medical College in New York in 1865 and graduated in 1867, his professional life beginning in LeRaysville, Pennsylvania, and continuing 1871, at Wilkes-Barre, Pennsylvania, in which place he practised till his death in August, 1895.

A physician and surgeon of great ability, he was the first man in his section of the state to perform ovariotomy and did this many times successfully at a time when operation was rare. He was a member of the surgical staff of Wilkes-Barre City Hospital from its beginning till his death.

According to Prof. William Goodell, who quotes him at great length, Dr. Davis performed the second vaginal ovariotomy on record. This case was reported originally in "Transactions of the Medical Society of Pennsylvania," 1874, vol. x, p. 221. Dr. Ashhurst in his "Surgery" quotes Dr. Davis as an ovariotomist and cites the above case. Dr. Davis' paper "On a New Method of treating Placenta Previa," read before the Pennsylvania State Medical Society in 1876, attracted much attention and on its merits he was elected an honorary member of the Philadelphia Obstetrical Society. He was on the surgical staff of Wilkes-Barre City Hospital until his death, and president of the State Medical Society in 1886.

Dr. Davis was an extensive contributor of papers to medical literature, writing among others "Vaginal Ovariotomy," 1874; "Placenta Previa," 1876; "Pelvic Peritonitis, Cellulitis and Hematocele," 1875; "Hernia of Liver in Infant," 1876; "Diphtheria," 1878; "Removal of Vesical Calculus," 1880; "Potability of the Water of Large Cities," 1885; "Rabies," 1886; "Median Operation for Stone," 1888; "The Filtration of City Water," 1894.

L. H. T.

Davis, William Elias Brownlee (1863–1902).

As a gynecologist and an originator of the Southern Surgical and Gynecological Association, of which he was president in 1901, William Elias Brownlee Davis is remembered in his native state of Alabama, where he was born on November 25, 1863, in Trussville, Jefferson County, the sixth in a line of doctors, his father, a Confederate Army surgeon, being killed in the war. The boy's life was that of many another genius: farm work and study, delicate health and scanty means, yet he won through it all, graduated at the University of Alabama, began practice with his doctor brother and took his M. D. at Bellevue Hospital College in 1884.

From the first he devoted himself specially to gynecology and abdominal surgery, and his sudden death left unfinished a work on "Hepatic Surgery." In 1892 he experimented on 200 dogs for the purpose of determining the treatment of common bile duct obstruction, establishing the principle that sterile bile is inoffensive to the peritoneum, that transperitoneal gauze draining of the common duct is a safe procedure; after removal of calculi from the common duct suture of the duct is unnecessary. By diligent observation and experimentation, far from laboratories, he pursued his way of original investigation. He fully appreciated the need of a medical association, and with his brother organized the Alabama Surgical and Gynecological Society. In 1900 he himself was president of the American Association of Obstetricians and Gynecologists and also honorary fellow of the state societies of New York, Louisiana and the British Gynecological Society.

The end came very suddenly, as the result of a railway accident, on February 24, 1902, and a monument was erected

to him in Birmingham by the Southern Surgical and Gynecological Society, in whose transactions (vol. xvi, 1904) is a biography by Dr. Richard Douglas, and a portrait. D. W.

Dawson, Benjamin F. (1847–1888).

Benjamin F. Dawson, obstetrician, was born in New York City on June 28, 1847, and graduated from the college of Physicians and Surgeons in 1866. While a student during the last year of the Civil War he served as acting assistant surgeon in the Federal Army and after graduation established himself in practice in New York, paying special attention to surgery, gynecology, obstetrics and diseases of children. In 1868 he founded the "American Journal of Obstetrics," and was editor of the same until 1874; contributing largely to this and other similar publications for many years. In 1876 he invented a galvanic battery for galvano-caustic surgery. About ten years after he gave up the practice of his profession on account of ill health. He was for a number of years professor of gynecology in the New York Post-graduate Medical School, assistant surgeon of the Woman's Hospital, attending physician of the New York Foundling Asylum, and a member of the New York Obstetric Society and other medical associations, and later he devoted more attention to gynecology, the practice of which he enriched with many ingenious instruments—an ovariotomy clamp, a spreading sinus speculum, and a galvano-cautery battery.

He died on April 3, 1888, at his home, No. 8 East Fifteenth Street, New York, of diabetes, from which he had suffered for years.

Med. Reg. State of N. Y., Albany, 1888.
Am. Jour. of Obstet., N. Y., 1888, vol. xxi.
Boston Med. and Surg. Jour., 1888, vol. cxviii.
N. York Med. Jour., 1888, vol. xlvii.

Dawson, John (1810–1866).

John Dawson was born at Sharpsburg, Maryland, May 11, 1810, the oldest son of John and Nancy Hays Dawson.

The Dawson family moved from Sharpsburg to Berkeley County, Virginia, where they lived until 1830, when they emigrated to Green County, Ohio, and settled in the village of Jamestown. Shortly after his arrival in Jamestown, young Dawson made the acquaintance of Dr. Matthias Winans, the physician and leading citizen of the place. On Dr. Winans' advice, the younger man took up the study of medicine, and practically became a member of the doctor's family. He eagerly took advantage of the well-stocked library of his friend and patron, and made up to a great extent for the lack of a liberal education which opportunity had denied him, and was soon not only a well read man, but proficient in Latin and Greek.

In 1835 the Cincinnati College of Medicine and Surgery was organized, with Drs. Daniel Drake, Samuel D. Gross, Joshua Martin, J. W. McDowell, Landon C. Rives and Horatio G. Jameson as the faculty. To this school young Dawson went for his first course in medicine. In 1838, Drs. Drake and Gross, having gone to Louisville to join the faculty of the University of Louisville, young Dawson followed them, and there took his second course.

He contributed his first article to the "Western Journal of Medicine and Surgery" under the title "An Epidemic of Typhus Fever in Ohio." This article attracted the attention of the profession, and stamped the author as a vigorous writer and a rising member of the medical faculty. The University conferred on him the honorary M. D. for this first paper.

Returning to his home, he entered into partnership with his friend and patron. He continued also to be a student and writer, and a series of articles followed, among them: "Thoughts on the Tongue as an Element of Diagnosis," "Epidemic Erysipelas," and "On Cold Baths in Typhoid Fever," the last something like half a century too soon to be appreciated.

While practising at Jamestown, he had one of those clinical experiences

that come, if ever, only once in a lifetime. He had a case of obstruction of the bowel in a young man, and fully expected to lose him. One morning when he went in the house he found the patient upon the vessel straining, and was told that he suddenly had a desire to stool. In a few moments the patient said he was through, and was helped back to bed. Upon examination, the doctor found some bowel that had passed per rectum, and was rewarded for his trouble by a section of the ileum twenty-six inches long. This priceless trophy was lost to him the next year, for, while on a visit to his old friend, Dr. Joshua Martin, at Xenia, there was an attack of house cleaning and all his collection of specimens was thrown out and lost.

In 1851 Dr. Dawson, feeling that he was wasting his time and talents in continuing country practice, removed to Columbus, Ohio. The following year the faculty of Starling Medical College was organized, and he was made professor of anatomy and physiology, in company with a remarkably strong set of men as his co-workers. Dr. Dawson held this professorship for twelve years, and later became one of the professors of surgery, which position he held till the time of his death. The following year and until his death he was editor of the "Ohio Medical and Surgical Journal." As a medical journalist he was eminently a success. His English was both strong and graceful, and the journal, during these years, contained many brilliant and learned articles.

In politics he was a Democrat, and his writings, outside of his professional articles, showed the bent of his opinions. Samuel Medary's "Columbus Crisis" contained a number of these writings. Among them were "Progress of the Races," "Commingling of the Races," and Ethnology and Politics."

Personally he was reserved and dignified, but never cold or severe; loved by his friends and respected by his enemies; always a hard worker and a friend to the poor, white or black, and these admired and loved him.

In the midst of his work he was stricken down in his office by an attack of cerebral hemorrhage, and died September 4, 1866.

A remarkable family fatality is shown in the male members of this family. Dr. John Dawson, Dr. James Dawson and George Dawson all died from cerebral apoplexy, and Dr. W. W. Dawson died of dementia paralytica, while the female members show no such tendency, nor can a previous family history of nervous trouble be established. C. A.

Transactions of the Ohio State Medical Society, 1867.

Dawson, John Lawrence (1815–1896).

John Lawrence Dawson, practitioner for more than fifty years in South Carolina, was born on his father's plantation at Metkin, Moncks Corner, South Carolina, in March, 1815, the son of Lawrence Monck Dawson, great grandson of Lord Monck. He had his education at the Medical College of Charleston and graduated M. D. from the Medical College of South Carolina, afterwards studying at Paris clinics and finally settling down in Charleston.

He was at one time president of the Medical Society of South Carolina and United States surgeon for the troops stationed there. As registrar of the city he compiled with Dr. de Saussure valuable statistics, the first really good ones the city had had.

He married Jane, daughter of his partner Dr. Simons and had four daughters. When this wife died he wedded Catherine Dawson and had one son and two daughters. Dr. Dawson died at his house in Tradd Street, Charleston on the seventeenth of September, 1896.

R. W. Jr.

Dawson, William Wirt (1828–1893).

William Wirt Dawson was born on December 19, 1828, at Dawson's Mills, Berkley County, Virginia, the youngest son of John and Nancy Hays Dawson.

The family—father, mother, and eleven children—emigrated to Jamestown, Green County, Ohio when the boy was one year old, and there he spent his childhood and early youth. When old enough to leave home he was sent to a private school at Xenia, Ohio. After returning home from school at Xenia, he began to work for his father, but finding that rather too strenuous for him, he followed the example of his two older brothers and began to study medicine with Dr. Matthias Winans, of Jamestown. In 1847 he took his first course in Louisville University, but did not return there to finish, going to the Medical College of Ohio, where he graduated in 1850. As a medical student he was described as a big-headed, large-hearted rollicking country youngster, ready for any fun and at the head of almost all the pranks that students were fond of, but never neglecting any of the clinical lectures, and always a hard worker. His natural bent, even in his student days, was for surgery. After graduation he spent two years near his old home, and then returned to Cincinnati and settled down to practise. While professionally a success from the very first, for the first two years his financial harvest was small. But he had a stout heart; the harder the work, the more determined was he to win. With the coming of the Civil War his first good fortune came, and he began to feel the tide of popularity running his way. In 1853 he had been made professor of anatomy in the Cincinnati College of Medicine and Surgery which chair he occupied for three years, and while it had tickled his pride to have been known as a professor in a medical college, it did not appear to increase his paying clientèle. In 1860 he obtained the same chair in the Medical College of Ohio, his alma mater, and it was soon after this that fortune came. He remained with the college until 1864, when he received the appointment of surgeon to the Cincinnati Hospital, then known as the Commercial Hospital. With his rise in professional popularity the joyousness of youth returned, the years he spent as surgeon and clinical lecturer at the Cincinnati Hospital he looked upon as the best of his life. In the summer of 1870 Dr. George Blackman died, and Dr. Dawson was immediately elected his successor as professor of surgery in the Medical College of Ohio. Then came the heyday of his life, intellectually and socially. While not so elegant or eloquent as Graham, nor so scientifically correct as Bartholow, yet as a teacher he was superior to them all, his terse and forcible manner of presenting facts never failed to reach the intellectual center of his listeners, and his lectures were the most popular and highly appreciated of any in the city, his clinics at the hospital of the Good Samaritan more popular, if possible, than his teaching at the college. From 1870 to 1880 was the period of his greatest success. During this decade he performed his most brilliant operations, and wrote the greater part of his papers on surgical subjects. In 1888 he was made president of the American Medical Association.

While not a specialist, but a general surgeon in its widest sense, he yet had his pet operations. At one time it was lateral lithotomy, and he claimed that he was the first American surgeon to make one hundred successive lithotomies without a death. He also claimed that his nephrotomy was the first in this country, and the first successful case anywhere. The case that gave him his greatest renown was his attendance on the Hon. Clement L. Vallandigham, who accidentally shot himself while attempting to show how the victim of an alleged murder had committed suicide.

The principal papers during this time were on abdominal tumors, hernia, carcinoma, Grave's disease and a score or more on his operations, including: "The Complete Removal of the Clavicle, with Cure; "The Removal of Seventeen Fibro-cystic Tumors from the Abdomen;" "Three Cases of Double Ligature of the Carotids and Three of Trephining for Epilepsy." During his early years and up to the time of the death of his wife

in 1883, Dr. Dawson was a veritable glutton for hard work. He would sit up reading until one or two o'clock in the morning, and at eight he would be in his consulting-room again. During this period he was bright, good-natured and jovial, as famous for his wit as for his learning and professional standing, for he was as popular with the profession as with the people. Soon after the death of his wife he began to lose interest in life and grew gloomy and morose, and in a few years was as peevish and irritable as he had formerly been bright and happy. In the winter of 1893 he had an attack of influenza, but finally got out to work again, yet towards spring he had a second attack and was never well afterwards. Early in the summer he was taken to the Hospital of the Good Samaritan, but it was soon evident that he was a mental wreck, and he was transferred to the College Hill Sanatorium, where he died February 16, 1893. C. A.

W. W. Dawson, Obit., Cincinnati Lancet-Clinic, March 4, 1893, n. s., vol. xxx (T. A. Reamy).

Deaderick, William Harvey (1773–1858).

William Harvey Deaderick was born at Winchester, Virginia, November, 10, 1773, and died at Athens, Tennessee, October 29, 1858. He was a graduate in medicine and began practice at Greenville, Tennessee. Shortly afterwards he moved to his farm at Cheeks' Cross Roads, Tennessee, where on February 6, 1810, he removed the left inferior maxilla. The patient was a boy (Jesse Lay) fourteen years of age. There was an excrescence or enlargement of the bone which nearly closed the buccal cavity and presented a large tumor outside. The bone was sawn through at the chin and near the joint. The growth was said to have been an osteosarcoma, but the fact that there was no return of it makes that diagnosis doubtful. The scar was, in time, completely hidden by a luxuriant growth of whiskers.

After a through investigation the fact was established that Dr. Deaderick was the first surgeon to remove the lower jawbone. His claim as the originator of the operation is justly recognized by Mott in his "Velpeau," by Smith, in his "Operative Surgery," by South, in "Chelius' Surgery," and others; notwithstanding, other claims to priority have arisen, all however proven to have been subsequent to Deaderick.

On May 26, 1807, he married Penelope Smith, a daughter of Col. Joseph Hamilton, and had nine children, five sons and four daughters—Thomas, Joseph, William, Alexander, Robert, Penelope, Anne Eliza, Margaretta and Frances.

Dr. Deaderick's second wife was Mrs. Lois Ashworth, by whom he had a daughter, Mary McKim.

After living some years at Cheek's Cross Roads he went to Athens, Tennessee, where he lived many years. His professional contemporaries and his intimates have said that his character embodied many excellent qualities and he was considered one of the best equipped physicians and surgeons of his day, no less distinguished for his exemplary piety and high moral tone than for his professional accomplishments. C. D.

Athens Post, 1857.
N. Am. M. Chir. Rev., Phila., 1858, ii.

Dearborn, Henry (1751–1829).

The son of Dr. Simon Dearborn, a physician of Hampton, New Hampshire, he, like his father, was educated to be a physician and practised many years at intervals in both New Hampshire and Maine, so that although better known as Gen. Dearborn, there can be no doubt that he should be included among the eminent medical worthies of America.

He was born in Hampton, New Hampshire, February 23, 1751, and after having such school education as that small village afforded, studied medicine with Dr. Hall Jackson of Portsmouth, one of New Hampshire's remarkable physicians.

Dearborn, after doing some practice for two or three years with Dr. Jackson, was

entitled "Doctor" and settled at Nottingham Square, in New Hampshire, from 1772 till 1775, where he practised as a physician. Nottingham Square was a little settlement in the town of Nottingham, on the turnpike road from Portsmouth to Concord. When the war broke out Dr. Dearborn gave up his practice as a physician and followed with the troops of Gen. Stark to the Battle of Bunker Hill.

When the Revolution was over, he bought a large tract of territory, then called Monmouth, in the district of Maine, which place is now divided into the city of Gardiner and the towns of Monmouth, Litchfield and Riverside. His wife was Miss Mary Bartlett of Nottingham, New Hampshire.

Here, beside attending to his farm, he did a little medical practice, but was soon called away to become a man of prominence in the affairs in the nation. He became major-general in 1790, went to Congress for two terms, was secretary of war in 1801, was later on minister to Portugal, and collector of the port of Boston.

With the breaking out of the War of 1812, Pres. Monroe asked him to accept active service again. He began well, and after the wars we find that he served his patients carefully and usefully. In his later life he retired from Gardiner and died in Roxbury, Massachusetts, June 6, 1829, aged seventy-eight.

J. A. S.

Hanson's History of Gardiner, Maine.

DeCamp, William H. (1825–1898).

William H. DeCamp was born in Auburn, New York, November 6, 1825, the son of John DeCamp of Mt. Morris, Livingston County, New York, his mother Sarah Miller of Auburn, New York. A general education was obtained at Munda, New York, and in 1843 he began medical studies there with Dr. Lewis G. Ferris and finished at Geneva Medical College whence he received his M. D. in 1846, at once beginning practice at Oak Grove, Allegheny County, New York, but in 1850 removing to Hunt's Hollow, Livingston County, where he gained considerable surgical practice. His health failing, in 1854 he moved to Grand Rapids, Michigan, and opened a drug store, which in 1857 was destroyed by fire, with all his possessions; so he resumed practice, which increased till the opening of the war when he entered the army and was commissioned surgeon of the first Michigan Regiment of Engineers and Mechanics till mustered out at the close of his term of service. After the battle of Perrysville, Dr. DeCamp had charge of the wounded in Gen. Bragg's army. From October 10, 1862, to February 10, 1863, he was medical director at Harrodsburg, Kentucky. On his discharge from the army he resumed practice at Grand Rapids, making a specialty of surgery. In 1868 he was president of Michigan State Medical Society. Outside his profession Dr. DeCamp made researches in concology mineralogy, botany, ornithology—especially notable was his collection of Michigan shells. His were the studies which resulted in developing the vast salt industries of Michigan. On examining the water of an artesian well near Grand Rapids he found ninety per cent. of salt. Calling a meeting of some public-spirited citizens he laid his observations before them and they took the matter to the Michigan Legislature, which voted a bounty of ten cents per bushel of salt produced in Michigan. On November 4, 1846 he married Emeline C. Griffiths, of Wyoming, New York. He died in Grand Rapids in 1868 from organic heart disease.

His writings include:

"Non-united Fracture." ("Detroit Review of Medicine and Pharmacy," vol. iii.)

"An Improved Method of Reducing Backward Dislocations of the Elbow-joint." ("Detroit Review of Medicine and Pharmacy," vol iv.)

"Ulcers and Their Treatment." ("Detroit Lancet," vol viii.)

"Sickness and Vomiting of Pregnancy." ("Transactions Michigan State Medical Society," vol i.

"Remedial Substitutes for Bloodletting." ("Transactions Michigan State Medical Society," 1870.)

"Gems in Medicine selected from Forty Years of Experience." ("Transactions Michigan State Medical Society," 1885.)

"Special Points in Operative Surgery." ("Transactions Michigan State Medical Society," 1886.)

"The Actual Cautery." ("Transactions Michigan State Medical Society," 1880.)

"Treatment of Fractures of the Extremities." ("Transactions Michigan Medical Society," 1887.) L. C.

Representative Men in Mich., Cincin., O., 1878, vol. v.

Delafield, Edward (1794–1875).

It is chiefly for his ophthalmic work and his great interest in the blind that Edward Delafield should be remembered, his energy and alleviation of disease being shown at a time when thousands went blind through the ignorance of surgeons concerning the eye.

He was the son of John Delafield of London who came to this country and married Ann Hallett of New York. Edward, the eldest of eleven children, was born in New York City, May 17, 1794. He graduated A. B. from Yale College in 1812 and became pupil to a Dr. Samuel Borrowe, following out diligently in New York the prescribed course of the College of Physicians and Surgeons and receiving its M. D. in 1816, with a thesis on "Pulmonary Consumption."

Like most young doctors of that period he went over to Europe and studied at foreign clinics, returning to New York City and practising there over forty years. He married first, Elinor E. Langdon Elwyn in October, 1821, and had six children, none of whom survived him. Nineteen years later, being then a widower, he married Julia Floyd, grand-daughter of Gen. Floyd, a signer of the "Declaration of Independence."

He was not a great writer, but he did good work in adding to and editing a new edition of Traver's Diseases of the Eye and in contributing articles on ophthalmology to medical journals. As far back as 1818 he conceived the idea of a New York Eye Infirmary and talked it over with his associate Dr. Kearney Rodgers, which talk resulted in their opening, in 1820, two rooms and in seven months they had treated 436 patients. The necessity for such a hospital was now obvious and the surgeons who had helped in the crowded two rooms also helped in the organization of the new hospital of which Delafield was for thirty years visiting surgeon. The American Ophthalmological Society also owns him as one of its founders and elected him as first president. While deeply devoted to his ophthalmic work he held to his other subject, obstetrics, and occupied the chair of obstetrics, and diseases of women and children in the College of Physicians and Surgeons thirteen years, being a president of the college in 1858. Of a very benevolent turn, he often noticed the dismal condition of shabby gentility to which the widows and children of his deceased confrères were reduced and this led him to found the first society for their relief.

As a practitioner, Dr. Delafield possessed, in a high degree, the confidence of his patients. His medical sagacity and extensive acquirements secured him success in the management of disease, and the kindly interest and sympathizing care which he felt for those intrusted to his skill gained for him their affection and gratitude.

He died in New York, February 13, 1875. D. W.

Trans. Am. Ophth. Soc. vol., ii, (port.).
Hubbel's Development of Ophthalmology, Med. Record, N. Y. 1875, x.
Medical and Surgical Reporter, 1866, xv.

Delamater, John (1787–1867).

His family, of Huguenot descent, had settled in Holland as refugees at an early date. His father was a farmer, and John, born in Chatham, New York, April 18, 1787, was expected to follow the same

vocation, but a slight, though permanent injury received in early life incapacitated him for the severe labor of the farm, and it was decided to educate him for a profession. His father preferred the ministry; he himself inclined to the law, and perhaps as a compromise between two opinions, the boy finally decided to study medicine. Of the details of his medical education we have, however, no information. On December 1, 1806, John Delamater was licensed to practise medicine by the Medical Society of Oswego County, New York, and returned immediately to Chatham, his birthplace, entering into a partnership with Dr. Dorr, his uncle. After a sojourn in Chatham of two and one half years, he removed to Florida, in Montgomery County, New York, and began a medical career, which in diversity, strenuousness and duration more than rivaled that of the famous Daniel Drake. In 1814 we find Delamater practising in Albany, New York, but in the following year he removed to Sheffield, Berkshire County, Massachusetts, where his success brought him to the notice of the faculty of the Berkshire Medical Institute located at Pittsfield in the same county. Accordingly, in 1823 he was called to the chair of materia medica and pharmacy in that institution, and for three years delivered the annual courses of lectures. His distinguished success as a teacher led to his call in 1827 to the chair of surgery in the College of Physicians and Surgeons of the western district of New York, located at Fairfield in Herkimer County. Here for the next ten years Dr. Delamater worked and from 1837 to 1839 he lectured upon the theory and practice of physic and on female diseases, and during the session of 1839–40, on the theory and practice of physic and midwifery. At this time the impaired health of his family induced him to change his locality, and in 1841, he removed to Geneva, New York, where from 1841 to 1843 he lectured on general pathology and materia medica in Geneva College. But the activity thus far depicted by no means covers the entire facts of his medical career up to this point, and he himself says: "Within the period intervening between the years 1828 to 1842, both inclusive, I accepted appointments and, in accordance therewith, delivered the following lectures in addition to the annual courses above named, viz.: six courses on the principles and practice of physic in the Medical School of Maine, connected with Bowdoin College; one course on materia medica and three courses on principles and practice of physic in the Medical School of New Hampshire, connected with Dartmouth College; one course of ten weeks—twelve lectures weekly—on surgery and midwifery in the University of Vermont; and four courses on pathological anatomy, midwifery and theory and practice of physic in the University of Willoughby, at Willoughby, Ohio; and, finally, in January and February, 1838, I delivered about sixty lectures on surgery in the Medical College of Ohio, located at Cincinnati, Ohio." Truly the catalogue reads like the diary of one of the peripatetic professors of the middle ages!

During the time he was lecturing in Geneva Dr. Delamater was also occupying the chairs of pathological anatomy and midwifery, or the theory and practice of physic, in the University of Willoughby, Ohio, and when, in 1843, the professors in the latter school resolved to remove to Cleveland and organize there a new medical school, Delamater was, naturally, the leading spirit in the transfer and occupied for seventeen years the chairs of general pathology and midwifery and the diseases of women in the Western Reserve College, thus founded. In 1860, at the age of seventy-three, he resigned active and formal duty as a teacher, but occasionally filled temporary vacancies in the staff of the college until almost the close of his busy and useful life. After his death, the outlines of no less than seventy courses of lectures, in almost all departments of medicine, were found among his papers, and it is believed that

during life he had assisted in the medical education of a larger number of young men than any physician of his day. On his retirement Dr. Delamater was honored with the title of professor emeritus, and received also the honorary LL. D. from the Western Reserve University. He died at the advanced age of eighty, March 28, 1867. His son, Dr. Jacob G. Delamater, was professor of anatomy and physiology in the Cleveland Medical College, 1843–1861.

As a writer his communications are characterized by the same clearness of thought and expression. Fortunately we have several specimens of his style preserved in the medical journals of his day. Among these we mention "On Detecting and Diagnosing the Simpler Forms of Valvular Diseases of the Heart," ("Cleveland Medical Gazette," December, 1859), "Reminiscences of Country Surgery" (Ibid., May, 1860), two letters on the subject of ovariotomy addressed to Dr. J. W. Hamilton and published in the "Transactions of the Ohio State Medical Society" for 1859, and most remarkable of all, a series of papers entitled, simply, "Dr. Fisher's Case," but containing, in addition to a fairly complete medical autobiography, an exhaustive discussion of the pathology and treatment of inversion of the womb. ("Cleveland Medical Gazette," April, 1860, *et seq.*)

An excellent portrait of Dr. Delamater is found in the faculty room of the medical department of the Western Reserve University, another of less excellence in the parlors of the Cleveland Medical Library Association, and good engravings of his quaint features are published in "Cleave's Cyclopedia" and elsewhere.

H. E. H.

Cleave's Biographical Cyclopedia of the State of Ohio, No. 1, Cuyahoga County (Philadelphia, 1875). A "Sermon delivered at the funeral of John Delamater by William Goodrich, D. D." (Cleveland, 1867), and in "The Life and Character of John Delamater, M. D., LL. D." An Address delivered before the Alumni of the Cleveland Medical College, March 3, 1880, by J. E. Ingersoll (Cleveland, 1880).

Also an article by Dr. Dudley P. Allen, of Cleveland, in the "Magazine of Western History," vol. iv.

Transactions of the American Medical Association, 1868.

Denison, Charles (1845–1909).

Charles Denison was born in Royalton, Vermont, November 1, 1845. His parents were Dr. Joseph Adam and Eliza Skinner Denison of Royalton, both of New England stock. Charles Denison married Ella H. Strong, daughter of Gen. Henry Strong, December 26, 1878, and three children survived infancy—Clara, Elsa, and a son, Dr. Henry S. Denison, of Denver.

Charles Denison died in Denver, Colorado, on the tenth of January, 1909, of gangrene following cholecystitis. He was one of the most active pioneers in the war against tuberculosis, inseparable obstacles only increasing his untiring energy. He graduated from the University of Vermont in 1859, and while in Hartford, in 1873, tuberculosis with pulmonary hemorrhages set in and he removed to Denver and devoted his attention to the study of climatology with especial reference to tuberculosis. For fourteen years he was professor of diseases of the chest and climatology in the University of Denver, and afterwards emeritus professor. He was the author of a valuable work on the climate of Colorado, entitled "Rocky Mountain Health Resorts," and of a series of climatic maps of the United States. Dr. Denison took part in the International Congress on tuberculosis in London in 1901, and was a frequent contributor to the "Transactions of the Climatological Association," in which he was deeply interested from the date of its organization. D. W.

De Rosset, Moses John (1838–1881).

Moses John De Rosset was the son of Dr. S. J. De Rosset of Wilmington, North Carolina, and after receiving a broad general education in this country and abroad, took up the study of medicine and graduated at the College of Physicians and Surgeons of New York

in 1859. He then served a term of eighteen months in Bellevue Hospital, but at the beginning of the Civil War returned to his home and was soon after appointed assistant surgeon in the Confederate Army, and inspector of hospitals at Richmond, serving with great distinction. At the close of the war he settled in Baltimore, devoting himself chiefly to diseases of the eye and ear. In 1878 he went to New York where he was making a great professional reputation when death came. He was, for a time, editor of the "North Carolina Medical Journal."

He died May 1, 1881, in Wilmington, North Carolina, at his father's home.

H. F.

Medical Record of New York, 1881, vol. xix. North Carolina Medical Journal. 1881, vol. vii.

Detwiller, Henry (1795–1887).

Henry Detwiller, a convert to homeopathy after twenty years in practice, was also a natural scientist and born in Langenbruch, County Basel, Lanschaft, on December 13, 1795, beginning to study medicine when only fifteen under Dr. Laurentius Senor and matriculating at the University of Freiburg. Being very fond of natural science he was seized with a desire to explore the regions of America, so left Basel in 1817 and acted as ship's doctor to several hundred emigrants who went as far as Amsterdam. Passing an examination at the medical board there he obtained the same post on the John of Baltimore, taking over some four hundred emigrants to Boston. A prolongation of the voyage round Bermuda in July heat brought on sickness and when Philadelphia was reached Detwiller was left there in charge of the quarantined vessel and of another in like plight. While in Philadelphia he became acquainted with a French physician Dr. Monges, and was often called in consultation for the family of General Vaudame and other French refugees, and on his advice, added to that of Joseph Bonaparte, settled in Pennsylvania, choosing Allentown, then moving to Hellertown, Pennsylvania, beginning seven years later to practise homeopathy. In 1836 he revisited his alma mater and took the degree which his youth had prevented his taking before going to America. During his long residence at Hellertown he found time for natural history and collected his "Flora Sauconensis" chiefly from the upper and lower Saucon. His ornithological specimens, the mammals, reptilia, chelonia, etc., represent nearly the whole fauna of Pennsylvania. The greater part was donated to public institutions and museums in Europe, especially the University of Basel. He was one of the organizers of the American Institute of Homeopathy and assisted in forming the Pennsylvania State Homeopathic Society.

He died at Easton, Pennsylvania, where he had practised over thirty years, quite an old man, being ninety-two. His wife, whom he married in 1818, was Elizabeth Appel, of the neighborhood, who died seventeen years later, leaving three sons and four daughters.

From a sketch by Dr. T. L. Bradford in the History of Homeopathy, 1905, vol. i, in which there is a portrait.

Dewees, William Potts (1767–1841).

This Philadelphian obstetrician was so famous that no lady considered herself safe in other hands, and patients, it was said, postponed their confinements until he was at leisure.

His great grandparents were among the early Swedish emigrants at Delaware Bay. His mother was the daughter of an Englishman, Thomas Potts, who bought much land here and founded Pottstown on the Schuylkill, where William was born on the fifth of May, 1767.

Early left fatherless he had only an ordinary school education and after attending medical lectures in the University of Philadelphia began practice without a diploma when only twenty-one, gaining patients by his talents

and his handsome face and winning ways. He specialized in midwifery and did good work in days when Mrs. Gamp was nurse, the speculum unknown, and anything beyond digital examination and a pessary regarded as indelicate even by doctors. There was no systematic teaching in obstetrics and Dewees grew restless under this negligence, and collecting a band of pupils gave lectures on midwifery and strengthened his position in 1806 by taking his M. D. from the University of Philadelphia with a thesis on "Moderation and Relief of Pain during Labor," he chiefly advocating blood-letting. Shippen notes this thesis as marking an era in the history of medicine.

Finally, in 1810, after Wistar, James Chapman and Dewees had spent illspared time in pleading for it, a chair of midwifery was established with the retrogressive provision "that an attendance should be optional for graduation."

James was chosen professor, but Dewees bore the disappointment manfully and devoted himself more energetically to obstetrics.

He had married Martha, daughter of a Dr. Rogers, of New England, but she died young and in 1802 Dewees married Mary Lorrain, a Philadelphian girl, and had three daughters and five sons. An attack of pulmonary hemorrhage in 1812 made him resign his work and invest his money in land at Phillipsburgh and retire there. His money was lost but his health restored and he came back poor, to speedily gain his old position and popularity, though in 1834 he had an apoplectic attack and the next year had to resign his professorship. An old biographer describes this scene: Dewees invalided on the platform in the class-room; the students gathered round eyeing him regretfully, some of their number holding a large silver vase to present to him, his colleague Nathaniel Chapman standing by to voice Dewees' thanks. Then the invalid is helped from the room and the curtain falls on his public professional life, though a sojourn at Havana restored enough health to enable him to take light duties for four years in Mobile, Alabama.

After that, home again to Philadelphia, a mere shadow of himself; not wealthy either, and with a big family. Gross says he was known as a "high liver." Williams simply speaks of his "relaxation in the pleasures arising from social intercourse necessitated by want of sleep, irregular hours and laborious occupation." On the twentieth of May, 1841, worn out by anxiety and disease, he died in Philadelphia an old man of seventy-three, leaving good writings behind as his lasting memorial.

In 1824 appeared his "System of Midwifery," which ran through twelve editions; "A Treatise on the Physical and Medical Treatment of Children" (ten editions), 1825; "On the Diseases of Females," 1826, also ten editions.

D. W.

Medicine in America. J. G. Mumford.
Samuel D. Gross. Autobiography.
American Med. Biog. S. W. Williams (with portrait)
History of the Medical Profession of Philadelphia. F. P. Henry.
An Eulogium. H. L. Hodge, Phila., 1842.
Am. J. M. Sc., Phila., 1841, n. s., vol. ii.

DeWolf, James Ratchford (1819–1901).

James Ratchford DeWolf was born at Wolfville, Nova Scotia, in 1819. His education was obtained at Horton Academy, and his professional training at Edinburgh University, from which he graduated M. D. in 1841, and in the same year obtained the L. R. C. S. (Edinburgh).

He was in general practice at Halifax from the time of his graduation in 1841 to the time of his appointment to the superintendency of the Nova Scotia Hospital for the Insane in 1857, and, being fully imbued with the then developing idea that kindness, tact, appeal to the patient's sense of honor and of the esthetic counted for much in promoting recovery, he at once instituted

William P. Dewees.

at the hospital a system of treatment which was free from the restraint, seclusion and abuses even at that time still common, and he soon established for the Nova Scotia Hospital the reputation of being one of the most advanced institutions in the world for treatment. He devoted himself to his calling with a rare degree of unselfishness, and conscientiously labored in season and out for what he considered would lead to better the condition of the insane. After many years of active work of this kind he retired to private life, but never lost interest in their cause. Up to the very last he continued to keep in touch with the literature of insanity and to follow closely the work of the hospital with whose history his name is so honorably associated. Dr. DeWolf's mission was undoubtedly the care of the insane, and the memory of his faithful labors will not perish. He died at Halifax in 1901.

He always took an active interest in the organization of the Medical Society of Nova Scotia, was its first secretary, and chosen president in 1866.

Dr. DeWolf married Eleanor Reid Sandifer, of Cambridge, England, and had four children. His son, George H. H. DeWolf, studied medicine, and practised in England and also for a short time in Nova Scotia. D. A. C.

Dexter, Aaron (1750–1829).

Aaron Dexter, first professor of chemistry and materia medica in Harvard College and founder of the Harvard Medical School, was born in Chelsea, Massachusetts November 11, 1750. His people came from Dedham, Massachusetts, but lived in Malden near Chelsea when he entered Harvard College in 1772. He graduated in 1776 and studied medicine with Dr. Samuel Danforth, a chemist in Boston.

Towards the close of the Revolutionary War he married Rebecca, daughter of Thomas Amory, of Boston, and began to practise in that city. He is said to have made several voyages to Europe as a medical officer during the Revolution and to have been captured by the British. His name does not appear among the medical men of the Revolution (Toner) and it is probable that he has been mixed up with William Dexter, who was surgeon's mate from Massachusetts.

Aaron Dexter was an incorporator of the Massachusetts Medical Society and its first treasurer. On May 22, 1783, Dexter was chosen professor of chemistry and materia medica in the newly formed Harvard Medical School, and he, with John Warren and Benjamin Waterhouse, formed the entire faculty. In 1786 Harvard gave him her honorary M. D. and in 1805 Dartmouth did the same. In 1791 his professorship was endowed by Major William Erving (Harvard, 1763) as the Erving professorship of chemistry and materia medica. Dr. Dexter became emeritus professor in 1816 to be succeeded by John Gorham.

He was remarkable for his urbanity and kindness and gave long and valuable service to the school he helped found and to many literary and charitable institutions as well.

He died of old age February 28, 1829, at his home in Cambridge. Dr. O. W. Holmes relates the following incident of one of Dr. Dexter's lectures in chemistry:

"This experiment, gentlemen, is one of remarkable brilliancy. As I touch the powder you see before me with a drop of this fluid, it bursts into a sudden and brilliant flame,"—which it most emphatically does not do as he makes the contact. "Gentlemen," he says, with a serious smile, "the experiment has failed, but the principle, gentlemen, the principle remains firm as the everlasting hills."

W. L. B.

Hist. Har. Med. School, T. F. Harrington.
O. W. Holmes' address at one hundredth anniversary of Har. Med. Sch., 1883.

Dick, Elisha Cullen (1762–1825).

Elisha Cullen Dick, the elder of two sons, only children of Archibald and Mary Barnard Dick, was born on his father's farm in Delaware County, Pennsylvania about 1762. His father was a farmer of

abundant means, a man of influence and culture who contributed largely to the fund for the support of the Pennsylvania Hospital in 1771. A slave owner, he emancipated and made provision for his slaves by his will. He was, during the War of the Revolution, assistant deputy quarter-master general of the army.

The boy's educational advantages were excellent, as he continued at school until he became a good classical scholar.

He studied medicine with Dr. Benjamin Rush, and later with Dr. William Shippen, attending lectures at the University of Pennsylvania, and graduating B. M. March 21, 1782, receiving later his M. D. Two days after this his father died and he fell heir to one-half the paternal estate.

Dr. Dick selected Charleston, South Carolina, in which to practise, but stopped over in Alexandria on his way, and was persuaded to remain in that city.

After the organization of the Medical Society of the District of Columbia he became a member, but having reached an advanced age, declined all positions of honor. He was elected mayor of Alexandria in 1804, and filled the office for several terms; was colonel of a cavalry regiment, and commanded in what is known as the Whiskey Insurrection in Pennsylvania.

His eminence as a physician is attested by the fact that his services were constantly sought by his brother physicians, and that he was called in consultation with Dr. Craik in the last illness of the illustrious Washington. With Drs. Craik, and Brown, the other consultant, he stood at the bedside of the "Father of his Country" when he breathed his last. He had the faculty of winning the confidence of his patients, being a man of polished manners, of musical and sympathetic voice, and quick in diagnosis and treatment. He rather avoided surgical cases. A great reader, he was familiar with obscure and rare cases, and the latest and best remedies.

Dr. Dick married October, 1783, Hannah Harman, daughter of Jacob Harman of Darby, Pennsylvania. Of the three children born to them, two lived to maturity, Archibald and Julia. Archibald graduated in medicine from the University of Pennsylvania in 1808.

In his latter years the doctor purchased a farm near Alexandria, and lived there until his death in 1825. He was buried in the Friend's burying-ground in Alexandria, the grave being unmarked, as he had a great abhorrence of ostentation and worldly pride.

Only two articles on professional subjects are known to have been published by Dr. Dick. The first of these, "Yellow Fever at Alexandria," appeared in the "New York Medical Repository," vol. i, second hexad., 1803, and is an account of the epidemic of yellow fever which occurred in Alexandria in 1803. The second, "Facts and Observations Relative to the Disease Cynauche Trachealis, or Croup," was written in 1808, and was published in the "Philadelphia Medical and Physical Journal," vol. iii, p. 242.

There is in the library of the surgeon-general an autograph letter "On Treatment of a Case of Enterocolitis, called Cholera of Infants," by Dr. Dick, which is dated July 27, 1815, and is addressed to James H. Hooe, of Prince William's County, Virginia.

A profile portrait likeness of the doctor, taken by St. Menin, is preserved in the gallery of the Alexandria-Washington Lodge, and another is in the Corcoran Art Gallery in Washington. The original copper-plate, engraved by St. Menin, was in the possession of Mrs. Arthur Crisfield, of Washington, great granddaughter of Dr. Dick. There is still another portrait in the library of the surgeon-general of the army in Washington.

R. M. S.

Sketch of the Life of Elisha Cullen Dick, M. D. J. M. Toner, M. D. Trans. Med. Soc. of Va., 1885, vol. xvi.

S. C. Busey. Reminiscences, Universities and their Sons, vol. ii, 1902.

Dillard, Richard (1822–1887).

Richard Dillard was born December 1, 1822, in Sussex County, Virginia, of

Scotch lineage, and inherited the intellectual characteristics of that race. He graduated at the University of Virginia, and took his medical degree from the University of Pennsylvania in 1839. He then came to North Carolina and settled in the town of Edenton, where his long and useful life was spent. During the period of 1861-65 he gave his professional services, and largely of his wealth, to the Confederacy. He was at one time brigade surgeon to Gen. Roger A. Pryor; and the first honorary member of the State Medical Society; a member of the State Senate in early life, and the choice of his district for a seat in the United States Congress at the breaking out of the war between the States.

He died November 27, 1887, as a result of repeated strokes of paralysis.

He was survived by one daughter and a son, Dr. Richard Dillard. L. T. R.

Dimock, Susan (1847–1875).

Dr. Susan Dimock, born in Washington, North Carolina, April 24, 1847, was one of the first among the women of this country to study medicine. Her father, Henry Dimock, was a native of Limington, Maine; he moved to Washington, North Carolina, and married Mary Owens of that place. Susan, their only child, was precocious and decided at the age of thirteen to study medicine. In 1864 her father died and with her mother she went to Massachusetts. Through the aid of Miss Bessie Green of that state she was enabled to study medicine. In 1866–7 she was a student at the New England Hospital for Women and Children, and in 1868, being denied admission to the classes for male students in this country, she went to Zurich and graduated at the University in 1871, going afterwards to Vienna and studying under Dr. Funk, who was so impressed by her talent that he wrote: "Should it be required of me to furnish a pattern for a young Aesculapius about to put forth, I should only say, 'make yourself to be like Miss Dimock.' The question whether a woman can be fit for the study and practise of medicine has been definitely answered by the appearance of Dr. Susan Dimock."

After a few weeks study in Paris, she returned to America and took charge of the New England Hospital for Women and Children, Boston, managing this institution with signal ability. She also visited her old home, Washington, North Carolina, and performed several successful operations,

In 1875 this promising career was brought to a sad end by the wreck of the Schiller off the English coast, she being one of the many passengers drowned at that time.

The regret at her untimely end was so great that a free bed in the New England Hospital was endowed in her memory by contributions from friends in this country and abroad.

L. T. R.

Dix, John Homer (1810–1884).

John H. Dix was born in Boston in 1810, graduated in arts at Harvard in 1833 and in medicine at Jefferson Medical College in 1836, afterwards, when in practice, devoting himself specially to ophthalmic surgery in which he acquired great skill, and was the first to follow Dieffenbach in the operation for strabismus. He was one of the founders of the American Ophthalmological Society. In 1841 he published "A Treatise on Strabismus, etc.," and in 1849 "A Treatise on the Nature and Treatment of Morbid Sensibility of the Retina, or Weakness of Sight," the Boylston prize essay for 1848.

He died in Boston in 1884. H. F.

Hubbell's "Development of Ophthalmology."

Dolley, Sarah Adamson (1829–1909).

Born March 11, 1829, of Quaker and Huguenot descent, her education was gained in schools conducted by the Society of Friends.

At the age of eighteen, having come across a copy of Wistar's anatomy, she

devoted a winter to its study and became fired with ambition to be a doctor. Her uncle, Dr. Hiram Corson of Plymouth, Pennsylvania, discouraged her, saying she could never hope to be recognized as a physician, but when she was accepted as a student by another physician, he reconsidered her proposition and took her as a student. Her uncle's influence secured her entrance to the Rochester Medical College—now passed out of existence—from which she graduated in 1851, the second woman in America to receive a medical diploma.

In 1851 Dr. Isaac A. Pennypacker and Dr. Hiram Corson, sent a communication to the Board of Guardians of the Poor of Philadelphia recommending that Miss Sarah Adamson be appointed to "such a situation in the Blockley Hospital as will afford her the opportunity of seeing it practice." The request was granted as the committee believed that opportunity for the study of obstetrics and the diseases of women and children should be extended to well-educated female physicians, but she was to have no salary and to help where required. She entered upon her work May 12, 1851.

In 1853 Miss Adamson returned to Rochester and married Dr. Lester S. Dolley. The story of her work is written into nearly sixty years of the history of Rochester where she had her long and useful career.

Dr. Sarah Dolley and her husband practised together until his death in the early seventies.

Dr. Dolley was ever a potent factor in all work for the advancement of women in medicine. In 1886 she helped organize the first free dispensary in Rochester for women and children, and in 1887 organized and was the first president of the Blackwell Medical Society of Rochester, the first incorporated society of women physicians entirely for scientific purposes, and for several years was the honorary president of the woman's Medical Society of the State of New York. Dr. Dolley was a member of the Rochester Academy of medicine, and in 1907 was made a life member of the Rochester Academy of Science, the only woman upon whom this honor has ever been conferred. She occasionally addressed Medical Societies, one paper on "The value of Paquelin Cautery," Transactions Monroe Medical Society, 1879, and her address as president to the Woman's Medical Society of New York State in "The Woman's Medical Journal," April, 1908.

Dr. Dolley died in Rochester, December 27, 1909, after an illness of several weeks.

One of her two sons, Charles, became a doctor in the city of Mexico.

A. B. W.

Rochester Union and Advertiser, Dec. 27, 1909.
Rochester Democrat and Chronicle, Dec. 28, 1909.
Minutes of the "Board of Guardians of the Poor," Phila, April 28, 1851, May 12, 1851, June 14, 1852.
Putnam, Mary Jacobi. Women in Medicine, in Woman's Work in America.
Personal Information.

Donaldson, Francis (1823–1891).

Francis Donaldson was born in Baltimore, July 23, 1823, the fifth and youngest son of John Johnston Donaldson, president of the Franklin Bank. He was educated at Dr. Prentiss' school near Baltimore, but his father was unable to give him the advantages of a college training. Just after becoming nineteen he studied under Prof. Samuel Chew, and later spent a year or more as interne at the Baltimore Almshouse. Having graduated M. D. at the University of Maryland in 1846, he spent two years in Europe, and in the hospitals of Paris listened to the greatest teachers. He warmly embraced the new rational medicine, then displacing the old empiricism and blood-letting. On his return to Baltimore, in 1848, he was appointed resident physician to the Marine Hospital and after two years service began to practise, the remainder of his busy life being devoted to this and teaching. From 1852 to 1855 he was attending physician to the Baltimore Almshouse,

and from 1858 to 1863 professor of materia medica in the Maryland College of Pharmacy. In 1866 the chair of physiology was created for him in the University of Maryland, hygiene and general pathology being added to the title, with clinical instruction in diseases of the throat and chest. After a service of fourteen years he retired from the didactic part of his chair and in 1888 abandoned teaching altogether.

Dr. Donaldson was an expert in physical diagnosis, and most of his writings, which were very numerous, especially in the form of journal articles, related to the chest and throat. His most important production was a section on "Diseases of the Pleura," in "Pepper's System of Medicine," vol. iii, pp. 483-601; he is also the author of a fine memoir of Dr. Charles Frick, in Gross' "Lives of Eminent American Physicians of the Nineteenth Century," 1861.

Besides the positions named, Dr. Donaldson held many others of influence and honor, the most important being: President of the Medical and Chirurgical Faculty of Maryland, 1881-1882; president of the American Climatological Association; consulting physician to the Johns Hopkins Hospital. He was also an associate fellow of the College of Physicians of Philadelphia.

He died in Baltimore, December 9, 1891, of "albuminuria and fatty heart."

He married Elizabeth Winchester, daughter of William Winchester, of Baltimore, who survived him with two sons and three daughters. His oldest son became a doctor. E. F. C.

Cordell's Annals of Maryland, 1903 (port.).

Dorsey, John Syng (1783-1818).

John Syng Dorsey, surgeon and writer, came of an old English family—the D'Orseys—some of whom had crossed the Atlantic and settled in Maryland.

His father, Leonard Dorsey, was a successful merchant in Philadelphia where John was born.

It is hardly necessary to say he was a bright scholar, for after receiving his classical education at the Friend's Academy he graduated at the age of fifteen at Pennsylvania University and began at once the study of medicine under his illustrious uncle. His entrance into the medical world was coincident with the end of the most terrible epidemic of yellow fever which had ever stricken Philadelphia, and young Dorsey, who had taken his M. D. at the age of nineteen, was appointed one of the resident physicians at the City Hospital and entered into the fight against the scourge, the suggested danger not troubling him at all, for the academy of medicine held the view of Dr. Deveze, who in 1799 had maintained that yellow fever was not contagious. A hundred years later the same opinion was re-affirmed and the non-contagious nature of yellow fever established by a commission.

While thus in the very midst of the battle Dorsey improved every opportunity of studying the disease and performed numerous autopsies, making careful bedside observations.

It was extraordinary that a youth not quite twenty should display such independent thought and action in so intricate a field as medicine, but it was a result of his inherent ability and the early training and being made to carefully enter up cases. Some of these books have been kept. The composition is simple but the descriptions clear and accurate presaging the future author of the first important American text-book on surgery.

In November, 1803, young Dorsey sailed for Europe with the intention of spending his time in the then two great medical centers, London and Paris. In London there lived and worked John Hunter and it was in Hunter's private dissecting-room that Dorsey's uncle distinguished himself as a pupil and received from his master the flattering offer of a partnership. Sir Everard Home, Hunter's brother-in-law, gave Dorsey a kindly welcome and the student at once plunged into hard work, attending diligently Hunter's Anatomical School. With this

fine mental equipment he left the following June for Paris, where, through the influence of Boyer, surgeon-in-chief of La Charité, he had permission to dissect in the "Salle de Répos," a fine name for a gruesome place which took Dorsey's fancy at once. It is curious that he makes no mention of the great French surgeons Sabatier, Dupuytren, Pelletan and Bichet, but enters in his diary "as to French surgery, I have learned nothing from it." In 1804 he returned to Philadelphia and took consulting-rooms, but for the first few years, notwithstanding help from his uncle, his income was not at all commensurate with his abilities. The first year he only took $325.75, but in the year of his untimely death, $10,199, this being partly from pupils and the sale of his book, "The Elements of Surgery," published in 1813 and illustrated mostly by the author. This work received a world-wide recognition, being reprinted in Edinburgh and used as a text-book in her university. "The American Surgeon," says the author, "is or ought to be strictly impartial and therefore adopts from all nations their respective improvements."

Amid the business of his own practice and helping Dr. Physick, he found time for both music and poetry, most of his poems bearing the impress of rhythmical beauty, one, penned in 1805 on "The Incomprehensibility of God," was evidently written with the greatest care. For music he had a warm liking and was himself proficient on several instruments. Add to this his skill in drawing, his wonderful conversational powers, his genial manners and handsome figure and you have one who stands out from the foreground of the eighteenth century prominent and attractive.

1807 saw him adjunct professor of surgery at Pennsylvania University, Dr. Physick requesting this in view of his own uncertain health, and the duties of the new assistant were fulfilled so thoroughly and humanely that his students loved him no less for his skill than his thought for them. That same year he married Maria, daughter of Robert Ralston, a Philadelphia merchant, and had a son and two daughters.

In 1813 Dorsey became professor of materia medica at the Pennsylvania University, a chair filled with singular ability until, in 1818, he was called to fill the chair of anatomy left vacant by the death of Dr. Wistar. Two years before he had sent to a medical journal the particulars of a case of inguinal aneurysm cured by tying the external iliac artery, the first example of the kind which had occurred in this country.

So the early age of thirty-five saw Dorsey with a prospect of ease, usefulness and increasing fame before him. His own poetic mind must have conjured up a delightful life among devoted friends and admiring pupils, but while the words of a brilliant introductory address were still fresh in the minds of his hearers Dorsey was dying from an attack of typhus which developed the evening of the same day in which he delivered his lecture.

"On approaching his bed at the head of which his mother was sitting" wrote Dr. Janeway, "Dr. Dorsey took hold of a button of my coat and thus addressed me: "Doctor, is it not remarkable that after having delivered my introductory lecture I was praying to my God that I might not postpone my repentance to a dying bed, and in one hour after that prayer I was smitten with my disease."

The large room in which he lay was filled with ladies and gentlemen, Physick, Hornes, Rolston and several medical students being there also. Dorsey then asked to be baptized, which was done by Dr. Janeway. His last words were: "I have a desire to live and remain with my family, but my desire to be with Christ is far greater."

Thus died a man whom a longer life would have seen equalling a Hunter or a Wistar, a man whose short life was so remarkable that it may long attract the reader of medical biographies.

A. R.

JOHN SYNG DORSEY.

(From a painting by T. Sully.)

Lives of Eminent Amer. Physicians.
Am. Med. Recorder, Phila., 1819, vol. ii, (portrait).
St. Louis Med. and Surg. Jour., 1851, vol. ix (H. Shoemaker).
There is a portrait in the Surg.-gen. Lib., Wash., D. C.

Douglas, Richard (1860–1908).

Born on December 20, 1860, the son of Byrd and Sarah Cragwall Douglas, he was commonly known, as "Dixie," because he arrived in this world the year South Carolina seceded.

Douglas belonged to the group of young surgeons who derived their inspiration from Lawson Tait and his contemporaries, they who began their work in the abdomen in the early nineties. He was a student under Granville Bantock in London and graduated from the medical side of the University of Nashville in 1881, completing his course in the Jefferson Medical College. From the beginning he gave promise of that brilliance which afterwards characterized his subsequent work, the painstaking care he showed as diagnostician being only exceeded by untiring zeal in his library and his keen interest in operating. He held the professorship of gynecology and obstetrics and later that of abdominal surgery in Vanderbilt University, also he was one of the founders of the Southern Surgical and Gynecological Society, his first paper contributed being one on the subject of "Peritonitis" in 1894, followed by "Splenectomy Statistically Considered," in 1896. His beautiful delivery and thorough mastery of his subject made a refreshing feature in medical meetings. A most exhaustive monograph on "Retroperitoneal Neoplasms" was his thesis in 1898, and his address on "Acute General Peritonitis," when elected president of the Southern Surgical and Gynecological Society, 1898, was equally valuable. He was likewise honored by other societies, being made president of the Tri-State Medical Society of Alabama, Georgia and Tennessee. His "Cysts of the Urachus," one of the best papers ever written, and "Gun-shot wounds of the Abdomen" ably embodied his experiences in the Nashville Hospital. Later he became very interested in tubercular peritonitis, his last paper before the Nashville Academy of Medicine being on that subject.

He was easily the leader in his state and had phenomenal success, but with the many endowments which nature lavished upon him he was also chastened with a peculiarly irritable disposition, with the result that he had many imaginary and real grievances which embittered his professional life but drew closer his devoted friends particularly a notable group of young men of his state for whom he had a great fascination. But his work on "Surgical Diseases of the Abdomen," 1904, had given him also an international reputation, and his comparatively early death which occurred from chronic nephritis on February 19, 1908, in Nashville, left a great regret that he had worked so hard and too feverishly for nature to fulfil his exhaustive demands.

W. D. H.

Trans. Southern Surg. and Gyn. Soc., vol xxi, 1909 (W. D. Haggard) (portrait).

Douglas, Silas Hamilton (1816–1890).

Silas Hamilton Douglas, physiologist, was born in Fredonia, Chautauqua County, New York, October 16, 1816 and had his general education in the Academy there and at the New York University. In 1838 he came to Detroit and studied medicine under Dr. Zina Pitcher, in 1841–42 taking a course of lectures at the Medical Department of the University of Maryland, and on June 3, 1842, was licensed to practise by the Censors, Michigan State Medical Society. At various times he accompanied Dr. Douglas Houghton on his geological surveys of Michigan and was employed as a physician on the staff of Henry R. Schoolcraft, in 1843 beginning to practise at Ann Arbor. 1844 saw him assistant to Prof. Houghton in the university and in charge of chemistry during the professor's absence in the

field, a duty which under various titles he conducted during the next thirty-two years after Dr. Houghton's death. For several years he employed a private chemical laboratory for teaching, but in 1856 the Regents, at his solicitation, erected a chemical laboratory at a cost of six thousand dollars and made practical chemistry a part of the curriculum. This was his great contribution to medical teaching—the initiation of laboratory training for the degree of M. D. He was largely interested in the founding of the medical department and remained with it until 1877, and had also charge of the erection of the observatory building at the university, the medical building, and other university works, doing good work as well in organizing the Ann Arbor water and gas works. While on his geological tours he collected a large cabinet of minerals which he gave to the university. The latter years of his life were embittered by a controversy over his accounts with the university, the matter finally reaching the Supreme Court and being decided in his favor. On May 1, 1845, Dr. Douglas married Helen Wells, who with seven children survived him when he died in Ann Arbor, August 26, 1890, from paralysis.

His chief writings included:

"Common Sense in Ventilation." (Michigan University Medical Journal," vol. i.)

"Method of Conducting Post-mortem Examinations in Cases of Suspected Poisoning." ("Peninsular Medical Journal," vol. i.)

"On the Analysis of Waters." (Peninsular Medical Journal," vol. i.)

"Michigan Coal; Its Analysis and Value for Gas." ("Peninsular Medical Journal," vol. iv.)

He was the author of a system of chemical tables which passed through four editions and which, enlarged by the aid of Prof. A. B. Prescott, M. D., into a text-book on "Qualitative Chemical Analysis," met a wide acceptance (three editions). L. C.

Hist. Univ. Mich., Ann Arbor, Mich., 1906.
Life by Prescott, Michigan Alumnus, Oct., 1902.
Portrait in Faculty Room, Medical Dept., Ann Arbor.

Douglass, William (1690–1752).

Dr. Douglass was born in Gifford, near Edinburgh, Scotland, in 1690. It is not known when he first came to America, but it is known that he studied in Paris, and was familiar with Latin, Greek, English, French and Dutch. He visited the French and English islands in the West Indies in 1717 and finally settled in Boston in 1718 and practised medicine.

Sometime previous to the outbreak of small-pox in Boston, in April or May, 1721, Dr. Douglass received from England the "Philosophical Transactions of the Royal Society" containing an account of the observations of Timonius and Pylarinus on inoculation for small-pox. These he sent to Dr. Cotton Mather, who, after reading and digesting their contents, conceived an enthusiastic belief in the efficacy of the practice. Mather started at once on a vigorous campaign of education and tried to elicit the support and interest of the medical profession. Probably he treated Douglass with too little consideration. At all events Douglass put himself in opposition and fought the new movement with all the resources at his command. He refused to loan again the only copy of the communications of Timonius and Pylarinus and attacked bitterly the work of Zabdiel Boylston, who had become the medical disciple of the learned minister, Mather. Douglass' opposition to inoculation brought him into considerable prominence. By 1730, when the small-pox appeared again, he had embraced inoculation although with a bad grace. He must have been held in considerable repute for he was made vice-president of the Scotch Charitable Society in 1721, and president in 1728, an office he held until his death. He was a physician to many of his countrymen in Boston. He was an ardent

botanist and was said to have a collection of more than eleven hundred plants, all found near Boston.

In Douglass' "Account of the Miliary Fever and Sore Throat," published in 1735–6, it appears that he had been in the habit of using mercurials in his practice for some time and that as early as 1721 he used calomel in the treatment of smallpox. We learn that Douglass had great success in the treatment of the "throat distemper" by the use of "well dulcified mercury, especially when joined with camphor."

He was a warm advocate and supporter of Gov. Belcher's administration, which ceased in 1741.

His propensity for writing was considerable, but he was not true to his principles, and veered about, as in the smallpox controversy, for when Gov. Shirley came in Douglass failed to applaud the same politics that found favor under Belcher. He was sarcastic and disagreeable in his remarks about his contemporaries and a caviller at the established order of things. In 1749 he published the first volume of his historical and political summary, embracing an account of all the American colonies. The second volume was not published until after his death. He published observations made by him respecting the variation of the needle of the compass, and also remarks on the differences of time in various parts of the world. He died suddenly October 23, 1752. So far as is known he was never married.

In his "Practical Essay Concerning the Small-pox," London, 1730, Dr. Douglass says (p. 63): "How mean or rash soever the beginning of inoculating the smallpox may have been, if many years practised by old women only, and neglected by the sons of art in Turkey; if in another part of the world a person of no literature, and of habitual rashness, from a third hand hearing of an overcredulous person, first attempted it indifferently on all who would pay for it without regard to age, sex, constitution, other circumstances and cautions, which tryals of such consequence require, as it is one of the inconveniences of human life that all the world over, ignorance, assurance and rashness pushes on some to attempt without fear or discretion what would make the most exquisite artist tremble to touch; nevertheless—if in the event by repeated experiments it prove useful, it ought to be embraced." W. L. B.

Amer. Med. Biog., 1828. James Thacher. A Brief Memoir, by Timothy L. Jennison, M. D.
Elliot's Biog. Dict. of the First Settlers of N. E., 1809.
Hist. of Harvard Med. School, T. F. Harrington.
Med. Com. Mass. Med. Soc., 1836, vol. v, p. 195.
The Abuses and Scandals of Some Late Pamphlets in Favor of Inoculation of the Small-pox Modestly obviated and Inoculation furthur considered in a Letter to Alexander Sandilande, M. D. and F. R. S. in London (by William Douglass, M. D.), 1722.

Dowell, Greensville (1822–1881).

Greensville Dowell, a noted surgeon of Texas, was the son of James and Frances Dalton Dowell, and born in Albemarle County, Virginia, on September 1, 1822. As a lad he went to the local schools and afterwards attended medical lectures at the University of Louisville and took his M. D. from Jefferson Medical College in 1846. Up to 1852 he practised at Como, Mississippi and finally settled in Galveston. He did a considerable amount of successful surgery, and enjoyed, perhaps, as much reputation as an operator as any of his professional contemporaries in this section. Original, bold and resourceful, with more opportunity and training, his achievements in surgery might have been brilliant. He devised several surgical operations, among them one for hernia, and invented a number of surgical instruments. The first medical periodical ever published in the state, the "Galveston Medical Journal" (1866–1870), was established and edited by Dowell. He was the author of two books on medical subjects, one on yellow fever, the other on hernia. While not included among the classics on these subjects, it is

conceded that they contain many valuable truths. To him is accorded priority in directing attention to the momentous fact that yellow fever is transmitted by mosquitoes (1876) five years before Dr. Finlay enunciated his theory on that subject. He was the first to perform the operation which Hahn, of Berlin, named nephrorrhaphy. Dowell fixed the kidney by a tape suture in 1874 ("Annals of Surgery," vol. xii, p. 87), seven years before Hahn introduced it to the profession.

He married, in June, 1849, Sarah Zelinda, daughter of John H. White, of Como, Mississippi, and when she died, leaving him two sons and one daughter, he wedded in 1868 Mrs. Laura Baker Hutchinson, of Galveston, who was very beautiful.

On the night of the wedding the boys resolved to give them a charivari, but the doctor considered the mock seranade an insult. He seized a club and rushed out to disperse the crowd and in the melée sustained a severe fracture of the right arm.

For two years he was professor of anatomy in the Soulé University, also lecturer on surgery when that institution became the Texas Medical College. In 1863 he became a surgeon in the Confederate Army and was also on the staff of the Galveston General Hospital. He died on June 9, 1881. J. F. Y. P.

Tr. Am. Med. Assoc., Phila., vol. xxxiii, 1882.

Downer, Eliphalet (1744–1806).

Eliphalet Downer, widely known as the "Fighting Surgeon," was the son of Joseph and Mary Sawyer Downer, of Norwich, Connecticut, and a descendant of Robert Downer, who settled in Newbury, Massachusetts about the year 1650. Eliphalet was a native of Roxbury, Massachusetts, but at the time of the Revolution owned a house on Washington Street, Brookline (still standing) near the famous Punch Bowl Tavern. Drake (History of Roxbury, p. 348) speaks of Downer as a "skillful surgeon.

In December, 1775 Downer was surgeon to one of the regiments under Gen. Putnam at Charlestown while the militia were fortifying Lechmere Point. Soon after the evacuation of Boston by the British he enlisted as surgeon to one of the first privateers fitted out in New England. It is said that he worked one of the guns on board the sloop "Yankee" when two sloops loaded with rum and sugar were captured. Later on he was on board the "Alliance" when she was captured at sea after fighting seven and a half hours and losing both her masts. He was severely wounded by grape-shot, receiving a compound fracture of the left arm, and was thrown into Portsea Prison, near Portsmouth, England. He made his escape by tunnelling and succeeded in reaching France. On two other occasions he was captured by the British and was imprisoned in Dartmoor and Forten Prisons but managed to effect his escape. His family, a wife and four children, had a hard time to get the means of subsistence during the three years he was away from home, all this time it is said his wife received but one letter from him. On July 9, 1779 Downer was commissioned chief surgeon to the Penobscot expedition, with which he served three months, losing all his surgical instruments, so the Massachusetts Legislature appropriated the sum of fifteen dollars to reimburse him. This was the last of his services on sea or land in the cause of freedom.

At the close of the Revolutionary war he resumed practice in Brookline and was said to have a large and lucrative one. He died in Brookline, April 4, 1906

W. L. B.

Memoirs of Major-general Heath, 1798, Boston.
The Downers of America, by David R. Downer, Newark, 1900.
Medical Men of the Revolution, J. M. Toner, 1876, Philadelphia.

Drake, Daniel (1785–1852).

In a letter dated Louisville, December 15, 1847, Daniel Drake says: "My father, Isaac, was the youngest son of Nathaniel Drake and Dorothy Retna;

DANIEL DRAKE.

(Applegate & Co., Cincinnati.)

my mother, Elizabeth, was the daughter of —— Shotwell and —— Bonney," and that is all he knew of his ancestry. He himself was born in Essex County, New Jersey, on October 20, 1785. When he was two and a half his father moved to May's Lick, Kentucky. Here he lived in a log cabin until fifteen years old, attending school from November until March of each winter. Of the classics he knew nothing until he began to study medicine.

In the fall of 1800 he went to Cincinnati and began to study under Dr. Goforth. At that time a student was required not only to read his preceptors books, but to fill prescriptions and attend to the consulting-room, generally a diminutive drug store. Dr. Drake's first tasks were to read Quincy's "Dispensatory" and grind mercury for mercurial ointment. The latter he said was much the easier task of the two. At the end of four years he received an autograph diploma from Goforth signed as "Surgeon-general, First Division, Ohio Militia." It was the first diploma ever granted in the west, and Dr. Drake prized it above all others as an old-time memorial.

In the autumn of 1805 he went to Philadelphia to attend University lectures and in the following spring returned to Cincinnati, making the journey on horseback in about thirty days. One year, 1806, was spent in Kentucky, and on the twenty-first of December, 1807, he married Harriet Sisson, granddaughter of Col. Jared Mansfield, surveyor-general. of the northwest territory.

In September, 1809, they lost their first child, Harriet, and in 1816 a second, John Mansfield, born in 1813. Three more children were born, Charles D., Elizabeth M. and Harriet E. Mrs. Drake died September 30, 1825.

Dr. Drake attended his second course of lectures in the University of Pennsylvania in 1815, graduating in 1816, and in 1817 held the chair of materia medica in Transylvania University, Lexington, Kentucky. After the first session he returned to Cincinnati and in 1818 planned a college, medical school and hospital, and in 1819 visited Columbus, Ohio, to lay his plans before the Legislature. They were adopted at once, and charters granted for the Cincinnati College, for the Medical College of Ohio, and for the Commercial Hospital. By contract with the secretary of the Treasury the latter hospital became also the Marine Hospital of the United States.

The first session of the Medical College of Ohio was held during the winter of 1821–22, with Drake as lecturer on the institutes and practice of medicine, including obstetrics and diseases of women and children. Before the close of the session misunderstandings sprang up, and Drake was expelled by the votes of two colleagues. In 1823 he went back to Lexington, Kentucky, and resumed the chair of materia medica, but in 1825 was transferred to the chair of practice, retained until 1827.

In 1830 he held the professorship of practice in Jefferson Medical College, Philadelphia. There he created quite a furor by his eloquence, not only among the profession, but also the students. At the end of the term he returned to Cincinnati and founded a medical department to Miami University, which, however, united with the Medical College of Ohio before the opening of the first session. Dr. Drake was assigned a subordinate position, and once more retired to private life.

In 1835 he organized the medical department of Cincinnati College. His colleagues were: Drs. Landon C. Rives, Joseph N. McDowell, John P. Harrison, J. B. Rogers, H. G. Jameson, and S. D. Gross. When the Cincinnati school closed, Dr. Drake was appointed professor of clinical medicine and pathological anatomy in the University of Louisville. In 1844 he was transferred to the chair of practice of medicine until 1849, when he resigned and once more returned to Cincinnati. In this year he was reappointed professor of practice in

the Medical College of Ohio, but trouble arose and in the spring of 1850 he resigned. In the autumn of 1850 he was recalled to Louisville where he filled the chair of practice of medicine in 1851–52. In 1852 he returned to Cincinnati, and to the Medical College of Ohio, then reorganized. But his work was done, he saw only the opening exercises of the session.

In 1835 he exerted himself to enlist the people of Ohio and the southwest in favor of a chain of railroads from Cincinnati to the coasts of South Carolina and Georgia. He made an elaborate report, showing the political and commerical advantages that would accrue to the states through which the road would pass. The scheme failed through the unwillingness of one of the states to grant the right of way. More than fifty years later his wishes were realized.

Dr. Drake was a voluminous writer. His first work was on the "Topography, Climate and Diseases of Cincinnati," published in 1810, and in 1815 his celebrated "Picture of Cincinnati." 1827 saw him editing the "Western Journal of the Medical and Physical Sciences," which he continued to do until 1836. In 1832 he published a "Practical Treatise on the History, Prevention, and Cure of Epidemic Cholera." His "Discourses" were delivered in July, 1852, before the Cincinnati Medical Library Association, but the crowning glory of his life was "The Diseases of the Interior Valley of North America." In 1822 he announced his intention of preparing it, but it was not until 1837 that he began in earnest the collection of material.

In the prosecution of this work he made several tours through the West and South. Finally the first volume of the work was presented to the profession in 1850. The second volume did not appear until November, 1854, two years after the death of the author.

Dr. Drake received many tokens of honor from scientific bodies at home and abroad.

He died in Cincinnati, November 5, 1852 from arachnitis, brought on by overexertion of the brain.

His writings included:

"Natural and Statistical View, or Picture of Cincinnati and the Miami Country," illustrated by maps. With an appendix; 251 pages, 2 illustrations, 2 maps, 8°. Cincinnati, 1815.

"An Inaugural Discourse on Medical Education," 31 pages, 12°. Cincinnati, 1820.

"A Narrative of the Rise and Fall of the Medical College of Ohio," vi—7–42 pages, 12°. Cincinnati, 1822.

"A Practical Treatise on the History, Prevention and Treatment of Epidemic Cholera, Designed both for the Profession and the People," 180 pages, 12°. Cincinnati, 1832.

"An Account of the Epidemic Cholera as it Appeared in Cincinnati," 46 pages, 8°. Cincinnati, 1832.

"The War of Extermination," 15 pages, 8°. Cincinnati, 1839.

"An Introductory Discourse to a Course of Lectures on Clinical Medicine and Pathological Anatomy," 16 pages, 8°. Louisville, Kentucky, 1840.

"A Memoir on the Disease called by the People, 'The Trembles,' and the Sick Stomach or Milk Sickness, as They Appear in the Virginia Military District in the State of Ohio," 57 pages, 8°. Louisville, Kentucky, 1841.

"Analytical Report of a Series of Experiments in Mesmeric Somniloquism, Performed by an Association of Gentlemen; with Speculations on the Production of its Phenomena," 56 pages, 8°. Louisville, 1844.

"Strictures on Some of the Defects and Infirmities of Intellectual and Moral Character in Students of Medicine; an Introductory Lecture," 16 pages, 8°. Louisville, 1847.

"A Systematic Treatise, Historical, Etiological and Practical, on the Principal Diseases of the Interior Valley of North America, as They Appear in the Caucasian, African, Indian and Esquimaux Varieties of its Population." Cincinnati, 1850.

"Pioneer Life in Kentucky, a Series of Reminiscential Letters to His Children, Edited with Notes and a Biographical Sketch by his Son, Charles D. Drake," portrait. Cincinnati, 1870.

"An Oration on the Intemperance of Cities, Including Remarks on Gambling, Idleness, Fashion, and Sabbath-breaking," 30 pages, 8°. Philadelphia, 1831.

A. G. D.

Mansfield (E. D.). Memoirs of the Life of Drake etc., 8°. Cincinnati, 1855.
New Jersey M. Reporter, Burlington, 1853, vi.
Tr. Col. Phys., Philadelphia, 1853, 6.
Gross's Lives of Eminent Amer. Phy., Phila., 1861.
West. J. M. and S., Louisville, 1854, 4 s., ii, L. P. Yandell.
Pepper, W. Daniel Drake, or Then and Now (J. Am. M. Assoc., Chicago, 1895, xxv). For portrait, see collection of portraits Surg.-gen. (Lib.). Washington, D. C.
Daniel Drake and His Followers, Otto Juettner, Cincinnati, 1909.
Biographical Notice of Daniel Drake, Charles D. Meigs, 1853.

Draper, Henry (1837–1882).

Henry Draper was born in Prince Edward County, Virginia, March 7, 1837. His father, John William, was widely known as a chemist, physiologist, political philosopher, and more especially as the author of "The Intellectual Development of Europe." Three years after the birth of Henry, his second son, the elder Draper accepted the chair of chemistry in the University of the City of New York. After a course in the primary and preparatory schools, Henry was admitted, at the age of fifteen, to the academic department of the University. A medical department having been founded by his father, the son graduated from it in 1858. The following year he spent in Europe, visiting and studying, as few tourists do, places and instruments connected with great scientific investigations. What particularly attracted his attention was the six-foot reflecting teleseope of Lord Rosse, and to the interest excited and the field of enterprise suggested are largely due his subsequent achievements in celestial photography. Upon his return to this city he was appointed a member of the medical staff attached to Bellevue Hospital, and for eighteen months discharged the varied duties. His tastes, however, lay in an altogether different direction, so he abandoned the practice of medicine, except the chair of physiology in the academic department of the University, accepted in 1860, and six years later he was installed professor of physiology in the medical department, but his desire to devote his attention more closely to astronomical matters in which he had already acquired well-deserved distinetion prompted him to sever his connection altogether from his alma mater.

The interest manifested by the elder Draper in photography—he having been allowed by his friends the honor of having taken what in 1839 was known as the first Daguerreotype—was the stimulus for the utilization of the art in determining the charaeter of celestial bodies. In his observatory on his father's grounds at Hastings-on-the-Hudson, he made his observations, and an incredible number of experiments in furthering his work. His first investigations in science were made when an undergraduate in the medical department at the age of twenty, by a series of experiments on the functions of the spleen, aided by microscopic photography, an art then in its infaney. It was in the course of this research that he discovered the great advantage possessed by protochloride of palladium in darkening collodion negatives. Shortly after his return from Europe he constructed a reflecting telescope of fifteen and one-half inches diameter, with which he was enabled to procure a photograph of the moon fifty inches in diameter, the largest ever made.

Prof. Draper was the first to demonstrate the superior value of chemically pure silver over all known substances in the construetion of the spectrum. This was the result of the experiments resorted to in the construction of his

famous equatorial telescope, with its aperture of twenty-eight inches, which was to prove of such value in photographing the spectra of the stars. Its mounting and its silvered spectrum were made with his own hands, and in 1872, after a long series of tests, he satisfied himself and others that his instrument was a success. Pres. Barnard, of Columbia College, wrote of it as "probably the most difficult and costly experiment in celestial chemistry ever made." With the aid of his new instrument Prof. Draper obtained a photograph of the fixed lines in the spectra of stars, and, with but a single exception, no one by repeating the experiment has since claimed a share in this honor. The discovery of the gelatino-bromide "dry process" in photography greatly lessened the difficulties in the way of this exceedingly delicate branch of celestial investigation and enabled him to secure upwards of one hundred of the spectra of various stars.

In 1872 Prof. Draper obtained a photograph of the diffraction spectrum which has never been excelled. It comprised the region from below G, wave-length 4,350, to O, wave-length 3,440, on one plate. Small portions of the diffraction spectrum have since been taken on a larger scale, though none of them were veritable for determining the relative wave-lengths of the fixed lines. Secchi, in his masterly work on the sun, used an illustration from this photograph of Prof. Draper's, and the British Association recognized its value by reproducing and indorsing it as the best that had ever been taken. The transit of Venus in 1874 afforded an exceptional opportunity for the display of perfected photography, and Prof. Draper, as its ablest exponent, was appointed superintendent of the photographic department by the commission which was sent out by this government to observe the phenomenon. His work was so successful and so gratifying to scientific men that it won from Congress a special gold medal, struck off at the Philadelphia Mint, and bearing the legend "Decori Decus Addit Avito"—"He adds luster to ancestral glory." This was the first instance in the history of the United States that any such recognition was given by Congress to a scientist.

Perhaps Prof. Draper's most remarkable achievement was his discovery of oxygen in the sun. This was in 1877, after a long and costly investigation of the lines in the solar spectrum. It was a revelation to scientific men which created intense interest, provoked much discussion and some criticism. A trip to Europe by Prof. Draper was one of its results. He laid his facts before the British Association and the French societies. The latter acknowledged the correctness of his views and applauded his discovery. There was a disposition to dissent from them among the English scientists, although the preponderance of opinion was in his favor. Subsequent investigations have tended to prove the soundness of his judgment. For the purpose of determining whether from an observatory in a high and dry region many of the obstacles now encountered in the use of very large telescopes could not be removed or greatly lessened, Prof. Draper made a trip to the Rocky Mountains in 1877, and undertook a series of experiments on the lofty plateau between the Rocky Mountains and the Sierra Nevadas. The conditions of the atmosphere, however, were found to be little more favorable than those met at lower levels, and the only conclusion that was arrived at was that the summit of a lofty mountain near the seacoast was best adapted to the purposes of astronomers. A total eclipse of the sun, observed by the professor from the same elevated standpoint the following year, afforded another illustration of the nicety with which his photographic apparatus registered celestial phenomena. The last two years of his life were devoted mainly to taking photographs of the nebula in Orion, a feat which only those who are intimately acquainted with the subject can properly appreciate. Only after the most

laborious efforts was he able to accomplish results in this special field.

With too little opportunity for authorship, save so far as occasional papers on the progress and results of his researches were concerned, only two works stand prominent, one "On the Construction of a Silvered-glass Telescope," the other "A Text-book of Chemistry." These, with his other papers and contributions to scientific periodicals, comprise the bulk of his literary work. He paid strict attention to his duties as a professor and was eminently qualified to fill the chair of chemistry in the academic department of the university, to which he was called on the death of his father.

It was his habit, whenever the National Academy of Sciences held an annual meeting in this city, to entertain its members in splendid style at his Madison Avenue mansion. At these dinners he almost invariably gave an illustration of some new invention of interest to the scientific world. One of these entertainments took place on the night preceding his illness, and was remarkable for the display given of lightning by electricity. The motive force for these displays was furnished by a gas engine of four-horse power, which was situated in the laboratory at the rear of the house. A visit to this laboratory has always been considered an event of no common importance by those who have had the good fortune to be admitted to it. All the newest electrical appliances, dynamos, arc and incandescent lamps, induction coils and batteries, were to be found under its roof, to say nothing of the collection of delicate instruments required in astronomy, spectrum analysis, and photography. He died November 20, 1882, of pleuro pneumonia, supervening upon exposure to a severe snowstorm in the Rocky Mountains, whither he had gone some months before to make certain scientific observations.

Med. Reg. of the State of New York, 1882.
Med. and Surg. Reporter, Phila., 1882, vol. xlvii.
Pop. Sci. Mon., N. Y., 1882, vol. xxii.

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Draper, John William (1811–1882).

"A native respect for republican institutions" is the reason assigned by an old biographer for John Draper having left England for America. Be that as it may, he was soon equally well known in both countries. Born May 11, near Liverpool, the son of John Christopher and Sarah Draper, his father a Wesleyan minister, he was educated at a Wesleyan school, the Woodhouse Grove Academy. A clever lad, at fourteen he was studying Hebrew and the old divines and meant to be a minister, but a strong bent towards natural philosophy and chemistry drew him away, and at sixteen he became one of the first students at the newly-opened London University, whereunto flocked men of high learning from all parts of the world.

But at seventeen, on the death of his father, he had left to his charge a large family, but he bravely took his fathers place, yet went on with his studies, his first original work being accomplished while he labored with Dr. Turner, when he analyzed a fossil hydrocarbon.

His mother's uncle, Commodore Ripley, United States Navy, had settled in Virginia, and in 1833 young Draper went out there and continued his scientific pursuits and studied at the University of Pennsylvania, graduating M. D. from there in 1836, his thesis on "Absorption" winning so high an opinion from the faculty that they had it published in the "American Journal of Medical Sciences." After practising a short time in Mecklingburg, Virginia, he became professor of chemistry at William and Mary College, Virginia, and soon after occupied the same chair at Hampden Sidney College. Here a fine library and the valuable instruments collected by Pres. Cushing made Draper joyfully labor from early dawn far into the night, his papers on "Absorption," "Glandular Action," and equally valuable ones on "Solar Light" and "Thermo-electricity" attracting attention throughout Europe and being translated into German.

Almost immediately after taking his

diploma he was made professor of chemistry, natural philosophy and physiology in the University of New York, and in 1841 professor of chemistry in the University Medical College.

In company with Paine, Mott, Bedford, Pattison and Revere he inaugurated the New York University Medical College in 1841, himself occupying the chair of chemistry.

Although he practised as a physician in Virginia and New York, it may be said of him that he spent more time and patience in perfecting hygiene as the result of experimentation than many physicians during a life-time of practice. During his chemical experiments he did much for photography in the way of original processes and he was the first in the state to take a daguerreotype portrait. When the news of Daguerre's photographic discovery came to New York Draper fitted an ordinary spectacle lens into a cigar case and began his experiments first by taking views out of a window and afterwards by taking portraits. To shorten the time of exposure he whitened the faces of his sitters. He had a most original theory which must be styled pantophotography. He believed that no action at any time or place goes unrecorded; in other words that an action done in a room or court would be permanently photographed on the surrounding sides, the next deed being photographed over this. So, if the tombs of the Pharaohs could be opened, Draper believed that by a proper series of actions a funeral procession of over 4,000 years ago could be brought to view.

In May, 1866, his fine library, his extensive notes and apparatus were all burned; a severe loss to such a book-lover and writer.

He was married to Astoria C. P. Gardner in England, a daughter of Dr. Gardner of Rio Janeiro, and had six children. Two of his sons, Henry and Daniel, became distinguished in science.

Physiology and chemistry, botany and natural history took the greater part of his time. As a lecturer he was concise without being ambiguous, calm and unimpassioned in utterance. "He would explain the phenomena of lightning or manufacture prussic acid in the same tone and way in which he lectured on milk, and having told his story left enthusiasm to his hearers."

His biographer gives as two of Draper's virtues, first that he considered smoking "a dirty practice" and "belonged to the Protestant Episcopal faith."

He died at Hastings-on-the-Hudson on January 4, 1882, leaving a gap which only a very eminent and philosophical thinker could fill.

Dr. Draper's numerous and valuable experimental researches were published in the "American Journal of the Medical Sciences," "London and Edinburgh Philosophical Journal," and the "American Journal of Science and Arts." He was likewise the author of many literary works and reviews: "A Treatise on the Forces which produce the Organization of Plants" (1844); "A Text-book on Chemistry" (1846); "A Text-book on Natural Philosophy" (1847); and one on "Human Physiology" (1856), which passed through numerous editions. His "History of the Intellectual Development of Europe" appeared in 1852, and was almost immediately afterwards republished in England and translated into French, German, Italian, Polish and Russian, and has passed through many editions in this country. In some respects, his most important work was the "Conflict between Science and Religion," which attracted great attention, and was translated into all the principal languages. He was also the author of "A History of the American Civil War" and "Thoughts on the Future Civil Policy of America."

In 1874 the American Academy of Science conferred on him the Rumford medal, the highest distinction in their gift, for his researches on "Radiant Matter."

Abridged from Distinguished Living New York Physicians. Dr. S. W. Francis. Boston Med. and Surg. Jour., 1843, vol. xxvii.

Med News., Phila., 1882, vol. xl.
Nature, London, 1881–2, vol. xxv.
Phila. Med. Times, 1881–2, vol. xii.

Draper, William Henry (1830–1901).

William Henry Draper was born October 14, 1830 and died in New York City April 25, 1901.

He graduated in arts from Columbia in 1851, afterwards becoming a student under Dr. Willard Parker and received his M. D. from the College of Physicians and Surgeons of New York in 1855, while in 1857 his alma mater conferred upon him the degree of M. A.

He was clinical professor of diseases of the skin at the College of Physicians and Surgeons from 1869–79, and although lectures had been given on this subject before in this college he was the first to hold the professorship and was one of the founders of the American Dermatological Association, but after relinquishing his dermatological professorship, he gave his entire attention to clinical medicine, and is remembered rather as a clinician than as a dermatologist, being consulting physician to St. Luke's, Roosevelt and Presbyterian Hospitals, and visiting physician to the New York Hospital.

He was a member of the New York County Medical Society and president of the Academy of Medicine.

He was a careful, though not voluminous writer, and was the author of a small treatise on dermatology.

J. M. W.

Drinkard, William Beverly (1842–1877).

A native of Williamsburg, Virginia, his mother was Mary Frances Martin, daughter of William Beverly Martin. Dr. Drinkard lived in Virginia until 1857, when he came to Washington and attended the school of Mr. Charles B. Young, where he showed fine intellectual qualities. He attended Georgetown Medical College a short time, and in May, 1860, sailed for Europe and became a pupil at the Lycée Imperiale, Orleans, France, whence he went to Paris, and in November, 1861, began to study medicine with ardor and devotion. As assistant in the ophthalmological clinic of Desmarres he had abundant opportunities to study eye disease. Dr. Drinkard also served as interne in the hospitals and came in contact with the eminent teachers of the time—Velpeau, Nélaton, Malgaigne, and others.

In 1865 he went to London where he received the degree of M. R. C. S. and in the autumn of 1865 returned to Washington and took his M. D. at Columbia College, District of Columbia. Immediately after graduation he began to practise, being in a short time made demonstrator of anatomy in the National Medical College, and lecturer on minor surgery. In 1872 he was elected professor of anatomy, which chair he held at the time of his death. He was one of the founders of the Children's Hospital, his special department being diseases of the eye and ear.

As an ophthalmologist, the great care which he bestowed on his cases, the thoroughness of his clinical examinations, the precision and nicety of his manipulations established the strongest confidence in his ability.

No death ever occurred among the younger members of the medical profession in Washington which was so generally lamented as that of Dr. Drinkard on February 13, 1877. D. S. L.

Transactions American Medical Association, 1878, lxxix.
Minutes of Medical Society D. C., February 4, 1877.
National Medical Review, January, 1878, vol. i.
Busey. Reminiscences.

Drummond, William Henry (1854–1907).

Known equally as physician and poet, he was the son of George Drummond, an officer in the Royal Irish Constabulary, and Elizabeth Morris Soden, he was born at Currawn House, Leitrim County, Ireland, April 13, 1854. Educated at Mohill, Leitrim County, and at Montreal High School, he studied medicine at Bishop's College, graduating in 1884, and was professor of medical jurisprudence, 1893. In 1894 he married May Isabel, only daughter of Dr. O. C. Harvey

of Jamaica, and was survived by her and two children.

Dr. Drummond retired from active practice in 1905, to occupy himself with large mining interests which he had acquired in northern Ontario. An outbreak of small-pox in the camp required his presence in Cobalt, and it was while attending to his duty that he was stricken with paralysis. He died in Cobalt amid the wild scenes he loved so well, on April 6, 1907. The end came as a complete surprise to his friends. His splendid physique and fine frame, his cheerful aspect and vigorous habit of life gave promise of an old age which only the slow process of decay should destroy. His untimely death made a profound impression throughout Canada and also in the United States where he was well known. The "Montreal Medical Journal" summed up the general feeling in the words: "By his vision we see our compatriots in a new and kindly light. So long as men love the open life, the honorable chase of game, the smell of the earth, and the sounds of the forest, his spirit will continue to haunt the Laurentian hills, the blue lakes which he among them, and the swiftly flowing waters of which he sung." Better known as poet than physician, he yet practised medicine in Montreal for twenty-three years, and occupied a professional chair for fifteen. He was probably the most widely known of Canadian writers on account of the vogue which his verse, written in the *patois* of the *habitant*, obtained. His first volume, entitled "The Habitant," was issued in 1898, and it quickly attained a large sale. It was followed by "Madeleine Verchères," "Johnny Couture," and "The Voyageur." His best known pieces are "The Wreck of the Julie Plante," "The Papineau Gun," and "Le Vieux-Temps." Dr. Drummond had the quality of great poets in that he saw beauty in common things, pathos in lowly life, humor in dull uniformity. The vein which he discovered was small, but it was pure and new. He discovered the French-Canadian and embodied him in literature, as well as it could be done. What Burns did for Scotland he did for Quebec.

A. M.

Montreal Med. Journal, May, 1907.

Du Bois, Abram (1810–1891).

Abram Du Bois, one of the founders of the American Ophthalmological Society, was a pupil of Dr. Kearney Rodgers of New York, and became his associate at the New York Eye Infirmary in 1843, with which institution he was actively connected for forty-eight years. He was not an author, but was fully devoted to his profession and pursued it with noble aims and in a worthy spirit, and made a generous gift to the library of the New York Academy of Medicine.

He died in New York City, August 29, 1891, aged eighty-one years. H. F.

Trans. Am. Oph. Soc., vol. vi, 1891.
Purple S. S. Memoir, Tr. N. York. Med. Ass., vol. ix, 1892.

Dudley, Augustus Palmer (1853–1905).

A. P. Dudley was born at Phippsburg, Maine, July 4, 1853. His father, Palmer Dudley, and his mother, Frances Jane (Wyman) Dudley, were natives of that state. While a young lad his parents moved to Bath, where he received his education in the city schools. Soon after leaving school at Bath his parents moved to Portland and young Dudley became an apprentice to the Portland Company, manufacturers of all kinds of iron and steel machinery. He served his apprenticeship faithfully, and when he left there he could (to use his own words) "build and run a locomotive, make a needle or a pen-knife." He had other aspirations and ambitions to the extent of reading and reciting in anatomy at irregular intervals in the office of his life-long friend, Dr. B. B. Foster, and worked with the writer as a regular student. He was always ready to do anything in the line of professional work. At one time he took the position of night nurse at the Maine General Hospital, and improved all opportunities of seeing clinical work at the

hospital and with surgeons in private practice.

He took his first course of lectures at the Maine Medical School, where he was, for a time, demonstrator of anatomy. He graduated at Dartmouth Medical School in 1877, and immediately commenced practice in Portland, where he remained until 1881, when his ambition led him to go to the Woman's Hospital in New York, where he remained as an interne for a year and a half. From there he went to San Francisco, California, as assistant surgeon in the State Woman's Hospital, returning to New York in 1884. He was appointed instructor in diseases of women at the Post-graduate Medical School in 1887 and visiting gynecologist to Randall's Island Hospital and Northeastern Dispensary, and was afterwards made full professor of gynecology and surgeon at the Post-graduate Medical School and surgeon to the Harlem Hospital.

He was also professor of diseases of women at the University of Vermont, and later professor of gynecology at Dartmouth Medical School, which position he held until death.

He wrote very many valuable papers for publication, some of them being translated for foreign medical journals. Nearly all this literary work was original investigation and a résumé of his clinical teaching. Among the most important papers are "Vaginal Hystereetomy in America;" "A New Method for Restoration of Lacerated Perineum;" "A New Method for Treating Certain Forms of Displacements." His most prominent papers were upon the "Conservative Treatment of the Uterine Appendages."

Dr. Dudley married twice. In July, 1884, to Susie Stephens, daughter of Jesse Mason, of Victoria, British Columbia, who died three years later of consumption, leaving no children. In 1891 to Cassandra Coon, daughter of W. J. Adams, of San Francisco, California, who with two daughters survived him.

He was a fellow of the American Gynecological Society, British Gynecological Society, Maine Medical Association, New York State Medical Association, New York Academy of Medicine, and the New York Obstetrical Society.

After having an examination which showed tuberculosis, he decided to go to the Swiss mountains, hoping much from the sea voyage and the altitude of Davos Platz. He sailed from New York on July 5, but died in Liverpool, England, July 15. The body was brought to Portland, Maine. S. C. G.

Trans. Am. Gynec., Soc., 1906, vol. xxxi.

Dudley, Benjamin Winslow (1785–1870). This lithotomist and pioneer surgeon was born in Spottsylvania County six miles east of Lexington. His father, Ambrose Dudley, was captain of a company in the Revolutionary War and later became a Baptist minister.

Benjamin Dudley received such education as the ordinary schools of his day and place offered. He made no pretensions to either Greek or Latin. His command of French he acquired abroad. He was neither a student nor were his inclinations literary.

While very young he was placed under the tutelage of Dr. Frederick Ridgely. In this he was fortunate, and it is entirely reasonable for one familiar with Ridgely's life to believe that this doctor, besides furnishing him with the best early example, supplied him through his lasting influence with much of the fire that characterized his life.

In the autumn of 1804 he matriculated in the University of Pennsylvania, and among his fellow students were Daniel Drake, John Esten Cooke, and William H. Richardson, all of whom were afterwards associated with him in teaching and in practice.

At the close of his course in Philadelphia, during the spring and summer months of 1805, he worked with Dr. James Fishback, who was both preceptor and partner of Dudley, and characterized as an eloquent, learned, though erratic divine, an able writer, a physician in good practice, an influential lawyer, and

an upright citizen. He was made professor of theory and practice of physic in the Medical College of Transylvania University in 1805, but resigned the following year.

In the fall Dudley returned to the University of Pennsylvania, receiving his M. D. there in March, 1806, just two weeks before he was twenty-one.

Returning to Lexington he began to practise, but being ambitious, he was dissatisfied with his knowledge and decided to further qualify himself under some of the more famous men of Europe. With this end in view he added some commercial business to the practice of physic, and in 1810 descended the Ohio River to New Orleans in a flat boat. This was just one year before the first experimental steamboat was launched upon those waters. At New Orleans he bought a cargo of flour with which sometime in that year he sailed to Gibraltar. Disposing of his cargo advantageously at that point and at Lisbon, he made his way through Spain to Paris. Nearly four years were spent in Europe, the best part of the time passed in the hospitals and dissecting-rooms of Paris. It was here that much of the foundation of his future success was laid, and his knowledge of anatomy was mainly acquired, but his surgical training he received in London. In his manners he was French, in methods English. Larrey, the surgical genius of the Napoleonic wars, came in for a large share of Dudley's admiration, but the hard sense of the English appealed more strongly to him. Abernethy he regarded as the leading surgeon of Europe, and Sir Astley Cooper was his ideal operator.

During his stay in Europe he also traveled in Italy and Switzerland and returned to Lexington in the summer of 1814, a member of the Royal College of Surgeons.

Collins refers to his misfortune of losing his books, instruments and a cabinet of rare minerals by the burning of the Custom House at London.

In 1815 he was appointed professor of anatomy and surgery in the medical department of the Transylvania University. He held both chairs until 1844, after which he retained only that of surgery. His last course of lectures was delivered in the session of 1849–1850, and about this time he also gave up his extensive practice and retired to private life.

After the reorganization of the medical department of the Transylvania University in 1817, friction arose between members of the faculty. A duel resulted in which Dudley wounded his opponent in the thigh or, according to others, the groin. It is said he would have bled to death but for Dudley, who asked permission of his adversary to arrest the hemorrhage, which he did by the compression of the vessel with his thumb until it could be definitely controlled, by this act converting an adversary into a life-long friend.

In appearance he was a man of slender frame, but of erect carriage and of most courteous and dignified deportment, while as a teacher his popularity was unsurpassed.

It was as a practical surgeon his reputation was established. He is credited with having performed lithotomy in the course of his life two hundred and twenty-five times, and it was not until about the hundredth case that he lost a patient. Lithotrity he never adopted, but performed the lateral operation, his favorite instrument being the gorget, invented by Mr. Cline of London. In all his operations he used but two sizes, the smaller seven-tenths larger, the latter eight-tenths of an inch broad in the blade. Although an expert operator, he was cautious rather than bold and conservative rather than adventurous, not inclining at all to operate in doubtful cases. He laid great stress upon the preparatory treatment, to which he was more inclined to attribute his success than to his superior skill. The period of preparation varied from a few days to two or three months. The time of operation varied from forty seconds to

twenty minutes, although he was opposed to the principle of operating against time, and never allowed himself to be thrown off his guard.

According to Gross, he was the first in Kentucky to ligate the subelavian artery. This he performed in 1825 for the cure of an axillary aneurysm which was described as "larger than a quart pitcher." The patient left for his home on the twenty-first day completely cured. In 1841 he successfully ligated the common carotid artery for an intracranial aneurysm attended with protrusion of the eye, pulsation noise in the head, and wide separation of the cranial bone on the right side together with the loss of sight and hearing on the same side. This was prior to the era of anesthetics. The stress he laid upon the use of boiled or boiling water in surgery at that time is worthy of comment.

He was not inclined to write, and very likely his contributions to literature were secured largely through his kinsman, Dr. Charles Wilkins Short who, with Dr. John Esten Cooke, established the "Transylvania Journal of Medicine and the Associate Sciences."

His most notable and perhaps all his contributions are: "Observations on Injuries of the Head;" "Observations on Hydrocele;" "On the Use of the Bandage in Gun-shot Wounds and Fractures." These were in the first volume of the "Transylvania Journal of Medicine." 1828.

In a later number of the same journal appeared his article upon "Calculous Diseases," reports of his operation for stone, and a paper on "Fractures." His article on the treatment of "Aneurysm" was published in July, 1849; "On the Treatment of Gunshot Wounds," December, 1849; "On the Treatment of Fractures by the Roller Bandage," in 1850, all of which appeared in the "Transylvania Journal of Medicine." Also an article on "Treatment of Asiatic Cholera."

He married at Lexington June 10, 1821, Anna Maria Short, daughter of Major Peyton Short, and had three children, William Ambrose, Anna Maria, and Charles Wilkins. The latter studied medicine but did not practice.

During the last years of his life, his health was greatly impaired owing to an infection he received during an operation. He died at his suburban house, "Fairlawn," near Lexington, in the eighty-fifth year of his age, from apoplexy, after an illness of two hours.

There are a number of portraits of Dr. Dudley by different artists in the possession of his family, but the best is the one by Jouett, owned by Mrs. Robert Peter. A. S.

A Memoir of the Life and Writings of Dr. Benjamin W. Dudley, by L P. Yandell. American Practitioner, 1870.
Filson Club Pub., No. 20.
History of Kentucky. Collins, vol. ii.
Recollections of Dr. Benjamin W Dudley, by Bedford Brown. Southern Surgical and Gynecological Transactions, vol. 1893 v.
Sketch of Benjamin Winslow Dudley, by Benjamin William Dudley.

Dudley, Ethelbert Ludlow (1818–1862).

A native of Lexington, Kentucky, Ethelbert Ludlow Dudley, anatomist and surgeon, was born February 25, 1818. He was the son of Col. Ambrose and Martha Catherine Ludlow Dudley, the former distinguished in the War of 1812.

Dudley first selected law as his profession at Harvard, but soon discovered his preference for a medical career; his father, however, required him to complete his law course, which he did, obtaining his degree. He then began to study medicine at Transylvania University, graduating in 1842. He continued, however, his studies in the school during the two following sessions under the tutelage of his uncle, Benjamin W. Dudley, who was for so many years the professor of anatomy and surgery, and for whom he acted as prosector during this period.

Before the next session he was made demonstrator of anatomy at this University, and in 1847 was promoted

to the chair of general and pathological anatomy.

In 1849 he originated and continued to edit for three years the "Transylvania Medical Journal," a new series of the old "Transylvania Journal of Medicine," and in 1859 accepted a call to the chair of descriptive anatomy and histology in the Kentucky School of Medicine in Louisville, which was just then being organized and to which many of the Transylvania professors were going for the winter session. By his talents and indefatigable energy he contributed very greatly to the success of this school.

In the second year of the Kentucky School of Medicine he was promoted to the chair of surgical anatomy and operative surgery and conducted the surgical clinic at the Marine Hospital for the classes in both of the Louisville schools. In 1853 Dudley, with the other Transylvania professors, resigned and returned to Lexington where he continued his duties in the renewed winter sessions of the latter school.

Among the most striking characteristics of Dudley was his wonderful energy, his enthusiasm, and these qualities, combined with his unusual mental gifts and his entire devotion to his profession, made his short career a most notable one.

At the outbreak of Civil War, led by his loyalty to the Union he was actively instrumental in the organization of a battalion of "home guards" of which he was commandant. He later obtained authority to organize a regiment, the Twenty-first Kentucky; of this regiment he was made colonel and took with him as adjutant his only son, a boy less than eighteen years of age. He had taken his regiment to the southern part of the state and while physician and surgeon to his men as well as commanding officer, he fell a victim to typhoid fever in February, 1862, at Columbia, Adair County, Kentucky.

Dr. Dudley married Mary Dewees Scott, a daughter of Matthew T. Scott, president of the Northern Bank of Kentucky, by whom he had two children, a son, Scott, and a daughter, Louise.

J. W. S.

The History of the Medical Department of Transylvania University (Dr. Robert Peter).

Dugas, Louis Alexander (1806–1884).

Louis Alexander Dugas was born in Washington, Georgia, in 1806, of French West Indian parentage. After receiving his early education from a private tutor he began the study of medicine in the office of Dr. John Dent, of Augusta, then studied at the University of Maryland, from which he graduated in 1827. He passed four years in Europe, then settled down to practice in Augusta. In 1832 he was one of the founders of the Medical College of Georgia, and filled the chair of surgery, and retained this position until the close of his life. He several times served as president of the Medical Association of Georgia, also became editor of the "Southern Medical and Surgical Journal" in 1851, and edited it for seven years. During the war he was a volunteer surgeon in many of the military hospitals. He died at his home in Augusta when seventy-eight years old. His first wife (1833) was Mary C. Barnes and his second (1840) Louisa V. Harriss.

He gave much attention to diseases of the eye, and in 1840 did an operation in certain conditions of corneal staphyloma which met with general favor. This operation was the abscission of the cornea. In the "Southern Medical and Surgical Journal" for 1837 he published a paper on "Purulent Ophthalmia."

Med. News, Phila., 1884.

Dunglison, Robley (1798–1869).

It happened that when old Thomas Jefferson was organizing the University of Virginia in 1824 he, failing to find a man for the chair of anatomy, physiology, materia medica and pharmacy, wrote to London to a learned young man only twenty-six but one who had already written a "Treatise on Children's Dis-

eases," and was editing the "London Medical Repository," to come out. This man, Robley Dunglison, born at Keswick, England, in 1789, was destined for a merchant, but fortunately a rich uncle, one Joseph Robley, died and left him enough to become a doctor. So when seventeen, after a good education he began to study medicine under a village physician before attending courses in Edinburgh, Paris and London, taking his surgical degree at the Royal College of Surgeons, London, 1819, and his medical at Erlangen in 1823.

In 1825 Yale conferred on him her LL. D.

The ship bearing Dunglison with his young wife and children was three months crossing from Liverpool, giving plenty of time for reflection on the step taken—a wise step, for he stayed with all approval for nine years at the University of Virginia going afterwards as professor of materia medica and medical jurisprudence to the University of Maryland. But the University of Pennsylvania recognized clearly what his value would be to them and made him professor of the institutes of medicine in Jefferson College, which appointment he held until 1868.

During the nine years in Virginia his industry was amazing. The "Human Physiology," rejected by Philadelphia publishers, came out at Boston in 1832, and went through eight editions and became at once the book for students. S. D. Gross says, "What Haller's great work accomplished for surgery in the eighteenth century, Dunglison accomplished for it in America in the nineteenth." The book is rich in learning, accurate and logical in its statements of facts. His big "Medical Dictionary," 1833, a work of profound erudition, earned him a world-wide reputation; 55,000 copies were sold during his life-time, and in 1897 it had reached twenty-three editions. These books were followed in rapid succession by treatises on "Materia Medica," 1843; "Hygiene;" "The Practice of Medicine" 1842, and "New Remedies;" yet this systematic and persistent writer found time to edit "Forbes' Cyclopedia of Practical Medicine" and several foreign works. He founded and edited for five years the "American Library and Intelligencer," and with one William Chapin issued a celebrated dictionary for the blind in three folio volumes, and all this besides innumerable articles to the medical and lay journals.

As a lecturer he could hold the close attention of his students to dry details and yet interest them, and as dean for many years he was prompt and faithful. "A fluent talker, an insatiable reader, a rapid writer, rapid to illegibility and, like the letters of the great Scotsman, Chalmers, his were often put away for the writer to elucidate. "Gentle and attractive in manners and appearance, no one could ever say an unkind word about Dunglison, and his heroically borne illness which made him a constant sufferer six months previous to death showed of what stuff the eager student was made. "Confined to bed, propped up by pillows, his feet resting on the floor, he could not even lie down for an hour. Long the victim of heart disease, no one could witness his distress without the deepest sympathy, yet no murmur escaped his lips; indeed he was cheerful and always delighted to listen to music and hear the latest news from the busy life outside. On April 1, 1869, he went away, his life's volume all frayed by hard usage; the long and last chapter, On Pain, typed sharp and clear by that hard-headed printer Experience. D. W.

Tr. Coll. Phys., Phila., 1869, n. s.
Autobiography. S. D. Gross, Phila., 1887.
Hist. of the Med. Profession in Philadelphia. Henry, 1897.
Portrait in Surg.-gen. Lib. Wash., D. C.

Dunlap, Alexander (1815–1894).

Well known in connection with ovariotomy, he was born in Brown County, Ohio, January 12, 1815 and after spending two years in Ohio University, Athens, matriculated at Miami University, Oxford, Ohio, from which he graduated A. B. in 1836. His medical degree was

obtained from the Cincinnati Medical College in 1839.

He began practice in Greenfield, Ohio, with his brother Milton, with whom he had read medicine, and upon the dissolution of this partnership (1846) he moved to Ripley, Ohio, and later Springfield, where he practised until his death, February 16, 1894.

Dr. Dunlap was president of the Ohio State Medical Society in 1868; vice-president of the American Medical Association in 1877, and an active member of the American Gynecological Society.

From 1875 to 1885 he was professor of surgical diseases of women in Starling Medical College.

During his career he made four hundred and twenty-eight laparotomies, of which sixteen or eighteen were hysterectomies, with eighty-three per cent. of recoveries.

Dr. Dunlap's claim for honorable mention is not based upon the number of sections nor upon the percentage of recoveries, both of which would compare badly with the statistics of modern operators, but upon the fact that he was one of the pioneer ovariotomists of the world.

It is difficult for one living in the present surgical environment to conceive of the bitter opposition which prevailed against the operation of ovariotomy in many who held high places in the profession in the early forties. The written report of Dr. Dunlap's first operation was sent to the "Western Lancet" of which Dr. John P. Harrison (one of his former teachers) was editor, but was returned with the significant comment that "its publication would encourage an unjustifiable and murderous operation, which had already been tried and condemned by the profession both in this country and Europe." The elder Mussey, who then dominated the surgery of this region, took early occasion to rebuke the young man "for doing such things." This first operation, which was done on the seventeenth of September, 1843, without an anesthetic resulted fatally on the twentieth day.

In the face of such discouragements, without hospital facilities, trained nurses or assistants, without anesthetics or antiseptics, and with limited operative experience, Dr. Dunlap boldly and successfully operated on his second case in 1849.

Preceding his first operation, there is the record of eighteen completed ovariotomies, thirteen of which were by McDowell, and one of which (Atlee's) antedated Dunlap's case less than three months; there were also reported a few abandoned operations, but of all these he certainly knew nothing, except the bald fact that McDowell had successfully removed ovarian tumors.

It was the privilege of the writer to assist Dr. Dunlap on several occasions. There was nothing spectacular about his methods. He (Dunlap) was always a slow, methodical operator, using few instruments and with a technic which was simplicity itself.

Undoubtedly his success was due largely to the postoperative care given his patients. Dr. Dunlap did his own nursing, and he did it well. It was not unusual for him to constantly attend the bedside of a patient for a week or more after operating, until the result, for good or bad, was assured.

The latter years of his life were full of suffering. Twice he underwent lithotripsy. His son, Dr. C. W. Dunlap, who was associated with him in practice, died before him.

We have from his pen a paper on "Ovariotomy" ("Transactions of the Ohio State Medical Society," 1868) and an "Address" before the same society in 1869. W. J. C.

"Buffalo Med. and Surg. Journal," 1894.
In Memoriam, N. Y. Journal of Gynecology and Obstetrics, 1894.
Trans. of the American Gynecological Soc., 1894.
Trans. American Association of Obstetricians and Gynecologists, 1894.

Dunn, Thomas D. (1854–1898).

Of Scotch ancestry, his great grandfather, Philip Dunn, having come over from Scotland and settled in New Jersey, Thomas Dunn was born in Crawford County, Pennsylvania, on January 30, 1854, the oldest son of the Rev. Thomas H. and Diantha Dunn. He began to study medicine with Dr. Jacob Price, West Chester, and graduated from the medical side of the University of Pennsylvania, 1881, with a gold medal for anatomical work, and began practice the following year in West Chester.

It was largely owing to his exertions that the Chester County Hospital was built, and the work entailed in gaining interest and funds any doctor will appreciate, and the long-titled Thomas D. Dunn Bacteriological Laboratory but inadequately expresses the equally long hours of affectionate thought given towards its establishment by the founder.

In his capacity of head physician to the Chester County Hospital and fellow of the College of Physicians of Philadelphia he rendered good public service, and when he died from the results of a carriage accident May 6, 1898, he left a record of fifteen years' good work. His wife, Kate C. Dunn, whom he married in 1883, with one daughter, Rachel, survived him.

Among some fourteen articles, a list of which is given in the "Transactions of the College of Physicians of Philadelphia," vol. xx, 1898, is one on "Two Cases of Glossy Skin," 1888, and "A Case of Leukemia with Rare Lymphoid Growths of Orbit and Parotid Gland," 1894.

Abstracted from Memorial notice by Dr. G. E. de Schweinitz. Trans. of the Coll. of Phys., vol. xx, 1898.

Dunster, Edward Swift (1834–1888).

Edward Swift Dunster, obstetrician and gynecologist, was born in Springvale, Maine September 2, 1834, a direct descendant of Henry Dunster, the first president of Harvard College. Soon after his birth his family removed to Providence, Rhode Island, where he fitted for college in the public schools and in 1856 received the A. B. from Harvard and in 1859 his A. M. While teaching in Newburg, New York, in 1856, he began medical studies and in 1856–57 attended a course of lectures at Dartmouth Medical School and received his M. D. from the College of Physicians and Surgeons, New York City, in 1859. During 1859 he served as interne at St. Luke's Hospital, New York, and began medical practice in the same city in 1860. In June, 1861, he entered the army as assistant surgeon and served in West Virginia and in the Penisular Campaign under Gen. McClellan, in charge of various hospitals. In February, 1866, Dr. Dunster began to practise again in New York City, making a specialty of obstetrics and diseases of women and children. He was editor of the "New York Medical Journal," 1866–72; resident physician-in-charge of Randall's Island Hospitals, 1869–73; professor of obstetrics and diseases of women and children, University of Vermont, 1868–71; and the same chair at Long Island Hospital Medical College, Brooklyn, New York, 1869–75; Dartmouth Medical College, 1871–1888; University of Michigan, 1873–88. Dr. Dunster was a member of the New York County Medical Society and the Michigan State Medical Society.

On November 4, 1863, Dunster married Rebecca Morgan Sprole, daughter of Dr. Sprole, of Newburg, New York, a celebrated Presbyterian preacher of his day, and died in Ann Arbor, Michigan, May 3, 1888, from septicemia.

His papers included:

"Irregular Contraction of the Uterus." ("Transactions American Medical Association," vol. xxix.).

"Ovariotomy." (Vol. xxix, "Transactions American Medical Association.")

"Prophylaxis of Puerperal Convulsions." (Reprint, "Toledo Medical Journal," 1878.)

"An Unusually Large Mole; Error in Diagnosis." ("Michigan Medical News," Detroit, 1879.)

"The History of Anesthesia." (Re-

print from "Peninsular Medical Journal," Detroit, 1875, vol. xi.)

"The History of Spontaneous Generation." (Reprint from the "Ann Arbor Scientific Association Reports," 1876.)

"The Use of the Obstetric Forceps in Abbreviating the Second Stage of Labor." (Reprint from "Transactions Michigan State Medical Society, Lansing, 1877.)

L. C.

History, Univ. Mich., Ann Arbor, 1906. Representative Men in Mich., West. Biographical Co., Cincinnati, O., 1878, vol. ii. Life, Peterson, Michigan Alumnus, June, 1905.

Dutcher, Addison Porter (1818–1884).

A prominent physician of Cleveland, Ohio, he was born in Durham, New York, October 11, 1818. Of his early education there is no information, but in 1834 he began to study medicine under Dr. John Shanks, of New York City, and subsequently continued with Dr. Edward H. Dixon, of the same place. Atkinson says he took his M. D. from the College of Physicians and Surgeons of New York City in 1839. Dr. Dutcher's name, however, does not appear among the alumni, so he graduated probably from some other medical college in the metropolis. He settled first in Cooksbury, New York, but removed soon to New Brighton, Pennsylvania, and again in 1847 to Enon Valley, in the same state, where he practised for seventeen years. In 1864 he was called to the chair of the principles and practice of medicine in the Charity Hospital Medical College, at Cleveland, Ohio, a position which he filled only two years, when he resigned and devoted himself to private practice and literary pursuits.

In 1839 he married Amanda M. Curtis, daughter of the Hon. Richard Curtis, of New York.

Dr. Dutcher was president of the Cleveland Academy of Medicine in 1868, and an honorary member of the Beaver County (Pennsylvania) Medical Society, as well as a member of the Pennsylvania Medical Society.

His contributions to medical literature are very numerous. Among them we may mention his treatise on "Pulmonary Tuberculosis" (1876), and papers on "Cough and Expectoration" ("Cincinnati Medical News," vol. i, 1872), "Pain as a Symptom of Pulmonary Tuberculosis" (Ibid., pp. 153–159)." He was also a warm advocate and defender of the cause of temperance.

Dr. Dutcher died in Cleveland January 30, 1884. H. E. H.

N. Y. Med. Journal, vol. xxxix (1884). Atkinson's "Physicians and Surgeons of the United States."

Duval, Elias Rector (1836–1885).

Elias Rector Duval was born in Fort Smith, Arkansas, on the thirteenth of August, 1836, of distinguished pioneer parents.

Dr. Duval received his early education in schools at Fort Smith and later at Arkansas College, Fayetteville, Arkansas, where he graduated A. B. in 1854. He obtained his M. D. at Jefferson Medical College. In 1853 his alma mater gave him her A. M., and in 1880 the honorary M. D. was given by the medical department of the Arkansas Industrial University, he being the first to receive one.

He served with Lieut. Steen's command in New Mexico as acting surgeon in the United States Army till March, 1859, when he resigned and began private practice at Fort Smith. In 1861 he was appointed surgeon in the Confederate States Army. In 1864–5 he was first assistant of the Trans-Mississippi department.

He was ex-president of the Sebastian County Medical Society and president of the State Medical Society in 1874–5.

Among Duval's published writings are: "Buenemia Tropica" in the "Louisville Medical Journal," "Malarial Hemorrhagic Fever" (Ibid.); "Influenza" (Ibid.); "Cerebrospinal Fever" in the "Transactions of the Arkansas Medical Association;" "History of Cholera as it appeared in Fort Smith in 1866." His last article was "Eclampsia Puerperalis," published

in the "St. Louis Courier of Medicine" January, 1886, three months after his death on October 7, 1885.

Dr. Duval married at Van Buren May 8, 1860, Angela Medora, daughter of Dr. James A. Dibrell, and had four children—Annie, Benjamin Taylor, Dibrell LeGrand, and Angela Medora.

He died on October 7, 1885.

Dyer, Ezra (1836–1887).

Ezra Dyer was born in Boston, October 17, 1836, graduated at Harvard in 1857, and after studying under Jefferies Wyman, Morril Wyman, and John Ware, entered the Medical School and graduated in 1859. He then studied in Dublin, Bonn, and Vienna, where, under Arlt, his interest in ophthalmic surgery was awakened, and he determined to devote himself to this specialty. With a letter from Arlt to Von Graefe he went on to Berlin in the fall of 1860. Having spent a most profitable winter semester with Von Graefe, Dyer went to London, spent several months at the Moorfields Hospital, then to Paris to study under Desmarres and Sichel, and finally to Utrecht to visit Donders and Snellen. He returned to Philadelphia in the winter of 1861. During the war he was given charge of all eye and ear cases in the Philadelphia Army Hospitals.

In 1864 he was one of the founders of the American Ophthalmological Society and later was appointed surgeon at Wills Eye Hospital. In 1873 he left Philadelphia on account of the health of a member of his family, gave up a large practice, and took up his abode in Pittsburg where he soon acquired an enviable reputation. In 1879 and again in 1880 he fell and suffered serious fractures from which he never wholly recovered. He removed in 1883 to Newport and died February 9, 1887.

Unswerving integrity, unselfish and enduring loyalty, a child-like faith in those he loved, these were among the characteristics of Ezra Dyer. H. F.

Trans. Am. Ophth. Soc., vol. iv., 1885–7 (Port).
New York Medical Journal, 1887, vol. xlv.

E

Earle, Pliny (1809–1892).

An alienist, born in Leicester, Massachusetts, December 31, 1809, he was a descendant of Ralph Earle, one of the petitioners to Charles II of England to form Rhode Island into a corporate colony, whose name appears among the signers of a political compact made at Portsmouth, Rhode Island, April 30, 1639. He was educated at Leicester Academy and the Friends' School, Providence, Rhode Island, and graduated in medicine at the University of Pennsylvania in 1837, afterwards travelling extensively and studying in Europe. For two years he was resident physician to the Friends' Asylum, Frankfort, Pennsylvania, and became superintendent of the Bloomingdale Hospital, New York, in 1844, resigning after five years' service and going a second time to Europe for special study. In 1853 he was appointed visiting physician to the New York Asylum and lecturer on mental diseases at the College of Physicians and Surgeons. At a later period he delivered a course of lectures at the Berkshire Medical Institute at Pittsfield, Massachusetts, as professor of materia medica and psychology. In 1864 he became superintendent of the Northampton Lunatic Hospital and held that position till his retirement after twenty-two years of distinguished service. He was one of the original members of the American Medical Association, also of the American Medico-Psychological Association, the New York Academy of Medicine and president of the American Medico-Psychological Association in 1884.

Leaving out of view the young scholar and poet's contributions to the "Worcester Talisman," "Spy," and other local periodicals, some of which he gathered into his Philadelphia volume of 1841, "Marathon, and Other Poems," he also wrote the following:

(1841) "A Visit to Thirteen Asylums for the Insane in Europe." (Philadelphia. J. Dobson, pp. 144.) This had before appeared in the "American Journal of the Medical Sciences" for October, 1839 (vol. xxv, pp. 99–134). It was reprinted later with many changes and additions. However, many of the original errors, arising from imperfect observation or dependence on untrustworthy authority, remained in the reprint. For example, the account of the traditional origin of the "Community Asylum at Gheel," as he called the famous colony at that Belgian town, is wholly incorrect, and the statistics much in arrears, coming down no later than 1821. Dr. Earle placed in the hands of his biographer a corrected copy of this reprint.

(1848) "History, Description, and Statistics of the Bloomingdale Asylum for the Insane."

(1853) "Institutions for the Insane in Prussia, Austria, and Germany." Utica, New York. These visits were all made in the year 1849, with many others upon which Dr. Earle did not report, but which served to correct former impressions and to make his comments on the annual reports of European asylums of great value. To his volume Dr. Earle added a supplement of sixteen pages, containing information furnished by Laehr in 1852, and a list of German asylums at that date, tabulated by Dr. Earle, which, as containing information curious in itself, and nowhere else accessible in English, is reprinted in this appendix. The mere political changes made in the past half century, largely by the genius and energy of Bismarck, give these minute divisions of German-speaking Europe curious interest. The

first form of the volume was published in the "American Journal of Insanity," then printed at the Utica Asylum, where Dr. Brigham had begun it.

(1877) The Curability of Insanity." (First form of this work in a pamphlet issued by the New England Psychological Society, Boston.)

(XII) (1887) "The Curability of Insanity: A Series of Studies."

(XIII) (1888) "The Earle Family: Ralph Earle and his Descendants." (Compiled by Pliny Earle, of Northampton, Massachusetts. Printed for the family.) (Worcester, Massachusetts. Press of Charles Hamilton, pp. xxiv, 480.) This may be considered Dr. Earle's *magnum opus*, since it occupied him, at intervals, for half a century, and involved an expenditure on his part of some thousands of dollars. It is a masterly work, of incredible labor almost, and yet deals with only one of the eight or ten families in America named Earl, Earll, or Earle. It contains more than 4,000 names of the cousins, near or remote, of Dr. Earle, and yet omits more than 1,000 as not coming within the scope of the book.

(1838–92) An incomplete list of Dr. Earle's contribntions to reviews, annuals, dictionaries, etc., include:

(1838) "Insanity: Its Causes, Duration, Termination, and Moral Treatment." (Part of his Medical Thesis of 1837.)

(1842–45) "Observations on the Rapidity of the Pulse of the Insane."

(1843) "The Curability of Insanity." (First paper.)

(1845) "The Inability to Distinguish Colors."

(1845) "Experiments with Conium Maculatum."

(1847) "Cases of Paralysis Peculiar to the Insane."

(1846) "Indian Hemp and Mental Alienation." (Review of J. Moreau.)

(1844–47) "The Poetry of Insanity, Contribntions to the Pathology of Insanity, Cases and a Leaf from the Annals of Insanity."

(1851) "The Insane at Gheel."

(1867) "Psychopathic Hospital of the Future."

In addition to these, Dr. Earle wrote some thirty reviews of reports of hospitals, and in 1846 a review of "Esquirol on Mental Diseases," in a New York periodical; a "History of Insane Hospitals in the United States," the first paper read before the New York Academy of Medicine, and published in its records; in 1863 an article in the "American Almanae" on "Insanity;" in 1881 an article on the "Curability of the Insane," in the "Proceedings of the Conference of Charities;" and in 1892 a long article on the same subject in Dr. D. H. Tuke's "Dictionary of Psychological Medicine," published in London two months after Dr. Earle's death. He published in 1890 in the "Journal of Social Science" his paper on "Popular Fallacies Concerning the Insane." G. A. B.

Memoirs of Pliny Earle, M. D. By F. B. Sanborn.
Med. Leg. Jour., N. Y., 1886–7, vol. iv (port.).
Med. Rec., N. Y., 1892, vol. xli.

Eastman, Joseph (1842–1902).

Joseph Eastman, a pioneer abdominal snrgeon, was born in Fulton County, New York, January 29, 1842. He was a self-architected man, having had very little schooling. At nineteen he was shoeing oxen in a lumber settlement in the foot hills of the Adirondaeks and in 1861 he shouldered a musket in response to the call of Pres. Lincoln. He was wounded at Williamsburg and taken to Mount Pleasant Hospital, Washington. Here, a few days later, still weak and trembling under the weight of the knap-sack and musket, he was ordered from the ranks of convalescents, leaving for the front.

For a time he discharged small duties about the hospital dispensary, washed bottles and read furtively from medical volumes which lay about. Later he was appointed hospital steward in the United States Army and while thus en-

gaged, attended three courses of medical lectures at the University of Georgetown, where he graduated in 1865.

He was then commissioned assistant surgeon of volunteers. The next year he was mustered out at Nashville, Tennessee, and returning to New York stopped off in Indiana where he remained to practise the profession he had picked up as a soldier. In 1868 he married Mary Katherine Barker, daughter of Thomas Barker of Indianapolis.

His medical education was supplemented by attendance at the Bellevue Hospital Medical College. He was for eight years assistant to Prof. Theophilus Parvin, the distinguished obstetrician and gynecologist, after which he spent some time abroad. Being the first to appreciate and teach the value of surgical cleanliness in his community, he quickly came into a great surgical practice which he gradually limited to the abdomen.

He was the only American surgeon who had operated for extrauterine pregnancy by dissecting out the sac containing the child, saving the life of both baby and mother (Hirst's "System of Obstetrics," vol. ii, pp. 269 and 270). He originated and perfected many instruments and surgical procedures, which in their day were much used and had a large and honorable part in laying the foundation of modern abdominal surgery.

His original work and his operating-room attracted many of the earnest surgeons of the country. These were impressed by his originality, machine-like precision and the clarity of his surgical judgment.

He was surgeon to the Indianapolis City Hospital and founder of the College of Physicians and Surgeons of Indianapolis, a component school of the Indiana University, department of medicine. He taught anatomy in this institution seven years, after which a special chair was created for him in diseases of women and abdominal surgery.

He was president of the Western Surgical Association, Chairman of the Section of Diseases of Women of the American Medical Association, and an honorary member of the medical societies of the states of New York, Michigan, etc. In 1901 Wabash College conferred upon Dr. Eastman her LL. D.

His death occurred in Indianapolis, June 7, 1902, caused by carcinoma of the liver. His wife, a daughter and two sons, Drs. Thomas B. and Joseph Rilus Eastman, survived him. A tolerably full list of his pamphlets, chiefly obstetrical, can be seen in the Catalogue of the Surgeon-general, Wash., D. C.

J. R. E.

Eaton, Horace (1804–1855).

The son of Dr. Eliphaz and Polly (Barnes) Eaton, he was born in Barnard, June 24, 1804 and fitted for college at St. Albans Academy, graduating at Middlebury in 1825. He studied medicine with his father in Enosburg and attended lectures at Castleton where he received his diploma, afterwards practising with his father at Enosburg and then with his brother, Dr. Rollin Eaton, in the same place.

He was a skillful practitioner and was held in high esteem by the profession generally. He was a member of the Vermont State Medical Society and its president in 1845. He held nearly all the offices—town, county and state—to which it was possible for his friends to elect him, being state senator four times, lieutenant governor three times, and in 1846 elected governor and remained so for two years. After his retirement he was elected professor of natural history and chemistry at Middlebury College, which chair he filled for six years until his death in 1855. It is recorded of him that he was the victim of a wasting and disastrous disease, contracted in the care of a professional brother in a neighboring town. Dr. Eaton was a voluminous writer and delivered addresses and lectures on a variety of subjects.

Gov. Eaton was twice married: in

1821 to Cordelia L. Fuller and in 1841, Edna Palmer, and had two children.

C. S. C.

Eberle, John (1788–1838).

John Eberle was born in the county of Lancaster, Pennsylvania, in January, 1788.

Of his parentage little is known except that both father and mother were of sturdy, German extraction, tilling the soil and no doubt requiring the same of their children as soon as they were old enough.

Although naturally endowed with a vigorous intellect he had no early educational advantages. It is not certainly known who was his preceptor, probably the good family physician, and later he matriculated at the University of Pennsylvania where his name appears in the list of graduates in the year 1809—the year he attained his majority, and his graduation thesis was devoted to an investigation of animal life. He at first settled in his native place, but as "a prophet is not without honor save in his own country," he selected Philadelphia as his future field of medical labor.

Young, energetic and ambitious, with no acquaintances or friends to render him financial assistance, he soon realized that he must put forth every effort. A previous taste of newspaper work and, perhaps the lack of full employment for his time at first, led to the establishment of the "American Medical Recorder" as a quarterly with John Eberle as its editor. The first number appeared in 1818. It was ably sustained and the popularity of the journal constantly increased because of the valuable papers found in its pages, but he had considerable difficulty in securing a publisher. Finally John Webster agreed to embark in the enterprise and his pluck and energy were a large element in the success of the magazine. Soon after this, in 1822, Eberle's "Therapeutics" appeared from the same press. It was decidedly his best production, was cordially received, and became a text-book.

Eberle was a member of the Philadelphia Medical Society, taking an active part in its discussions and in its business affairs. It met every Saturday evening and the proceedings were so interesting that they attracted not only many of the professors but large numbers of the medical students, and was no doubt a potent factor leading to the establishment of a second medical school which was called the "Jefferson Medical College."

From the time of its organization Eberle taught materia medica and also the theory and practice of medicine with marked ability, adding much to the success and popularity of the school in connection with which he published a work "On the Theory and Practice of Medicine," for which he received liberal compensation.

It was comprehensive and original, not a mere compilation of previous or foreign works. That it was well received is manifest from the fact that it passed through five editions and was adopted as a text-book by various colleges. In connection with the larger work he also published a more concise one designed specially for students, being a synopsis of his lectures and known as "Eberle's Notes."

The revenues from Jefferson College poorly supported his growing family, for he desired to give his sons better educational advantages than he himself had enjoyed. Hence, disappointed in his favorite enterprise, he was easily interested in a scheme for establishing a new medical school in Cincinnati as a rival of the Medical College of Ohio, and to be known as the Medical Department of Miami University.

This project was consumated in 1830, Eberle, Drake and Mitchell being drawn from Philadelphia to take part in the university plan, but before the arrangements were fully matured the rival schools were amalgamated and the Philadelphia professors found themselves in the Medical College of Ohio.

During this year the "Western Medical Gazette" was issued, with Eberle, Staughton and Mitchell as its editorial staff, and fully maintaining the reputation of Eberle as a medical editor.

Again disappointed, however, in the attendance and revenue of the new medical college, Eberle accepted the chair of theory and practice of medicine in the Transylvania University, which was being reorganized at Lexington, Kentucky. The invitation was accompanied by the promise of a fine salary, and, knowing his fondness for editorial work, he was also induced to become one of the editors of the "Transylvania Medical Journal," which positions he filled ably but only for a short time before he was obliged to resign because of shattered health.

His reputation as a lecturer and teacher had preceded him and the announcement that he would deliver the introductory address of the reorganized Transylvania University filled the large hall to overflowing. But his health, broken by the disappointments and trials through which he had passed, made him scarcely able to fill his appointment at all, and during the session many of his lecture hours had to be filled by his colleagues.

While in bad health he unfortunately became addicted to the use of opiates and the pernicious habit possibly hastened the end of a career whose beginning had given promise of such a brilliant future.

On the second of February, 1838, he died, having filled only a portion of one school term, and was buried in the Episcopal Cemetery in Cincinnati.

As a writer he was clear and impressive; as a lecturer sure of attention, being forceful and vigorous, throwing his whole soul into his subject; as a debater he was ready and versatile, his editorial work having stored his mind with choice literature both past and present.

His writings included:

"A Treatise on the Practice of Medicine" two volumes. Philadelphia, 1830.

"A Treatise of the Materia Medica and Therapeutics," four editions. Philadelphia, 1834.

"A Treatise on the Diseases and Physical Education of Children." Cincinnati, 1833.

"Notes of Lectures on the Theory and Practice of Medicine," delivered in the Jefferson Medical College of Philadelphia. Cincinnati, 1834.

See also: Hare. "Reply to Criticisms by J. Eberle, on His Account of the Calorimotor." ("American Medical Reeorder," Philadelphia, 1820.)

"Botanical Terminology; or a Pocket Companion for Students of Botany," being a concise explanation of the terms employed in the classification and description of the vegetable kingdom." Philadelphia, 1818.

"A Treatise of the Materia Medica and Therapeutics," two volumes. Philadelphia, 1822–3.

"A Treatise on the Practice of Medicine," one volume, four editions, revised and enlarged. Philadelphia, 1838.

"Lectures on the Practice of Medicine," three volumes, delivered in 1826–7.

"A Treatise on the Practice of Medicine," with notes and additions by George M'Clellan, two volumes in one. Philadelphia, 1849.

"A Treatise on the Diseases and Physical Education of Children," four editions, with notes and large additions by Thomas D. Mitchell. Philadelphia, 1850.

"Webster (J.) in his Controversy with Dr. John Eberle," 8°. Philadelphia, 1837. F. C. W.

Gross (S. D.). Lives of Eminent American Physicians (T. D. Mitchell).

Edebohls, George Michael (1853–1908).

Edebohls was a native of Manhattan Island; born May 8, 1853, of German parents, Henry and Catherine Edebohls, who had immigrated to this country about ten years previously. Receiving his early education at two of the best Catholic schools of New York City—De La Salle Institute and St. Francis

Xavier's College—he was graduated, in 1871, from St. John's College, Fordham, which institution, in 1886, conferred upon him the degree of A. M., and in 1906 that of LL. D.

Immediately after graduation from St. John's he entered the College of Physicians and Surgeons, Columbia University, and on receipt of his medical degree, four years later, became a member of the house staff of St. Francis Hospital, where, in the various divisions, he spent nearly half a decade. In 1880 he went to Europe, intending to prepare himself as a specialist in diseases of the eye and ear, but on his return to America resumed the general practice he had begun while connected with the hospital. As a general practitioner, however, he was only moderately successful.

His appointment as gynecologist to St. Francis Hospital, in 1887, was the real beginning of his career, as it gave opportunity for the development of his talents along the lines to which he was most inclined and best adapted. His success soon became marked, and it was not long until he had established for himself a deserved national reputation, through the excellence of his operative work and the high quality of his literature.

As an operator Edebohls was unsurpassed. Rarely in one surgeon do we find combined the talents of a skillful operator, an engaging author, a successful teacher, and an ingenious inventor. That way genius lies. Edebohls possessed all of these accomplishments. His works on "Renal Decapsulation for Chronic Bright's Disease" and "Renal Decapsulation for Puerperal Eclampsia" have won for him an international repute. Frequently now the latter operation is being performed in Europe with varying results, and the studies on the subject are far from closed. The consensus of opinion, however, is favorable. The radical boldness of the idea of surgical intervention in Bright's Disease subjected him to no little criticism and some abuse.

To medical and surgical literature he was a frequent contributor, possessing a clear, concise style well fitted to the expression of his original conceptions and sturdy convictions. A tolerably full list of his writings is in the Cat. of the Surg.-gen. Lib., Wash., D. C.

As professor of diseases of women at the New York Post-graduate Medical School and Hospital, Edebohls attracted a large class. His lectures were attended by interested matriculates in great numbers. He was ready, fluent, entertaining, and instructive, and many of the younger practitioners of to-day owe to him much of their most valuable surgical equipment.

In the field of invention Edebohls was constantly active. A number of operations now generally performed had their origin at his brain and hands, and an operating-table, a vaginal speculum, leg holders, needle holders, kidney pads, and some lesser surgical paraphernalia were the inventive outcome of exigencies met within his experience.

He was a member of the Medical Society of the State of New York and the German Medical Society; a fellow of the American Gynecological Society and of the New York Academy of Medicine; honorary fellow of the Société de Chirurgie de Bucharest; attending gynecologist to St. Francis and the Post-graduate Hospitals, and consulting gynecologist to St. John's Hospital, Yonkers, and Nyack Hospital, Nyack.

The illness which caused his death is thought to have been contracted during the summer of 1907, when he and his wife, who was Barbara Leyendecker, accompanied by their two sons paid a visit to their married daughter and son-in-law in Mexico. The entire family were stricken with typhus fever while there, and the eldest son died of it. This loss, added to anxiety appears to have undermined his hitherto robust constitution. Gradually the insidious disease developed, and though

the enlarged cervical tumors were extirpated, his life was forfeit. George Michael Edebohls died of Hodgkin's disease, in New York City, on the eighth day of August, 1808, after four months' illness. He was buried at Blauvelts, New York, where as a youth he had lived for a time on a farm owned by his parents, the interment being in a cemetery presented to the village by his father.

In person Edebohls was tall and erect, of commanding presence and graceful carriage. In manner he was grave, dignified, and scrupulously polite. Temperamentally he was taciturn, retiring, and excessively modest. Only after long and close acquaintance did he unbend to intimacy and comradeship and reveal as noble qualities of heart as of head. To reach this plane with him the writer's opportunity was exceptional, because his aid was requested in much of the abdominal surgery done by Edebohls in the year following his retirement from general practice.

H. J. B.

Am. Jour. Obstet., May, 1909.
N. Y. Med. Jour., Aug., 1908.
Boston Med. and Surg. Jour., Aug., 1908.
Buffalo Med. Jour., Sept., 1908.
Post-graduate, N. Y., Sept., 1908, where there is a portrait.

Edwards, Emma Ward (1845–1896).

Emma Ward, a pioneer physician, was born in Newark, New Jersey, June 5, 1845, of New England ancestry and educated at local private schools. At seventeen, her health failing, she was placed under medical care for several years. During this time she determined to become a physician and at twenty-one, health recovered, she was studying under local doctors. There was no regular school of medicine in New York for women until 1868, when "The Woman's Medical College of the New York Infirmary" was opened. Emma Ward immediately matriculated and entering the first class graduated in 1870 with the honor of valedictorian. After her graduation she served as clinical assistant, dispensary physician and instructor in "practice" in the college, and was associated with Dr. Loring of New York for a year. She then returned to Newark and took up general practice with unusual success.

In April, 1872, she married Dr. Arthur M. Edwards and removed to Berkley, California. Her husband becoming incapacitated by illness, she returned with him and the children to Newark in 1878 and built up a phenomenally large practice.

She was a member of the New Jersey State Medical Society and Essex County Medical Society.

To her fine character, coupled with the success she achieved, is partly due the tremendous impulse which the education of women in the medical profession received in the vicinity of New York.

She died of dysentery, March 28, 1896 at Clearwater, Florida.

A. B. W.

The Woman's Journal, Boston, vol. xxvii.
New York Medical Record vol. xlix.
Personal Information.

Edwards, Francis Smith (1826–1865).

Francis Smith Edwards was born in Norwich, England, June 2, 1826, the son of Charles Edwards, a distinguished member of the New York bar, and the author of several legal and other works.

He had his early education at a school in Poughkeepsie, New York, and was subsequently a pupil of the Messrs. Peugnett, in that city. After leaving school he joined Col. Doniphan at St. Louis, and accompanied him in his march over the prairies during the Mexican War. A book entitled "A Campaign in New Mexico with Col. Doniphan," etc., of which Edwards was the author, contains an account of his adventures in that expedition.

He began to study medicine with Dr. John C. Beales, of New York, and graduated at the College of Physicians and Surgeons in 1854. Up to the time of his last sickness he generally

assisted at some one of the clinics attached to that institution, and gave especial attention to the diseases of women and children. For a few months he served as surgeon on one of the Cunard steamers.

During his professional career he had collected a large number of valuable coins, and his reputation among those devoted to this study elevated him to the vice-presidency of the Numismatical Society.

He died of typhoid fever, June 1, 1865, contracted while in attendance upon a patient suffering from this disease.

He married Ely Ann, daughter of Thomas Goodwin, of New York City, and left a wife and two children.

Med. Reg. City of N. York, 1860.

Edwards, Landon Brame (1845–1910).

Landon Brame Edwards, New York University, New York City, 1867, was one of the founders of the University College of Medicine; founder in 1874 and for many years editor of the "Virginia Medical Monthly," later known as the "Virginia Medical Semi-Monthly." He died at his home in Richmond, November 27, 1910, aged sixty-five. In 1863 he enlisted in the Artillery Corps of the Confederate Army and served until the close of the war, and served afterwards as surgeon of the first regiment, Virginia Volunteers. He was a member of the Southern Surgical and Gynecological Association and past president and honorary fellow of the Richmond Academy of Surgery. His work as a teacher began in 1874, when he became lecturer on anatomy in the Medical College of Virginia; in 1875 he was elected lecturer on materia medica and therapeutics and served in this capacity for two years. In 1893 he was made professor of practice of medicine in the University College of Medicine, Richmond, and from 1900 to 1907, was professor of clinical medicine and dean of the medical faculty of the institution and later emeritus professor. His hospital experience began in 1867 when he served for five months as house physician at Charity Hospital, Blackwell's Island, and later as assistant physician to Dr. M. Gonzales Echeverria, at his hospital for nervous diseases, Lake Mahopac, New York.

J. Am. Med. Ass., 1910, vol. lx.

Edwards, William Milan (1855–1905).

William M. Edwards, alienist, was born on his father's farm near Peru, Indiana, September 17, 1855, his father a native of Cincinnati, Ohio, his mother of Louisville, Kentucky. After an early education in the common schools at Peru, Indiana, one year at Smithson College, Logansport, Indiana, two years at the University of Indiana, and a two years' teaching engagement at his home district school he began to study medicine with Drs. Ward and Brenton of Peru, Indiana in 1884, graduating M. D. from the University of Michigan. At once he was appointed assistant physician in the Michigan Asylum for the Insane at Kalamazoo, and in 1891 medical superintendent to fill the place vacated by the resignation of Dr. George S. Palmer. He was a member of the American Medico-Psychological Association; vice-president, Michigan State Medical Society, 1904 associate editor "Physician and Surgeon," Ann Arbor, Michigan; 1898, non-resident lecturer on insanity, Michigan University; and author of many papers read before the joint Board of Trustees of the Michigan Asylums, the State Board of Charities, and other organizations interested in the care of the insane. During his administration of Kalamazoo Asylum the antiquated buildings were practically reconstructed, the colony system developed and extended, detached hospitals and infirmaries for patients of both sexes erected. He organized a highly effective training school. Dr. Edwards was about six feet in height, well proportioned, very dark hair and complexion, gentle of

speech, with winning expression and considerate manner; he was able to attract all to his plans and interest them in his purposes, blending the most inharmonious elements into an efficient working force.

On August 10, 1897, he married Emma Adèle Merritt, of Union City, Michigan, who survived him. He died on April 26, 1905, in the hospital at Ann Arbor, from chronic heart disease.

Two of his papers were:

"The Public Care of Epileptics by Colonization." ("Transactions Michigan State Medical Society," 1884,

"The Early Recognition and Treatment of Insanity at Home." ("Transactions Michigan State Medical Society, 1899.) L. C.

Eliot, Jared (1685–1763).

He was eminent as a Congregational minister and famous as a physician, unquestionably the first physician of his day in Connecticut, frequently visiting every county therein, and often making professional visits to Newport and Boston.

Born in Guilford, Connecticut, November 7, 1685, his father was the Rev. Joseph Eliot, whose great abilities as a divine, a politician and a physician were justly admired, not only among his own people, but throughout the colony. His grandfather was John Eliot, "Apostle to the Indians," an Englishman who landed at Boston, Massachusetts in 1631. The wife of the "Apostle" had great skill in physic and surgery. The grandson, Jared, married Hannah, daughter of Samuel and Elizabeth Smithson, who was a famous midwife in Guilford. From his father, Joseph, his grandmother, Ann, wife of the "Apostle," and from association with his wife, Hannah, and her mother, the midwife, Jared Eliot must have been in the way of acquiring many useful hints in the healing art.

He graduated from Yale College in 1706. Harvard College gave him the honorary A. M. About 1756–7 he was unanimously elected a member of the Royal Society of London. He was trustee of his alma mater from 1730 till his death.

Seven of his printed sermons reveal unusual excellence in his chosen profession, and a number of his printed essays upon agriculture show that he was a scientific agriculturist. So valuable were they that they were printed in a volume in 1760.

In 1762 his "Essay on the Invention, or Art of Making Very Good, if not the Best Iron from Black Sea Sand," appeared. For this the Royal Society of London granted him a valuable gold medal inscribed for "Producing Malleable Iron from the American Black Land," which then, and now, abounds on the shore of Long Island Sound at Clinton. The medal is in the possession of a descendant at Goshen, New York.

Eleven children, nine sons and two daughters, were the result of his marriage. Three of the sons graduated at Yale College, two of them becoming physicians, who died young.

The portraits of himself and his wife by an unknown artist are preserved by a descendant at Clinton.

Much more might be said in regard to this very distinguished man of colonial Connecticut. "Dexter's Yale Biographies and Annals," "The Genealogy of the Eliot Family," "The Descendants of John Eliot," a new edition, and Dr. Gurdon W. Russell's "Early Medicine and Early Medical Men in Connecticut," and numerous other books and pamphlets contain lengthy articles in regard to him, but one of his communications in print shows in his own words the scientific spirit of the man more than any relation of what he did.

"The last week, in this place, a man at his work was troubled with a fly that attempted, and, notwithstanding all his endeavors to avoid it, entered his ear and went so deep that he could

not reach it. It continued for some time, and then came out of itself. He quickly found the inconvenience of the spawn there lodged; the pain and tumult in his head grew great and almost intolerable, but was soon eased by thrusting into his ear a feather dipped in warm oil. There came out forty maggots. This was in May, 1729."

E. E.

Russell's Early Medicine and Early Medical Men in Connecticut.

Eliot, Johnson (1815–1888).

Born in the city of Washington, District of Columbia, on the twenty-fourth of August, 1815, Johnson Eliot was a son of Samuel and Mary Johnson Eliot, Jr., of Boston, Massachusetts. Upon his father's side he traced his ancestry back to Sir John Eliot, of Devonshire, England, in 1373.

When only thirteen, after a common school education, he apprenticed himself, very much against the wishes of his widowed mother, to Charles McCormick, a druggist of Washington, and continued in the drug business for about fifteen years, when he disposed of his store and in 1839 was appointed hospital steward at the Naval Hospital, Washington, District of Columbia, serving under Surgs, Foltz and Jackson. During the same year he began to study medicine under Dr. Thomas Sewall, matriculating in the medical department of Columbia College, District of Columbia (now George Washington University) and graduating in 1842 with a thesis entitled "Humoral Pathology."

Immediately upon graduation he was appointed demonstrator of anatomy there by Dr. Thomas Miller, professor of anatomy. He was zealous and faithful in the discharge of his duties; this position he resigned in 1849 to become one of the founders of the Medical Department of Georgetown University and the same year professor of anatomy and physiology, three years later resigning the physiology chair but continuing to fill that of anatomy. At this time the material for dissection was very scarce and the rivalry between the two colleges often lead to personal conflict.

When the chair of surgery in Georgetown Medical Department became vacant in 1861, he accepted the position and very soon forged his way to the front rank of the surgeons in this section of the country.

At the call of Pres. Lincoln, he was among the first local surgeons who volunteered their services, starting for the battlefield of Bull Run with a pass to the front signed by secretary of war Stanton, not waiting for a commission. Here he busied himself with the sick and wounded of both armies, amputing when necessary, dressing wounds, undertaking to deliver letters and notes for the unfortunates to their home folks.

A thorough anatomist, a bold and deliberate operator, he was one of the pioneers in ovariotomy, and among some of his brilliant operations may be mentioned three cases of removal of the superior maxilla, two cases of amputation at the hip-joint, a case of removal of seven and a half inches of the humerus, and also one of the early successful excisions of the head of the humerus, simultaneous ligation of the carotid and subclavian arteries for aneurysm of the arteria innominata, two cases of removal of palatopharyngeal sarcoma, ligation of the subclavian artery, simultaneous amputation of both legs.

Among his appointments Dr. Eliot was physician-in-charge of the Washington Small-pox Hospital from 1862–4; consulting surgeon and one of the directors of St. John's Hospital, Columbia Hospital for Women, Children's Hospital, Central Dispensary and Emergency Hospital, surgeon-in-charge of Providence Hospital, dean of the medical faculty of Georgetown University from May 12, 1856 to the re-organization of that body in 1876, and professor of surgery from 1861 to 1876, when he was elected emeritus professor of surgery, but

continued his clinical teachings until his death. In 1869 the honorary A. M. and in 1872 that of doctor of pharmacy was conferred on Dr. Eliot by Georgetown University. He was a member of the Pathological Society, Medical Association of the District of Columbia, Medical Society of the District of Columbia, and president of the latter in 1874.

He married, November, 30, 1850, Mary John, daughter of John Llewellin, Esq., of St. Mary's County, Maryland, who with six children survived him. While reputed to be wealthy he died a comparatively poor man, as he lacked business tact and his charitable work knew no bounds. His death was caused by pneumonia after a short illness of eight days in 1888.

His publications were few; he delivered a number of introductory and valedictory addresses to students and presented the following before the Medical Society of the District of Columbia: "Bright's Disease," "Knotted Funis," "Stimulants Hypodermically," "Report of a Large Calculus from a Horse," "Cystic Degeneration of the Thyroid Gland," "Hepatic Abscess," "Amputation of the Finger for Neuralgia Following Whitlow," "Excision of the Elbow," "Strangulated Hernia," "Excision of the Inferior Maxilla." "Ovariotomy," "Palatopharyngeal Sarcoma." The following paper was published in the "American Journal of the Medical Sciences," 1877, vol. lxxiii p. 374: "Simultaneous Ligation of the Carotid and Subclavian Arteries for Aneurysm of the Innominate Artery."

G. M. K.

Med. and Surg. Reporter, Philadelphia, 1884, vol. l.

J. Am. M. Assoc., Chicago, 1884, vol. ii (J. M. Toner).

A portrait is in the Surg.-gen. Lib., Wash., D. C.

Ellegood, Robert Griffith (1829–1902).

Born at Concord, Sussex County, Delaware, March 16, 1829, of ancestry who came from England and settled in Lynnhaven Parish, Princess Anne County, Virginia, about 1720, his maternal ancestors were of Scotch (Houston) and Welsh (Griffith) origin. His early education was acquired at the district schools and he afterwards spent three years at Laurel Academy, graduating from Pennsylvania Medical College in 1852 and beginning practice in Concord where his ability won him a position of prominence in the medical profession of the state and country. He was a member of the Delaware State Medical Society, of which he was elected president in 1872. He married, July 28, 1858, Elizabeth Cannon, and had three sons, of whom Joshua Atkinson and Robert became doctors. He was a frequent contributor to medical literature, most of his writings having been presented before the State Medical Society.

Dr. Ellegood died at Concord, Delaware, March 22, 1902 of erysipelas.

H. M. T.

Ellis, Calvin (1826–1883).

Calvin Ellis, a lineal descendant in the seventh generation of the Ellises who were founders of Dedham in 1634, was born in Boston, August 15, 1826.

After a good school education in Boston, Ellis entered Harvard College, where he graduated in the class of 1846. He used to say that during his college life he "played," and that he first awoke to the full meaning of life when he studied medicine. He graduated from the Harvard Medical School in 1849, and the same year was appointed house-pupil at the Massachusetts General Hospital.

After two years in the hospitals of France and Germany, where he devoted the greater part of his time to clinical medicine, morbid anatomy and pathology, he returned to his native city and became assistant to J. B. S. Jackson, professor of pathological anatomy at the Harvard School. He was also made admitting physician and pathologist to the Massachusetts General Hospital.

In 1865 he was elected Visiting Physician to the hospital, which increased his chances of securing a better position in the school. On April 25, 1863, the corporation appointed Ellis adjunct professor of the theory and practice of physic. After serving George C. Shattuck for two years in this place, he was transferred to the department of clinical medicine, and on October 20, 1865, was made adjunct professor to Henry I. Bowditch, whom he succeeded on September 28, 1867, as professor of clinical medicine. Two years later he was chosen dean of the medical school and held this office till June 25, 1883, when the school moved into its new building. Ellis was unquestionably one of the most valuable teachers the Harvard Medical School has had. He showed that we must place the diagnosis of disease upon a scientific basis; he scouted mere authority. Nothing was to be regarded settled until proven. "Snap" diagnoses were beneath his notice, and so-called intuition in diagnosis was to him little less than charlatanism.

He was dean of the medical school in the reformation period, and the newly elected president of the university, Charles W. Eliot, found in him a leader ready and able to carry out reforms in that department of the university where custom, tradition, and personal interests seemed strong enough to defeat any new move. He lived to see success assured. Not so with his life work on "Symptomatology." It must be one of our keenest regrets, as it is a loss to medicine that this last work was not left in form for publication. But many of his writings survive. A full list includes some forty-two articles published, mostly in the "Boston Medical and Surgical Journal" and the "American Journal of the Medical Sciences," between 1855 and the year of his death. His Boylston prize essay in 1860 on "Tubercle" was considered perhaps the best paper on that subject prior to Koch's discovery of the bacillus.

Ellis became a fellow of the American Academy of Arts and Sciences on November 9, 1859, and was a distinguished member of that learned body at the time of his death. During the Civil War he went twice to the front upon errands of mercy, and twice returned a victim to the infection from which he tried to rescue others.

His generous bequests to the school so faithfully executed by his sister were as helpful in a material manner as his teaching to the intellectual side of student life.

The trustees of the Massachusetts General Hospital wanted him for visiting physician and were glad to get him. So too felt the corporation of the university when they elected him professor of clinical medicine. Finally, when his failing heath made these duties impossible, the corporation waited three years in the hopes that his strength might return and his labor be renewed. He died on December 14, 1883.

He gave freely of his time and money, and helped many educational undertakings also. When the new Boston Medical Library Association needed funds for a card catalogue, Ellis gave one thousand dollars, and at his death he left one hundred and fifty thousand dollars to the Harvard Medical School.

His daily example as a wise and high minded practitioner, and a kindly, honorable, disinterested man, was of great worth to the students, for they saw that these qualities were the foundation of his success as a physician, and of his wholesome influence in the hospital, the school and the medical profession. W. L. B.

Hist. Harvard Med. School, T. F. Harrington.
Biog. by Henry I. Bowditch.
"The Beloved Physician," Rev. C. A. Bartol, 1884.
Bos. Med. and Surg. Jour., vol. cix, also vol. cx.

Elsberg, Louis (1836–1885).

As the first to demonstrate in public in this country the use of the laryn-

goscope in diagnosis and treatment, for this alone Elsberg, born April 2, 1836 at Iserlohn, Prussia, son of Nathan and Adelaide Elsberg deserves to be remembered.

His people came over here and settled in Philadelphia when he was thirteen, and the lad went to a public school, and took his M. D. at Jefferson Medical College in 1857. After six months as resident at Mt. Sinai Hospital he went abroad and studied under Czermak, and the year after, on returning, established the first public clinic for throat diseases. He also, with some few others, founded the American Laryngological Association and was its first president.

The records of his contributions given at the end of this sketch show the work he did despite a very large operative practice. In a paper on "Laryngoscopic Medication," 1864, he gave descriptions of many new instruments he had invented. His publication of eleven successful operations for "Syphilitic Membranoid Occlusion of the Rima Glottidis" was made at a time when many able men doubted the feasibility and safety of surgical interference in such cases.

His intense application to work after a second journey to Europe, this time to recuperate, led to an aggravation of the kidney trouble from which he suffered. Ten days before his death he contracted a severe cold, pneumonia set in and his friends hardly knew he was ill before news came of his death on February 19, 1885.

He married, in 1876, Mary Van Hagen, daughter of Joseph Scoville, of New York.

His most important writings include: "Laryngoscopical Surgery," 1864, which won the gold medal of the American Medical Association; "On the Structure and Other Characteristics of Colored Blood;" "Changes in Biological Doctrines During the Past Twenty-five Years;" "Neuroses of Sensation of the Pharynx and Larynx;" "The Normal and Pathological Histology of the Cartilages of the Larynx;" "The Discovery of a New Kind of Resultant Tones;" and in 1880 began the quarterly publication of "The Archives of Laryngology." Among his appointments he was professor of laryngology, University Medical College, New York, for seventeen years. D. W.

Tr. Med. Soc. State of N. York, 1886, (Dr. Morris H. Henry.)

Elwell, John J. (1820–1900).

John J. Elwell, medico-jurisprudentist, one of the ripest scholars and most courtly gentleman who ever graced the medical profession, was born near Warren, Ohio, June 22, 1820. His youth was spent on a farm, his early education acquired at the public schools of Warren and at the Western Reserve University, his medical degree from the Cleveland Medical College. For some years he practised medicine, then turned his attention to law, being admitted to the bar in 1854, and entering at once into legal practice. He soon became professor of medical jurisprudence in the Ohio State and Union Law College and Western Reserve Medical College.

In 1853 and 1854 he was a member of the Ohio Legislature from Ashtabula County. In 1857 he established the "Western Law Monthly," and was for years both editor and publisher.

In August, 1861, he entered the Union army in the capacity of quartermaster.

At Port Royal he was stricken with yellow fever, and for a time recovery seemed doubtful. Owing largely to the careful nursing of Clara Barton, he did at last get well, but with health so impaired that he was placed in command of the prison for confederates at Elmira, New York.

Dr. Elwell was a polished and copious writer. In addition to editoral work he wrote voluminously for other journals, both legal and medical. He was one of the contributors to and editors of Bouvier's "Law Dictionary,"

and some of his articles in the "North American Review" attracted widespread attention. His *magnum opus*, however, and the work on which his fame as a writer rests, was his "Malpractice, Medical Evidence, and Insanity." This not very large work (only 594 pages, even in the last edition) contained in compact form the law so clearly and thoroughly stated that the volume at once became a leading authority not only in America but also in Canada and Great Britain, going through four editions. It did not profess to cover the whole of the field, but the portion with which it did concern itself had not been cultivated by any other writer with equal assiduity and success.

Gen. Elwell was tall, about six feet. In middle life he was of rather substantial build. His complexion was light, his cheeks ruddy till sickness made them sallow. His hair in early life was abundant, and of a lively rich brown, worn rather long; his eyes gray, very gentle and kindly; his manner quick, earnest, and impulsive. He was fond of children. He married Nancy Chittenden, by whom he had one son and three daughters, but neither the wife nor any children survived him. On the death of his wife he brought the three children of his younger brother (who had also lost his wife) to his house and adopted them. To these he later left his entire fortune. He shared his consulting-rooms with several companionable friends, all old men, but as full of good cheer and spirits as if they were boys: Alfred Elwell, the general's brother, was seventy-eight. Dr. H. H. Little was eighty. Judge Darius Cadwell—drollest of raconteurs—eighty also; and Dudley Baldwin—whose father had been an officer throughout the entire Revolutionary War—was ninety-one. Fond of stories, among his large fund he used sometimes to tell the following, an actual occurrence: A rather "close" old gentleman, being upon his death bed, and surrounded by kin and friends, addressed his family physician: "Doctor, I have settled all accounts but yours. Now, how much do I owe you?" The doctor disliked to make out a bill before the sorrowing relatives, but mentioned a small amount, which he stated would be satisfactory. "All right," said the old man, "will you take it in mutton." The doctor, in his embarrassment, replied that he would. "Forequarters," the old man added. "Yes," said the doctor. "All right," said the old gentleman. Then, with a long sigh, he turned over and died.

The general, though he lived to be almost eighty, never wholly recovered from the effects of the yellow fever and two accidents which followed closely on that disease. The day before his death he wrote to his life-long friend, Capt. Levi T. Scofield, of Cleveland, this very simple message: "Captain, come and see me." The friend complied at once. The general, though sick, rose as his old friend entered and placed before the fireplace a rocker. Then he said, "Captain, I am going to die to-night, but please do not tell General Barnett or Major Kendall of my condition. It would pain them greatly to see me suffering so." That night he rose again to do some simple favor for two young men, strangers, who had not known of his condition. Three hours later (March 13, 1900) he was dead. T. H. S.

"Cuyahoga County Soldiers' and Sailors, Monument," 1894.
Am. Med., n. s., vol. iv, 1909.

Ely, Edward Talbot (1850–1885).

Edward Talbot Ely, youngest son of W. W. Ely, was born October 2, 1850, in Rochester, New York. He graduated at Rochester University in 1871 and at the College of Physicians and Surgeons, New York, in 1874, serving later in the Presbyterian and Charity Hospitals, and in 1875 became associated with Dr. St. John Roosa. He was an assistant surgeon at the Manhattan Eye and Ear Hospital, and associate

professor of ophthalmology and otology in the New York Post-graduate School of Medicine. In 1878 he became a member of the American Ophthalmological Society. His ophthalmologic and otologic writings showed great ability.

In 1882 he was attacked with tuberculosis and died April, 12, 1885, in Rochester, New York. H. F.

Trans. Am. Ophth. Soc., vol. iv, 1885–7.

Emerson, Gouverneur (1795–1874).

Gouverneur Emerson, traveller, agriculturist and doctor, eldest of the seven children of Jonathan and Ann Beel Emerson, was born August 4, 1795 near Dover, Kent County, Delaware. His grandparents having been received into the membership of the Duck Creek Meeting of the Society of Friends, Gouverneur was brought up in their simple faith. Through his mother's ambition he began to study medicine when he was sixteen, under one of her cousins, Dr. James Sykes, a surgeon of some note in Dover and one time governor of the state of Delaware. Afterwards he attended medical lectures in Philadelphia. The University of Pennsylvania granted him his M. D. in March, 1816.

In 1816, owing to poor health, he moved to and practised near Montrose, Pennsylvania, but after two years accepted an appointment as surgeon on a merchant ship bound for China. His journal gives detailed account of his voyage and a dramatic account of being held up and robbed by Spanish pirates on the return voyage.

When Dr. Emerson returned to America he settled in Philadelphia where a yellow-fever epidemic gave him an opportunity for usefulness which he used so well that he was appointed attending physician to the City Dispensary. The Board of Health being without authority to deal with small-pox as it did with other contagious diseases, Dr. Emerson turned his attention, when on the Board of Health, to necessary legislation concerning checking the disease. Statistics relative to small-pox are to be found in his article, "Medical and Vital Statistics," published in "The American Journal of the Medical Sciences" for November, 1827, 1831, and July, 1848.

Dr. Emerson made some contributions to the improvement of the agriculture of his native place, editing the "Farmer's Encyclopedia and Dictionary of Rural Affairs." His interest in agriculture increased until he was entirely occupied with its demands to the exclusion of medicine. He definitely gave up his large practice in 1857 and occupied himself with questions of political economy and social science for the remaining years of his life.

He died suddenly July 2, 1874.

M. K. K.

Proc. Am. Phil. Soc., 1891, xxiv.

Emmet, John Patten (1796–1842).

This scientist was born in Dublin, Ireland, April 8, 1796, the second son of Thomas Addis Emmet, one of the leaders of the United Irishmen, and Jane, daughter of the Rev. John Patten, a Presbyterian clergyman of Clonmel. He was also nephew of the great Irish orator, Robert Emmet.

His parents emigrated to New York when he was a child and he was educated in Newburg, New York, and later entered the Military Academy at West Point. He was prevented from graduating by his delicate health, and spent a year abroad, chiefly in Italy, devoting himself to the study of languages and art. On his return to New York he began to study medicine in the College of Physicians and Surgeons, paying special attention to chemistry and, despite ill health, graduating in 1822, defending an inaugural thesis on "The Chemistry of Animated Matter," a treatise of one hundred and twenty-five octavo pages. Immediately after this he settled in Charleston, South Carolina.

While a cadet at West Point he was appointed, on account of his great proficiency, acting assistant professor of mathematics, also assistant to the professor of chemistry, Dr. William H. Mc-

Neven, while studying medicine. In 1825 he was offered the Chair of natural history, as it was then termed, comprehending zoology, botany, mineralogy, chemistry and geology, in the University of Virginia, which he accepted. In 1827 his chair was changed to that of chemistry and materia medica, and this he filled until his health gave way in 1842. Before his marriage he filled his residence with pets, accumulating in one room a number of live snakes and other reptiles, and a large white owl and brown bear had the liberty of the house and grounds. These were banished in the house-cleaning made by his mother preparatory to his marriage. In 1834 he purchased a tract of land adjoining the University grounds, built a house, calling the place Morea, and here passed his time in the fullest enjoyment of giving play to the exercise of his ingenuity, chiefly in the line of horticulture. He planted and experimented with flowers and fruits in great variety; gave the neighborhood its noted stock of apples and peaches; established the cultivation of the grape and the making of wine and brandy in that section. He grew hedges of the *morus multicaulis* and raised silkworms, and after several years succeeded in making sewing silk of the best quality. Discovering on his place a vein of fine kaolin, he used this earth in making pottery and porcelain vessels, devising the necessary methods for doing so, and also made from it a fine hone and a variety of water-proof cements.

He married, in 1827, Mary B. F. Tucker, a native of Bermuda, who was then on a visit to her uncle, Mr. George Tucker, a colleague in the faculty. Thomas Addis, one of Emmet's sons, became a doctor.

In January, 1842, the condition of his health necessitated a trip to Florida, where in the milder climate he so improved that in May he with his wife were able to take passage on a vessel sailing for New York. This vessel was dismasted in a storm off Cape Hatteras and drifted for thirty-eight days before she was picked up and taken into New York. The incident privation and exposure so greatly reduced his strength that he died in New York, August 15, 1842.

For ten years after 1830 he was a frequent contributor on various scientific subjects to "Silliman's Journal." He also wrote often for the different literary publications, including the "Virginia Literary Museum," then edited and published at the University of Virginia.

A portrait done in July, 1842, just before his death, is in the possession of his son, Dr. T. A. Emmet. R. M. S.

Memoir of Prof. John Patten Emmet. By his son, Thos. Addis Emmet, M. D.
The Alumni Bulletin, University of Va., vol. i, No. 4, Feb., 1895.

Engelmann, George (1809–1884).

George Engelmann, best known as a botanist was born in Germany on February 2, 1809, in the old and wealthy city of Frankfort-on-the-Main, and died of Bright's disease in St. Louis on February 4, 1884. His father was a burgomaster in Frankfort, and was able to give his son a university education. He was the eldest of thirteen children, and left only one son, George J., a scientific gynecologist.

He entered as a pupil at the University of Heidelberg, where he met and formed an intimate association with Louis Agassiz and Alexander Braum and graduated as doctor of medicine at Würzburg, after attending in Berlin the lectures of the genial Prof. Schönlein and others. His inaugural dissertation created quite a sensation among the acquaintances of the young scientist. It was called "De Antholysi Prodromus" and treated of morphological monstrosities of plants and their metamorphoses. It was written in elegant Latin, and showed evidence of deep insight into the nature and cause of the deviations from the ordinary conformations of plants. Engelmann, however, did not deduct from his researches the shallow hypotheses attempted since by Darwin. His work was purely scientific, differing in

this from Darwin's conceptions, which, as Virchow proves, are not founded upon a scientific basis. This essay was soon followed by a monograph, also in Latin, on the habits of a little creeper he found on a hazel bush. It was printed in Germany, and delighted scientists on account of the minuteness and perfections of the observations. Largely due to him is the honor of having introduced the present method of classification of plants based on microscopical examinations and investigations. His whole heart was given to this work. He always investigated systematically and accepted in science nothing for granted until it had passed through the searching crucible of his analogical mind. After thorough observations he published in America his master-piece "The Monography of North America Cuscutinæ," this production being republished by botanical periodicals in England and Germany, also in America in 1842, by the "American Journal of Science." His descriptions of the cactaceæ of the Pacific Railroad survey followed, and several years later came his most renowned work on the cactaceæ of the boundary, which forms a highly interesting portion of "Emory's Report of the United States and Mexican Boundary Survey," the magnificent illustrations of which were engraved in Europe under Engelmann's direction.

Many other papers on botany were also published by him at different times, "The Yucca," "The Agave," The Conifera," "The American Oaks," etc. However, his publications on the North American vines should be particularly mentioned, for they have become very important to the grape-growers of this country as well as of Europe.

A list of Engelmann's botanical papers has been published by Prof. C. S. Sargent in Coulter's "Botanical Gazette" for May, 1884, who enumerates one hundred and twelve entries and also counts thirty-eight scientific societies of which Dr. Engelmann was duly elected a member.

Moreover, in 1856 he originated the St. Louis Academy of Science, of which he was first president. The Shaw Botanical Garden owes much of its beauties to his original ideas and plans.

He was a man of medium stature, well-proportioned, with a square German head and a countenance beaming with intelligence and kindness.

Before coming to America he spent a year in Paris to enlarge his knowledge of surgery, medicine and obstetrics. He remained there in 1832, although cholera was raging.

Dissatisfied with the political situation of Germany, and attracted by the glowing descriptions which Dresden had published of Western America, at the end of 1832 he embarked at Bremen for Baltimore, and after a long and tedious journey arrived near Belleville, Illinois, at the home of his uncle, who had preceded him.

He soon began his explorations of the country, visiting Southern Illinois, Missouri, Arkansas and Louisiana, paying particular attention to his favorite studies and discovering many plants which he afterwards described.

In one of his excursions through the wilds of Arkansas he stopped one night at a farmer's rude cabin, and while cleaning the large knife which he used to dig out plants and roots, the farmer watched him closely, and thinking that Engelmann had some murderous design, stepped forward and said, "Look ye here, stranger, let us swap knives" and at the same time brandishing a vicious looking "Arkansas tooth-pick." Engelmann was at some trouble to convince this backwoodsman that he used his knife only to dig out roots.

After making several excursions in the above states, he concluded in 1835 to settle down and commence practice at St. Louis, then only a small frontier town of ten thousand inhabitants. In order to defray the expenses of furnishing his modest office, then on Chestnut and Second Streets, he was compelled to dispose of his guns and pistols, but

did not sell his favorite horse, so necessary in those primordial times.

Practice from the first was very successful, especially among the numerous French families, who became his warmest friends. Even during the last years of his life and with failing health he would not refuse his professional services to any one even at night.

Owing to his obstetric skill he became the most popular accoucheur of those days, and was the first man who successfully used the forceps, in spite of the opposition of the members of the profession.

In about four years he had accumulated sufficient funds to enable him to leave his patients in the care of his trusted friend Dr. A. Wislizenus, and to return to Germany for the purpose of marrying Dora Horstman, of Kreuznach, to whom he had been engaged ten years. In June, 1840, he brought his young wife to his new home in St. Louis.

In 1856 he took another trip to Europe, where he remained two years to superintend the engravings of the plates for his great work on the "Cactaceæ of the Boundary."

In 1868 he repeated his European tour, accompanied by his wife and his only son George, whom they left abroad to complete his studies. In 1879 his wife, the constant companion of his journeyings, died of nervous exhaustion.

Engelmann was inconsolable, and in spite of attempted consolation by his friends, of whom I had the honor to be one, and occasional visits to the Rocky Mountains and Colorado, he gradually succumbed to the intensity of his sorrow. L. C. B.

Am. Jour. of Sci., N. Haven, 1884, 3 s., vol. xxviii (A. Gray).
Pop. Sci. Mon., N. York, 1886, vol. xxix.
St. Louis Med. and Surg. Jour., 1893, vol. lxv (L. C. Boisliniere) (portrait).
Science, Cambridge, 1884, vol. iii.
Weekly Med. Rev., Chicago, 1884, vol. ix

Engelmann, George Julius (1847–1903).

George Julius Engelmann, A. M., M. D., master in obstetrics, Vienna, was born in St. Louis, Missouri, July 2, 1847; only son of George Engelmann, who was born in Frankfort-on-the-Main in 1809 and died in St. Louis in 1884. His mother was Dorothea Horstmann, born at Bacharach-on-the-Rhine in 1804, and died in St. Louis in 1879.

His early education was guided by his mother until 1856, when he was taken by his parents to Europe to study in the great centers which his father sought in the interest of botanic research. He returned to St. Louis in 1858, and entered Washington University, where he graduated with the valedictory in 1867, then for medical training to the University of Berlin, 1867–69, at Tübingen under von Niemeyer and von Bruns, 1869–70. A brief interval as volunteer surgeon under the Red Cross in the Franco-Prussian War followed; then further studies in Berlin under von Langenbeck, Virchow, Traube, Frerichs, and Martin, and graduated in the spring of 1871, receiving the first medical diploma under the new German Empire.

The years 1871–72 were spent in Vienna, mainly in the gynecologic wards of Spaeth and Braun, and in the pathologic laboratory of Rokitanski. He there received the degree of master in obstetrics, and engaged in his first important investigation on the "Mucous Membrane of the Uterus" with Dr. Kundrat, later professor of pathologic anatomy. After a winter in the hospitals of Paris and London, Dr. Engelmann returned to St. Louis in the spring of 1873 to practice in his native city, taking the position of lecturer on pathologic anatomy in the St. Louis Medical College. He entered with zest upon his work, took an active part in the medical life of the city, and organized the St Louis School for Midwives and the Maternity Hospital in 1874.

After recovery from a nearly fatal sepsis acquired in December, 1878, he gave up a laborious general practice and devoted himself entirely to diseases of women, in which he had been always most interested.

Among many of his papers may be mentioned: "The Difficulties and Dangers of Battey's Operation" ("Transactions of the American Medical Association," Philadelphia, 1878); "Battey's Operation; Three Fatal Cases, with Some Remarks upon the Indications for the Operation" ("American Journal of Obstetrics," New York, July, 1878); "Battey's Operation; A Brief Summary of Results Achieved in the Forty-seven Cases as far as Reported" ("St. Louis Medical and Surgical Journal," August, 1878); "Renal Disease Following Uteroovarian Lesion" ("Transactions of the American Gynecological Society," 1889); "Posture of Women in Labor," "Labor among Primitive Peoples, Ancient and Modern," 1882, which appeared in German (Vienna, 1884) and French (Paris, 1886), as did also the "Hystero-neurosis, Dry Treatment," and "Electricity in Gynecology;" "Vaginal Hysterectomy and Hysterectomy by Morcellement; "History of Vaginal Hysterectomy" ("Transactions of the Southern Surgical and Gynecological Society," 1883–84); "The Health of the American Girl, Presidential Address" ("Southern Surgical and Gynecological Society," 1890); "The Menstrual Function as Influenced by Modern Methods of Training, Mental and Physical, Presidential Address" ("American Gynecological Society," 1900); "The Age of First Menstruation on the North American Continent" ("Transactions of the American Gynecological Society," 1901); "The Increasing Sterility of American Women" ("Journal of the American Medical Association," October 5, 1901); "Decreasing Fecundity Concomitant with the Progress of Obstetric and Gynecic Science" ("Philadelphia Medical Journal," January 18, 1902); "The True Suspended Position in Childbirth, and the Question of Priority" ("Therapeutic Monthly," April, 1902); "Birth- and Death-rate as Influenced by Obstetric and Gynecologic Progress" ("Boston Medical and Surgical Journal," May 15, 1902); "The Age of First Menstruation at Pole and Equator" ("American Gynecology," March, 1903); "The Cause of Race Decline is not Education" ("Popular Science Monthly," June, 1903).

Archeologic researches in the interest of St. Louis Academy of Science in the swamp-lands of southeast Missouri added much of interest to the society's museum and formed the basis for his own private collection, one of the most important in the West, to which exchanges with the museums of Washington, Berlin, and Vienna added greatly. On removing to Boston in 1895, the larger part of his collection of Missouri flints and pottery from the mounds was given to the Peabody Museum of Archeology in Cambridge.

Dr. Engelmann was professor of diseases of women and operative midwifery, Missouri Medical College and St. Louis Post-graduate School of Medicine; president American Gynecological Society, 1900; president Southern Surgical and Gynecological Society, 1890; president St. Louis Obstetrical and Gynecological Society, 1887–89; fellow London Obstetrical Society, British Gynecological Society, Boston Obstetrical Society; member of the Massachusetts Medical Society and Medical Society of the State of New York.

He married in 1879 Emily Engelmann, who died after a long illness in 1890, and in 1893, Mrs. Loula Clark and removed to Boston, Massachusetts, in 1895. He died on November 16, 1903.

J. T. J.

From an address by Dr. Joseph T. Johnson, Trans. Amer. Gynec. Assoc., 1904. Trans. Southern Surg. and Gynec. Asso., 1903, vol. xvi (L. S. McMurtry) (port.).

Entrikin, Franklin Wayne (1830–1897).

The son of Emmor and Susanna (Bennett) Entrikin, Quakers, he was born at West Chester, Pennsylvania July 27, 1830. His parents removed with him to New Lisbon, Ohio, in the fall of 1831, and settled on a farm in Hanover township, and here he attended the country schools. They removed to a farm two

miles south of Salem, Ohio, in 1840, where he attended the Salem Quaker Academy, working on the farm during vacations. He studied anatomy, physiology, chemistry, and materia medica under Dr. John Harris, of Salem, and also learned practical dentistry. In the summer of 1848 he worked under Drs. Robertson and Kuhn, at Hanover, Ohio.

In July, 1855, he removed to Findlay. He attended lectures at the Medical College of Ohio and graduated in the spring of 1873.

During the first twenty years of his professional career, Dr. Entrikin accumulated an anatomical cabinet, the work of his own hands, to which was added by purchase many of Azieus' best models in papier maché, and a large number of pathological specimens obtained in operations and postmortems. Dr. Entrikin had charge of the Green Springs Medical and Surgical Sanatorium, 1881–82. He returned to Findlay in 1883; was elected professor of diseases of women, Fort Wayne Medical College in 1882, and delivered lectures on gynecology there during the winters of 1882, '83, and '84. In the summer of 1885 he was elected to the chair of gynecology, Toledo Medical College, and lectured there in 1885–86.

Dr. Entrikin was a member of the Ohio State Medical Society and the Mississippi Valley Medical Association. He wrote the "Woman's Monitor," and contributed many articles on medical subjects, to be found in the "Lancet and Observer," "Toledo Medical Journal," and the "St. Louis Medical and Surgical Journal," also an article on "Tuberculosis" in the "St. Louis Medical and Surgical Journal," February, 1885, which attracted considerable attention.

The first tracheotomy in Hancock County, Ohio, was performed by Dr. Entrikin, in 1862, for the removal of a bean from the trachea of a little girl. On July 1, 1862, he united the severed tendon Achillis by means of a silver wire suture, performing the operation upon George Franks, of Cass township, Ohio, a perfect cure resulting. In November, 1875, he operated for ankylosis, correcting a bad deformity of the knee in a lad of fourteen, and exhibited the case before the Northwestern Ohio Medical Society in May, 1876. He also was early to propose overextension of oblique fractures of long bones, to allow for the creeping incidental to use and muscular action, calling attention to it in an article read before the Northwestern Ohio Medical Society in May, 1876, and published in the "Cincinnati Lancet and Observer" in May of the same year.

Dr. Entrikin married, in October, 1852, Sarah Ann, daughter of Thomas and Sarah (Leslie) Lyon, of Deerfield, Ohio, and had three children: Leonidas, Emmor L., and Franklin B., who graduated at the Medical College of Ohio and practised with his father who died at Findlay May 13, 1897.

Physicians and Surgeons of America, Watson (port.).

Eskridge, Jeremiah Thomas (1848–1902).

Jeremiah Thomas Eskridge, alienist, the son of Jeremiah and Mary Marvel Eskridge, was born June 1, 1848, in Sussex County, Delaware. His family was founded in America by Judge George Eskridge, a native of Scotland, who came to America in 1660 as judge of the King's Bench in Virginia.

Dr. Eskridge, when a boy, worked on a farm, attending school until fifteen, when he began teaching in the schools of his native county. With the money gained he entered at eighteen the Classical Institute at Laurel, Delaware. He entered the Jefferson Medical College, at Philadelphia, in 1872, and took his M. D. there in 1875.

Dr. Eskridge was president of the Philadelphia Northern Medical Society; a director of the Philadelphia County Medical Society; a member of the College of Physicians of Philadelphia; the American Neurological Association; and the New York Medico-Legal Society.

Immediately after graduation he practised in Philadelphia, for a time acting as assistant demonstrator of anatomy in Jefferson Medical College and physician to the Philadelphia Dispensary. In 1879 he was appointed lecturer on physical diagnosis at the Philadelphia School of Anatomy, and attending physician to St. Mary's Hospital. He was elected in 1880 attending physician to Jefferson Medical College Hospital; in 1882, neurologist to the Howard Hospital, and in 1883, post-graduate instructor in mental and nervous diseases in Jefferson Medical College.

Dr. Eskridge's health broke down in 1883, and in 1884 he went west on account of tuberculosis of the lungs and settled in Colorado Springs, where he spent four years, and in 1888 he removed to Denver where he again practised. In 1889 he was appointed neurologist and alienist to the Arapahœ County and St. Luke's Hospitals, and the next year began giving a course of lectures on the diseases of the nervous system in the University of Colorado. In 1892 he was appointed dean of the medical faculty of the same institution and professor of mental and nervous diseases and medical jurisprudence, but in 1897 he resigned, severing all connections with the college. In 1895 he was appointed commissioner of the State Insane Asylum and from 1895 to 1898 was president of the board.

Eskridge's master mind was housed in a body all too frail to endure the work he had mapped out for himself. The systematic manner in which he studied cases, or applied his reasoning powers to abstruse problems of diagnosis, illustrated the whole life manner and method. The courts often desired his opinion and sought it privately in many cases when attorneys had failed to put him on the witness stand.

A close student of medical literature and a prolific contributor to its most difficult branch, he yet found time, in spite of a busy life, to range the broader fields of general literature.

In 1876 Eskridge married Jane Grey, who was born in Ireland but came to this country in childhood. They had no children.

Eskridge died in Denver, Colorado, January 15, 1902, his death being due to cerebral thrombosis, from chronic intestinal nephritis. His writings numbered over sixty papers, the chief being:

"Tumor of the Brain, with Double Nasal Hemianopsia." ("International Clinics," Vol. i, sixth series.)

"The Specific and Non-specific Lesions of the Brain Resulting from Syphilis and Their Influence Upon Diagnosis, Prognosis and Treatment." ("The Journal of the American Medical Association," January 4, 1902.")

"Irrigation of the Posterior Cerebral Fossa for the Relief of Basilar Meningitis." ("The Journal of Nervous and Mental Diseases," November, 1895.)

"Report of a Case of Intradural Spinal Tumor Extending Through the Foramen Magnum, Compressing the Extreme Upper Portion of the Cord, and Almost Completely Destroying It at the Third Cervical Segment." ("The Medical News," September 25, 1897.)

"Temporary Abulie Agraphia Probably Due to Partial Obstruction of the Superior Longitudinal Sinus." ("Colorado Medical Journal," June, 1896.)

"Idiopathie Muscular Atrophy." "Journal of Nervous and Mental Diseases," April, 1893.)

"Tumor of the Cerebellum." ("Boston Medical and Surgical Journal," January 10, 1895.)

"Poliomyelitis Occurring in an Epidemic Form, Followed Twelve Years Later by Progressive Muscular Atrophy and Lateral Sclerosis." ("Colorado Medical Journal, January, 1896.)

"Expert Witnesses." ("Denver Medical Times," May, 1892.)

"Trephining in Three Cases of Epilepsy; Two of the Jacksonian Variety; One Due to Old Meningeal Hemorrhage; Improvement." ("Medical News," October 13, 1894.)

A tolerably full list is in the Cat. of the Surg.-gen's. Lib., Wash., D. C.

S. D. H.

Estabrook, Joseph Hubbard (1797–1885).

He was born in Athol, Massachusetts, October 15, 1797 and, although it was early expected he would not live long, he flourished like a bay tree till eighty-eight years old. He was the son of the Rev. Joseph and Caroline Jacobs Estabrook, and was nearly the oldest graduate at the time of his death of Williams College, from which he graduated in 1818.

He studied medicine with his cousin Dr. Ezekiel Cushing, of Boston, who had lately returned from France where he had been for years studying medicine under the celebrated Baron Larrey, and from such a man Estabrook must have obtained many useful medical hints and lessons as well as the latest surgical ideas of that Nestor in the French Army staff of the Napoleonic era. Simultaneously, Estabrook attended lectures at the Harvard Medical School, where he obtained a diploma in 1821. In consequence of his delicate health, he was advised to go to Maine, where he chose Camden for his habitation, and practised for more than fifty years. In 1823 he married Caroline Jacobs, of that town, and reared a large family, six of whom practised as physicians.

He settled in Camden when there were few if any other medical men around, extremely few that had any reasonable medical education, so that his field of labor was extensive, including all of the adjacent towns as well as the islands in the Penobscot Bay. He was often called to visit patients on the outlying islands by day and night, not seldom making the trip at night in an open row-boat, and sometimes amidst severe storms.

He was a member of the Maine Medical Society, later on a member and president of the Maine Medical Association, and did excellent work in each. Rarely appearing in print, he was an excellent speaker.

He died gently at the last, July 5, 1885, leaving behind him a memory of a skillful and trusted physician. His portrait adorned the walls of many a house for twenty miles around.

J. A. S.

Trans. Maine Med. Assoc., 1886.
History of Camden, Maine.

Etheridge, James Henry (1844–1899).

James Henry Etheridge, medico-jurisprudentist and obstetrician, was born at Johnsville, New York, on March 20, 1844, the son of Dr. Francis B. Etheridge. He studied for one year at the medical department of the University of Michigan; two years at Rush, and began to practise in Chicago in 1871.

He was on the staff of several Chicago hospitals for many years, for a long time holding the chair of therapeutics, materia medica, and medical jurisprudence in Rush Medical College. This chair he vacated in 1889 to take that of gynecology, succeeding Dr. William H. Byford. In 1892 he was elected to the chair of obstetrics also, and was for some time professor of gynecology in the Chicago Polyclinic. He was well known as a brilliant operator. Though a constant contributor to medical journals, he never wrote a book.

He married, June 20, 1870, Harriet Elizabeth Powers, of Evanston, and had two daughters.

He died in Chicago, February 9, 1899.

T. H. S.

Illinois Med. Jour., vol. xlix
Bull of Alumni, Rush Coll., vol. v, 1909

Eustis, William (1753–1825).

William Eustis, army surgeon, took his medical degree at Harvard in 1772, with highest honors. He was a pupil and favorite of Dr. Joseph Warren, who thought highly of his ability and had him appointed surgeon in the Massachusetts artillery. In the battle of Bunker Hill he was near his heroic

friend and teacher when the latter was struck down by a fatal bullet. Eustis was soon made a hospital surgeon and went with Washington's army to New York. He had the reputation of being a "humane, faithful and indefatigable officer." In 1786 he served in a campaign against the Indians and in Shays' rebellion. He then withdrew from the army. Subsequently he was successively a member of Congress, secretary of war, minister to Holland, and governor of Massachusetts, and died, while holding this office, in 1825.

A. A.

Brown, Hist. Med. Dep. U. S. Army, Washington, 1873.
Twent. Cent. Biogr. Dict.
Notable Americans, Bost., 1904.

Evans, John M. (1820–1903).

John M. Evans was born in Rutland County, Vermont, February 12, 1820, where he lived till 1838, when he left his New England home for the untried West, settling in LaPorte, Indiana. Here for three years he worked as a carpenter, then entered the LaPorte Medical College, from which, in 1846, he graduated.

He removed to a little hamlet, known as "The Grove," in the following year, and one year later the place was christened Evansville, in honor of the young physician who in so short a time had won by his skill the respect of all around. On June 1, 1851 he was married at La Porte, Indiana, to Emma Clement who died in 1899. They had three children; the son, John M. became a doctor. In 1861 Dr. Evans entered the Union Army as surgeon of the thirteenth Wisconsin Volunteer Infantry, and served until March, 1865, and was also on the staff of Gen. Robert Granger. After receiving an honorable discharge he practised in Evansville until August 9, 1903, when he was stricken with his last illness.

In 1896, when Evansville became a city, he was elected her first mayor.

S. T. C.

Eve, Joseph Adams (1805–1886).

Joseph Adams, obstetrician and gynecologist, son of Dr. Joseph Eve by his second wife Hannah Singleterry, was born near Charleston, South Carolina August 1, 1805. He came of an old loyalist family of Philadelphia who, because of political opinions, sacrificed their property and left the country at the beginning of the Revolution and settled in Jamaica, West Indies. His father, Dr. Joseph Eve, was a highly cultivated man of decided inventive and poetic genius. He invented the brush and roller cotton gin and was the author of many poems. Joseph Eve, Sr., returned to the United States about the year 1800 and engaged in planting first near Charleston, South Carolina and afterwards near Augusta, Georgia.

Dr. Eve received his education in the country schools of his day, but acquired a knowledge of Greek and Latin and several of the modern languages unassisted by teachers. He studied medicine under Dr. Milton Anthony and attended his first course of lectures in Liverpool, 1827, graduating M. D. from the Medical College of South Carolina in 1828, and after this was associated with Dr. Anthony in establishing at Augusta, the Georgia Academy of Medicine. This institution was a hospital for patients as well as a school for the instruction of students. In 1833 it became the Medical College of Georgia and in 1873 was made the medical department of the University of Georgia. In the first faculty of the Medical College of Georgia, Eve held the chair of materia medica and therapeutics, but on the death of Dr. Anthony was transferred to and held for fifty-three years that of obstetrics and diseases of women and children (1839).

As a teacher he was clear, exact, and eminently practical; his lectures always carefully prepared and first written out, and he was ever untiring in the interest of his students. Throughout his long and useful career as a teacher he boldly and persistently advocated adoption of

every reform for higher medical education and was one of the committee appointed by the faculty of the Medical College of Georgia in 1848 to call a convention of the medical colleges of the country to raise the standard of requirement. This was the first movement toward advanced medical education ever inaugurated in the United States and was not received with favor. At the first meeting of the American Gynecological Society Dr. Eve was highly honored. He was invited to a seat on the right of the president and presented to the society as the oldest active teacher of obstetrics in the world and at this meeting he was made one of the first honorary fellows.

Dr. Eve was never a voluminous contributor to medical literature; but the few papers on scientific subjects which he published are characterized by deep study and research and are to be found in the "Transactions of the American Gynecological Society," the "American Journal of Obstetrics," the "Transactions of the Medical Association of Georgia," and the "Southern Medical and Surgical Journal" of which publication he was the editor for a number of years. Dr. Eve was one of the founders of the Georgia Medical Association and its president in 1879. In 1882 Emory College of Georgia conferred on him the degree LL. D. in recognition of his distinguished services to science and humanity. J. E. A.

Atlanta M. & S. J., 1885–6, xxvi.

Eve, Paul Fitzsimmons (1806–1877).

Paul Fitzsimmons Eve, surgeon in Tennessee, son of Capt. Oswell and Aphra Ann (Pritchard) Eve, was born near Augusta, Georgia on June 27, 1806. First taking his A. B. from Franklin College, Athens, Georgia, he studied medicine under Charles D. Meigs then took his M. D. from the University of Pennsylvania in 1828. A year of practice taught him his needs and to supply them he worked hard during 1831 in the clinics of the most famous European surgeons.

1831 was a time of political upheaval, and when the Russian advance was made on Poland he helped as army surgeon in Warsaw and received the golden cross of honor. In November he returned to America and in 1832 became professor of surgery in the Medical College of Georgia and in 1850 succeeded Gross in the same post in the University of Louisville, but resigned on the death of his wife, Sarah Louisa, daughter of Gen. Twiggs. He was afterwards successively professor of surgery in the University of Nashville; the same in Missouri Medical College in 1868, yet had to resign as the climate did not suit him, and returning to Nashville accepted the chair of operative and clinical surgery and finally that of surgery and diseases of the genito-urinary organs.

During his well-filled forty-five years of surgery he became a skilled lithotomist, and Meigs gives him the credit of being the first American to exsect the uterus *in situ* He did also some fine operations in trephining and trachcotomy the details of which can be seen in his largest work, "Remarkable Cases in Surgery," (1857). There was an article, too, on "One Hundred Cases in Lithotomy" ("Transactions American Medical Association," 1870) and "A Report on Hip-joint Operations performed by Confederate Surgeons" was contributed to "The Medical History of the War." He also edited the "Southern Medical and Surgical Journal" and was assistant editor of the "Nashville Medical and Surgical Journal." He had plenty of experience as an army surgeon, serving in the Mexican War, and in 1859, being in Europe, was present at the battles of Magenta and Solferino, contributing his notes to the "Nashville Medical and Surgical Journal." When the Civil War broke out he was well to the fore and became surgeon-general of Tennessee, and on the fall of Nashville was surgeon to the Gate City Hospital, Atlanta.

He married again, twenty years after the death of his first wife, Sarah Ann,

daughter of the Rev. H. D. Duncan, of South Carolina, and died in January, 1877.

A tolerably full list of his writings, which numbered some six hundred may be found in the Surgeon-general's Catalogue, Washington, District of Columbia. Among them, besides those cited is:

"Treatment of Stricture of the Urethra by Rapid and Free Dilatation," 1853.

"A Synopsis and Analysis of One Hundred Cases of Lithotomy, Lithotrity, etc., 1871.

"Lithotomy, Removal of a Calculous Mass, etc. Reports of Operations," 1873.

D. W.

Louisville M. News, 1877, vol. iv.
Med. Rec., N. Y., 1877, vol. xii.
Med. and Surg. Reporter, Phila., 1877, vol. xxxvii.
St. Louis Med. Reporter, 1869, vol. iv.
Tr. Am. M. Ass., Phila., 1878, vol. xxix.

Everts, Orpheus (1826–1903).

The ancestors of Orpheus Everts came from Vermont and settled in Ohio in 1795. They included one Mercy, daughter of Josiah Standish, son of Miles Standish. Orpheus, son of Dr. Sylvanus and Elizabeth Heywood Everts, was born in Salem Settlement, Indiana on December 18, 1826 and after early education at local schools studied medicine under his father and Dr. Daniel Meeker. Graduating from the Medical College of Indiana in 1846, he later received honorary degrees from the University of Michigan and Rush Medical College.

He began to practice in 1846 at St. Charles, Illinois, but after ten years (1846–1856) retired to take up the editorship of a newspaper in La Porte, Indiana, but after three years studied law, and was admitted to the bar in 1860. The beginning of the Civil War found him at the front as surgeon and major of the twentieth regiment Indiana Volunteers. After the war he devoted his attention to psychiatry and diseases of the nervous system, and in 1868 was appointed superintendent of the Indiana Hospital for the Insane, a position held for eleven years; and for thirteen he was professor of nervous and mental diseases in the Medical College of Indiana, then, until his death, medical superintendent of the Cincinnati Sanitorium.

For thirty-four years he was an active and honored member of the American Medico-psychological Association and its predecessor, the American Association of Superintendents of Hospitals for the Insane.

He married March 14, 1847, Mary Richards, daughter of Dr. George W. Richards, of St. Charles, Illinois and had five children: Charles Carroll, Juliet, Orpheus, William Porter, and Carolyn. Charles Carroll and William Porter graduated in medicine, but the latter died soon after finishing his course.

Dr. Everts was a frequent contributor to the press. Among his more important contributions to non-medical literature were: "Giles and Company, or Views and Interviews Concerning Civilization," a novel illustrating some phases of heredity; "The Cliffords," a philosophical allegory introducing impersonations of religion and science; "Facts and Fancies," in blank verse (a modern American epic); and he was author of numerous medical papers published in the "American Journal of Insanity," the "Cincinnati Lancet-Clinic," and "Journal of the American Medical Association." One of the last acts of his professional life was to prepare a paper for the section on "Nervous and Mental Diseases" for the American Medical Association at its meeting in New Orleans, in May, 1903, which paper appeared in the "Journal of the American Medical Association," April 16, 1904. A tolerably full list is in the Surgeon-general's Catalogue, Washington, District of Columbia.

He died at his home in College Hill, Cincinnati, June 19, 1903.

The cause of death was advancing years and failure of the digestive functions.

A. G. D.

Ewell, Thomas (1785–1826).

Thomas Ewell was born May 22, 1785 at Belle Air, Prince George County, Virginia and died there May 1, 1826, on his farm. He was the son of Col. Jesse Ewell and brother of Dr. James Ewell and began to study medicine with Dr. Weems, Georgetown, District of Columbia. He graduated M. D. 1805, University of Pennsylvania, with a thesis "The Stomach and Its Secretions" then practised medicine in Washington and married Elizabeth, daughter of the Hon. Benjamin Stoddert, of Maryland, secretary of the navy. Appointed to the medical department of the army in 1808, he was stationed at the navy-yard, Washington, remaining there until he resigned, May 5, 1813, to practise at Capitol Hill, whence he removed to Georgetown. It is said that he was the first to use ice internally in dysentery. In 1820 he tried to have a general hospital established in Washington, but could not raise the necessary funds.

W. S. L.

F

Faget, Jean Charles (1818–1884).

The discovery of a definite, practicable pathognomonic sign of yellow fever by Dr. Faget in 1858 was as invaluable to the seacoast of North America and South America between north latitude 38 1/2 degrees to south latitude 36 degrees as that of Jenner on cow vaccine, or of Pasteur in serum therapy. It allowed an earlier diagnosis and stopped at once the long disputes regarding the confusion with malaria and the pernicious horror of many types of that disease.

Jean Charles Faget was born in New Orleans in 1818, of French parentage. After a most solid and careful education under the Jesuit Fathers he went to Paris for his medical education. After undergoing a rigid examination he became an interne in the French hospitals of Paris, and on finishing his studies graduated with great honor. His thesis, then received *cum magnum laude*, was on "Quelques faits anatomiques en faveur de la cystotomie sus-bubienne chez les très jeunes enfants."

On his arrival in New Orleans, where he settled after graduation in 1845, he quickly entered into active practice. He did not find the field of the profession barren of men with ability. There was then in the city a galaxy of distinguished men, most of them graduates of "La Faculté de Paris." Men who after their splendid preparation in the hospitals and laboratories of Paris soon became brilliant practitioners in America, among them Drs. Charles Delery, Lambert, Labatut, Henri Rancé, Beaugnot, and many others. Dr. Faget, though modest and retiring, was soon at the fore. Of course it was impossible for men of such ability and forcefulness to get along in perfect harmony and peace. Is it due to the newness of the country, or the greater freedom or liberty of expression? Whatever it may be, our earlier masters were very prone to argumentation and to most active polémiques, a fact not to be regretted if kept within proper bounds, as great truths flashed from these very arguments and discussions. The combativeness of any country or people means success, growth and development.

When Dr. Faget joined La Société Médicale de la Nouvelle-Orléans, he soon became a propagandist of the infectious school of the spread of disease, while his distinguished confrères, Charles Delery, Beaugnot and Rancé were of the contagionist school. It was during the interminable polémiques between these scientists that most of the work and labor of these gentlemen was told, couched in language most polite, but with sarcasm most biting, while they broke their lances against one another, and enunciated their theories and related the facts they had as proofs.

Dr. Faget read many letters before the society, which were published in "La Gazette Médicale," all to prove that the old school which believed that the natives never had yellow fever were wrong; that the yellow fever, which was diagnosed by them with the then specific symptoms of black vomit, was not yellow fever, but most often a pernicious malarial fever which, properly treated, answered to massive doses of quinine. Finally, on July 15, 1859, Faget proved the difference between these cases and real yellow fever, a fever of one paroxysm with sometimes a remission, a flushed face, red gums, frequently hemorrhagic gums, pointed coated tongue, red and thin at the edges, ushered by a chill at night. First day, high fever, pulse in proportion; second day, high fever and falling pulse, some albumin in urine; third,

fourth and fifth day, still these symptoms, more pronounced, the pulse falling, often to sixty, even fifty, while the temperature is maintained. This important observation, made and given out by Dr. Faget in 1859, was bitterly assailed at the time, but its truth was quickly recognized by Dr. Thomas Layton and later by Dr. Just Touatre. In 1870 the latter, who had used for years in his service as a French marine surgeon, a large rectal centigrade thermometer, was able to absolutely confirm the observation of Dr. Faget, that often in the first twenty-four or thirty-six hours, with a rising temperature, as shown by the thermometer, the pulse instead of becoming more rapid is proven by the watch to be gradually falling, losing entirely its usual correlation. This undoubtedly due to some intense toxin absorption affecting the sympathetic nervous system. Often a rising temperature of 105 or 104 Fahrenheit shows a pulse of sixty, or as low as fifty per minute. For this most important clinical observation and also his "differential symptomatic signs in hematemesic paludal fever," after the epidemic of yellow fever of 1858, he was decorated by the French government as a Chevalier de la Légion D'Honneur. And for his "Type and Specific of Malaria with Watch and Thermometer" he received twenty-four votes out of fifty-three for his candidature as a member of the Académic Médicale de Paris. Dr. Faget was also made a member of the Louisiana State Board of Health. His personality was an ideal one, for besides his great medical ability he had splendid qualities of heart and mind, modest and pure; he was a consistent Christian and always a thorough and honorable gentleman. This well spent life when it ended, September 4, 1884, had certainly been a most useful one and the Faget law of pulse and temperature is as well known in the entire yellow-fever zone as the mosquito dogma is to-day. L. G. L.

Farish, Henry Greggs (1770–1856).

Henry Greggs Farish, son of a Commissary in the British Army, was born in Brooklyn, New York, about 1770, and was engaged first as assistant surgeon and later as surgeon in the British Navy, and after practising for a time in England, came to Nova Scotia and settled in Yarmouth in 1803, where he remained in active practice till his death fifty-three years later. In addition to his duties as medical practitioner he filled for many years, with singular ability and integrity, many important public offices. He was naval officer, collector of excise, registrar of deeds, and an able magistrate.

Three of his sons adopted medicine as a profession. Greggs Joseph and James C. settled in Yarmouth, and Henry G. in Liverpool, England.

Dr. Farish must have been extremely methodical in all his ways, otherwise he could not have successfully carried on a large practice in conjunction with his many public duties. As a proof of the careful and conscientious manner in which he cared for his patients, there is no better evidence than the record of 2,148 cases of labor attended by him.

The Farish obstetrical record was published in volume 4, page 177 of the "Maritime Medical News," Halifax, and is a very interesting document. It includes over 10,000 cases of confinement attended by the father and his three sons.

Dr. Farish died in Yarmouth, Nova Scotia, in 1856. D. A. C.

Farrand, David Osborn (1837–1883).

David Osborn Farrand was born in Ann Arbor, Michigan, April 23, 1837, the son of Judge Bethuel Farrand, prominent in the early history of Michigan, and Deborah Osborn Farrand, whose culture and tactful manners made a home full of benediction to all who were its guests. David had his general education in the Ann Arbor schools and literary department of the univer-

sity, his medical studies in the medical department of the university and afterwards in Germany, then completed them at the College of Physicians and Surgeons of New York City, whence he received his diploma in 1862. On graduating he entered the United States Army as a volunteer and was stationed at the Lawson General Hospital in St. Louis, Missouri, later being detailed to the barracks at the east end of Clinton Street, Detroit, and St. Mary's Hospital, places for transfer of soldiers on their way to the front. In 1864 a commission as assistant surgeon in the regular army was given and he was transferred to Harper Hospital, Detroit. In 1866 he formed a partnership with Dr. Zina Pitcher. Until 1871 by special permit he was contract surgeon of the Detroit troops. From its origin till his death in 1883 he was surgeon to Harper Hospital, Detroit, and a member of the Michigan State Medical Society in 1866 a leading spirit in the erection of Harper Hospital building; its training school for nurses was named after him, also one of the Detroit public schools. As he was quick of perception, of thought and execution, he accomplished a vast amount of work.

In September, 1866, Dr. Farrand married Elizabeth Trombly, who with two daughters and a son survived him. The son became a physician, the father died in Detroit, Michigan, March 18, 1883, with cerebral infection from a chronic suppurating ear.

His writings were not many, they included:

"Urethral Fistula of Traumatic Origin—Successfully Treated by Urethrotomy." ("Detroit Review of Medicine and Pharmacy," vol. i.)

"Ligation of Subclavian Artery for Subclavian Aneurysm." ("Detroit Review of Medicine and Pharmacy," vol. i.)

"Successful Ligation of Femoral Artery." "Detroit Review of Medicine and Pharmacy," vol. ii.)

"Tetanus." ("Detroit Review of Medicine and Pharmacy," vol. ii.) L. C.

Cyclopedia of Mich. Biog. West. Publishing Co., 1900.
Mich. Pioneer Recollections, vol. i.

Farrand, Elizabeth M. (1852–1900).

Born at Ann Arbor, Michigan, March 31, 1852, she was the daughter of Lucretius S. and Francis Shaw Farrand, her grandfather being Bethuel Farrand, the first probate judge in Washtenaw County, Michigan. After a general education at the Ann Arbor public schools she graduated at the Ann Arbor High School in 1872 and during the next fourteen years served as assistant librarian at the University of Michigan, meantime preparing a history of the University which she published in 1885. She had her M. D. from the department of medicine and surgery of the university, and in 1888 she was resident physician in the Detroit Woman's Hospital. She then settled in Port Huron, Michigan, and practised till her death. In 1893 she was president of the North Eastern District Medical Society; and member of the Michigan State Medical Society.

She died at Port Huron, Michigan, August 17, 1900, from cancer of the breast. L. C.

Trans. Mich. State Med. Soc., 1901.

Farrell, Edward (1843–1901).

Edward Farrell was born in Halifax, Nova Scotia, September 23, 1843, and after practising in that city for about thirty-five years, died there January 1, 1901.

His literary education was obtained at St. Mary's College, in his native city, his professional training with Dr. W. J. Almon, Halifax, and at the College of Physicians and Surgeons, New York, from which he received his M. D. in 1864. For the next two years he was one of the house surgeons at Bellevue Hospital, New York.

He was elected president of the Medical Society of Nova Scotia in 1880, president of the Maritime Medical Association in 1894, and vice-president

(surgery section) of the British Medical Association in 1897. He was also a member of the Canadian Medical Association, before which he delivered a notable address on Surgery.

From 1874 to 1878 Dr. Farrell was a member of the House of Assembly, and a member, without portfolio, of the Provincial Government. At the time of his death, and for years previously, he was president and professor of surgery of the Halifax Medical College, dean of the faculty of medicine in Dalhousie University, and surgeon at the Victoria General Hospital.

He began practice in Halifax, in 1866, and quickly established a reputation for more than ordinary ability, associating himself actively with everything pertaining to the medical life of the city, and being one of the most earnest and devoted of those who fathered and fostered the Halifax Medical College. It was chiefly by his efforts also that the Halifax Infirmary was founded and developed.

Dr. Farrell was survived by a widow and eight children, four sons and four daughters. His eldest son, Dr. Edward D. Farrell, engaged in the practise of medicine in Halifax. His second son, also a physician, joined the Royal Army Medical Corps, but lost his life through disease induced by hardship and exposure during the Somaliland expedition in 1906. D. A. C.

Fauntleroy, Archibald Magill (1837–1886).

This surgeon and alienist was the son of Gen. Thomas T. Fauntleroy, of the United States of America, and born at Warrenton, Virginia, on July 8, 1837. His early youth was passed at military posts on the western frontier commanded by his father. He entered the Virginia Military Institute in August, 1853, and graduated with distinction in 1857. Then taking up the study of medicine, he spent one session at the University of Virginia, and another at the University of Pennsylvania, from which he graduated in 1860. Passing the examination for the army, he was commissioned an assistant surgeon.

He was one of the founders of the Medical Society of Virginia and was elected president in 1871, at the beginning of the second year of its existence, and the following year he was made an honorary member. In the society he was very active and influential, and probably did more than any other member in getting an act passed by the Legislature creating a Medical Examining Board.

In April, 1861, he resigned his commission in the army and entered the medical corps of the Confederate Army as assistant surgeon, and was promoted to surgeon June 27, 1861. He did duty in hospitals in various places in Virginia, and later as medical director at Wilmington, North Carolina. From July, 1861, to June, 1862, he served as chief of staff to Gen. Joseph E. Johnston, and carried his wounded commander from the field of Seven Pines. At the end of the war he settled in Staunton, Virginia, and at once became prominent as a physician and surgeon. Upon the death of Dr. Robert F. Baldwin, the superintendent of the Western Lunatic Asylum at Staunton, he was elected his successor, in 1880.

He married Sallie Conrad, of Virginia, and several children were born. Three of his sons became physicians, one a dentist. Of the former, all three entered the service of the United States, one being in the army, another in the navy, and the third in the marine hospital service.

He died in his fiftieth year, in Staunton, June 19, 1886.

His contributions to medical literature were not very numerous. They included:

"Case of Backward Dislocation of the Hip Reduced After Twenty-five Days by Manipulation." ("Confederate States Medical and Surgical Journal," vol. ii, No. 1.)

"Hip-joint Amputation." ("Richmond Medical Journal," vol. i.)

"Traumatic Tetanus." ("Virginia Medical Monitor," vol. ii.)

"Hydatids of the Kidney." (Ibid., vol. v.)

"Chloroform in Obstetrical Practice." (Ibid., 1873.) R. M. S.

His family has photographs of him. Trans. Med. Soc., of Va., 1886.

Fay, Jonas (1737–1818).

Jonas Fay was born in Hardwick, the second of Stephen Fay's ten children, on January 13, 1737.

Of his youth and training, we only know that Dr. Fay had a good general education for those days, a "pen and ink training." Of his professional education there is apparently nothing known. At the age of eighteen he was in the French War at Fort Edward and Lake George in a company of Massachusetts troops, then surgeon to Ethan Ellen's expedition against Ticonderoga, and later surgeon to Warner's Regiment for the invasion of Canada. In his professional life in Bennington and elsewhere, he followed the routine of the average country doctor of those times.

His public services, however, give him a high place in Vermont history. He was one of the founders of the state. A man of good native endowments, of wide information, of courage and determination as well as of likeable disposition and, above all, a patriot.

Stephen Fay, his father, had come to Bennington in 1766, and kept the famous Catamount Tavern. "Landlord Fay's" was the rendezvous for the Green Mountain Boys in the stirring times, when the Grants were the bone of contention between New Hampshire on one side and New York on the other. At the old hostelry, Dr. Jonas Fay was brought into frequent and intimate association with the leaders among the early settlers, chief of whom was the redoubtable Ethan Allen. Being a skillful draughtsman he early became the clerk of the Committee of Safety and of the various conventions of the settlers, which resulted in the establishment of the new state. He drew up the most important public papers, and was the author of its Declaration of Independence. These documents, still preserved in Dr. Fay's hand writing, attest the confidence in which the author was held by the inhabitants.

He was clerk of the Dorset Convention, which petitioned Congress to serve in the common cause of the country. He was again at the Westminster Convention, which declared Vermont to be an independent state, and he was secretary of the Convention that formed the constitution of the state in 1777. Dr. Fay continued to practice all this time and until 1800 in Bennington, when he removed to Charlotte, and later to Pawlet, but returned to Bennington late in life and died there March 6, 1818.

Senator Proctor discovered in 1904, in the Library of Congress, certain manuscripts relating to the early Vermont Conventions, and these manuscripts, all in Dr. Fay's hand writing, he reproduced in facsimile and distributed in a bound volume. This volume contains Dr. Fay's family record, and shows him to have been twice married. By his first wife, Sarah, he had seven children. His second wife was Lydia, widow of Challis Safford, and had three children. C. S. C.

Fayssoux, Peter Dott (1745–1795).

No record of the ancestry of this army surgeon is extant, but it is known that he was born in Southern France in 1745. His mother emigrated to Charleston, South Carolina, in 1746 or 1747, where the boy grew up and was educated under the care of his stepfather, James Hunter. He graduated in medicine at Edinburgh in 1774 or 1775.

Of Dr. Fayssoux's life only a few fragments have been preserved, but

these indicate a man of strong character, actively devoted to the cause of his adopted country, learned and skillful in medicine with high ideals for the betterment of his profession. He took an active part in the stirring events of the Revolution, and on July 13, 1778, was appointed first lieutenant, South Carolina Regiment. He was taken prisoner at Charleston on May 12, 1780, and was sent to St. Augustine, Florida, where he endured his "captivity with patience and exile with resignation." In the following year, on May 15, he received the appointment of chief physician and surgeon of hospital, southern department, which position he held until the close of the war. His public service, however, did not end with the advent of peace, for in 1786 we find him a member of the Legislature, acting "with independence and firmness of character." He was also a member of the Privy Council.

Dr. Fayssoux seems to have been the initiator of the movement to organize the Medical Society of South Carolina, for it was at his house in December, 1789, that Dr. David Ramsay and Dr. Alexander Barron met with him to carry out this project. He was elected the first president.

He married Mrs. Ann Johnson, née Smith, on March 29, 1777, and had six children, none of whom studied medicine.

He died suddenly of apoplexy, February 2, 1795. R. W., Jr.

Private Family Record.
Minutes of the Medical Society of South Carolina, March 29, 1777.
Minutes of the Medical Society of South Carolina, Feb. 3, 1795.

Fenger, Christian (1840–1902).

Christian Fenger, Chicago's successful surgeon and first teacher of modern pathology, was the son of Kammerraad Fritz and Matilda Fjelstrup Fenger. From his birth, November 3, 1840, in Copenhagen, until his graduation from the medical department of the University of Copenhagen in 1867, little is known of him. After graduation he served Prof. Meyer as assistant for two years, and then gave another two years as interne of the Royal Frederick Hospital. His service in the City Hospital from 1871 to 1874, was first as prosector then as privat-docent. From the beginning of his career Dr. Fenger wished to be a teacher but failed in being appointed to the chair of pathology for which he had passed the required examination. Perhaps it was owing to this failure that he went to Egypt where he became a member of the Sanitary Council and surgeon to the Khalifa in the District of Cairo. Here he made the most of his opportunities in studying tropical disease and mastering the Arabic language. The Danish-Schleswig-Holstein and Franco-Prussian wars further added to his knowledge by giving him training in military surgery. With all this experience he quickly made his reputation as a teacher and surgeon when he came to the United States in 1877 and settled in Chicago. His medical confrères first recognized his worth by the work he did in the morgue of the Cook County Hospital. His profound knowledge of pathology was appreciated by all who attended his postmortems. Dr. Fenger was also well versed in bacteriology, keeping pace with all its new developements. The School of Modern Pathology of Chicago counts him as one of its founders. The County Hospital gave him the position of attending and consulting surgeon, which post he held for twenty years; and the internes profited by his ability as a teacher and his kindness as a host, for he cordially welcomed them at his house every week, the evening being spent in discussion and study.

Dr. Fenger taught surgery for eighteen years in the College of Physicians and Surgeons, Northwestern University Medical School, and Rush Medical College.

An acknowledgment of his work

as a teacher came to him in the appointment of professor of clinical surgery in the Rush Medical college. His teaching was enhanced by his skill in illustrating by colored drawings on the blackboard, He always adopted this way when he undertook an important operation, to show the pathologic condition, surgical anatomy, and technic of the operation about to be performed. Every operation was with him a dissection. He would stand with his knife in the air, talking and demonstrating, forgetting the patient was under anesthesia or take out a specimen and talk about it, forgetting the patient was waiting to be sewed up. His endurance was unusual, as he was able to conduct clinics from two o'clock in the afternoon until nine in the evening. He made no display of his vast clinical material and had the honesty to report unfavorable cases. He was the first in Chicago to perform vaginal hysterectomy and one of the first there to explore the brain with an aspirating needle.

During his thirty years of work he contributed more than eighty articles to surgical literature, a full list of which is given in Sperry's "Group of Distinguished Physicians and Surgeons of Chicago," 1904. The place he made for himself in the new world as scientist, surgeon, author and humanitarian did not allow him to be forgotten in the old. King Christian of Denmark conferred on him the Order of Ridder of Danneberg; America honored him in her own democratic way by a large gathering of physicians representing one hundred and thirty-nine medical societies from every part of the continent; all coming together to express admiration for the pioneer work in science done by Dr. Fenger in the country of his adoption.

During the last summer of his life his working power was taxed to its utmost, but a good holiday set him up again. On the second of March, 1902, however, he was attacked by a most virulent type of pneumonia and died five days later. During his illness the three who had been his pupils, Billings, Favill and Herrick, gave devotion and care to their beloved professor. He was survived by his wife, Caroline Abildgaard, and two children, Frederick and Augusta.

Jour. Am. Med. Assoc., July 5, 1902. Dr. N. Senn.
A Group of Disting. Phys. and Surg. of Chicago, Speery, 1904. (Port.)

Ferguson, Everard D. (1843–1906).

This surgeon was born in Moscow, Livingstone County, New York, on May 9, 1843 and was educated at Genesee College, University of Michigan, graduating from Bellevue Hospital Medical College in 1868. After practising in New York State in Essex and Dannemora, he settled in Troy and remained there until his death on September 8, 1906. He married, in 1864, Marion A. Farlay and had a son and a daughter.

He was a master of quick, accurate clinical diagnosis and his insight into complicated conditions was astonishing. As an operator, too, he had consummate ability in overcoming any unforeseen emergency. For twenty-five years he was summoned hither and thither in New York State and his resources for keeping appointments were amusing. He would sometimes get a lift on a freight train or an engine, once doing what was an unparalled thing in those days, having the New York Albany express stopped to take him up.

Keenly interested in medical literature and societies, he was a founder of the New York State Medical Association and its president in 1899, also originator and a founder of the Medical Association of Troy. His biggest work was founding the Samaritan Hospital in Troy, for which he raised about a quarter of a million by private solicitation. He himself was chief of its medical and surgical staff, and at death had done some 2153 operations, of which 907 were abdominal sections.

His chief contribution to medical literature was the editing of and writing original articles in the "Transactions of the New York State Medical Association," writing them in good virile English. His alert intelligence and good oratory made him also a welcome addition at medical meetings.

J. P. M.

Fernald, Renald (1595–1656), Bristol, England.

The state of New Hampshire had its beginning at Strawberry Bank in 1623, and the little colony had the severest hardships of life on the frontier. It was without a physician for eight years, then in 1631 there was an arrival in the colony of some fifty men and half as many women on the ship "Warwick," which dropped anchor in the harbor on July 4, 1631. Among these was Dr. Renald Fernald, who was the first physician to settle in the province of New Hampshire, and the second in New England.

Dr. Fernald was born in Bristol, England, July 6, 1595. He is said to have resigned a position in the English Navy to come to America.

From the few records of his career that have been left to us, it is known that he was a man of more than ordinary ability, and served the colony to which he had joined himself with honor and fidelity.

Soon after his arrival he was elected captain of the military company in the little colony, was drawn as grand juror in 1643, elected town recorder in 1654–1655, was trial justice of the peace, recorder of deeds, surveyor and commissioner, and clerk of Portsmouth.

The name of Strawberry Bank was changed to Portsmouth through the efforts of Dr. Fernald in a petition which he and four others presented to the General Court in May 1653.

The first coroner's inquest held in New Hampshire was in January, 1655, by a jury of twelve men, under the direction of Dr. Fernald, who certifies that the said jury returned the following verdict.

"Wee whose names are subscribed doe testifie how wee found Thomas Tuttell, the son of John Tuttell, by the stump of a tree which he had newly fallen upon another limb of the other tree, rebounding back and fell upon him, which was the cause of his death as wee consider. This was found the last day of the last March."

Dr. Fernald died at Portsmouth October 6, 1656. I. J. P.

Ferrer, Henry (1850–1890).

Henry Ferrer was born February 17, 1850 at Santiago de Cuba, but had his early education in France, studying medicine in Heidelberg and graduating in 1870. He then devoted himself to the study of the eye and ear in Vienna, Paris, and London, becoming assistant to Soelberg Wells. In 1870 he took up the practice of these specialties in California, where he achieved a wide reputation.

"Dr. Ferrer . . . had by ability and application attained eminence in the profession. His information was vast, his judgment clear, his skill great, but unfortunately his career was cut short at the time his star was growing brightest." . . .

He died at Santa Barbara, October 22, 1890. H. F.

Trans. Med. Soc. of the state of Cal., vol. xxi, 1891.

Field, Edward Mann (1823–1888).

Edward Mann Field was born July 27, 1823, at Belfast, Maine, the son of Bohan Prentice and Abigail Davis Field. He graduated at Bowdoin in the class of 1845 and studied medicine with Dr. Daniel McRuer, of Bangor, who was an excellent surgeon in the days before the discovery of asepsis. He attended medical lectures at the Jefferson Medical College in Philadelphia, where he received his degree in 1849, then went to Europe and was for two years in the leading hospitals in London and Paris. Returning

from Europe, well drilled in medical and chiefly in obstetrical science, he settled in Bangor in 1850, gained an excellent practice, and married Sally Russ McRuer, a daughter of his medical preceptor, and had two daughters.

He became extremely popular as an accoucheur, and during many years is said to have attended twice as many cases of this nature as any other two physicians around. His success in this branch was largely due to his gratifying results in difficult deliveries.

With fine literary taste, he enjoyed classical authors, and possessed poetical ability of high order, so that he often wrote "occasional" poems highly admired by those who heard them. He received the honorary A. M. from Bowdoin in 1852. His last illness, during weary months of which he was devotedly attended by his wife, was tedious and distressing. It was due to chronic enlargement of the heart, which at one time measured five and one-half inches. He suffered at times from asthma and pulmonary edema. He was early convinced of the hopelessness of his disease, and in his lucid intervals asked to be allowed to die, but to the end he endured his sufferings heroically, dying ultimately July 29, 1887, at Bangor, much lamented and leaving the record of a very successful obstetrician and physician, and a beloved personality. J. A. S.

Trans. Maine Med. Assoc., 1888, ix.

Finley, Clement A. (1797–1879).

Clement A. Finley, surgeon-general of the United States Army, was educated at Washington College, Pennsylvania, and began the study of medicine under a physician at Chillicothe, Ohio, taking his M. D. from the University of Pennsylvania in 1818. He at once entered the United States Army as assistant surgeon and served at various posts in the East and West. During the Mexican War he was medical director of Taylor's Army. In May, 1861, Finley, was appointed surgeon-general and served as such until April, 1862, when he retired at his own request, having served in the United States Army more than forty years. A. A.

Tr. Am. M. Ass., Phila., 1880, xxxi.

Firestone, Leander (1819–1888).

Leander Firestone, surgeon and gynecologist, was born in Wayne County, Ohio, April 11, 1819. Cradled in poverty and brought up as an ordinary farmer's boy, the lad fought his way steadily forward, studying at night by the light of a burning brush pile until he was able to attend a few sessions of the district school, then securing the direction of such a school for himself, and finally saving sufficient money from his scanty earnings to attend medical lectures, first at the Jefferson Medical College, Philadelphia, and then in that of Cleveland. From the latter institution he graduated in 1841 and settled immediately in Congress, Wayne County, near his place of birth. In 1847 he was called to the position of demonstrator of anatomy in the Cleveland Medical College and occupied this position for six years. In those early days the duties of the modern demonstrator were largely combined with the more exciting adventures of the not entirely historical "resurrectionist," and Dr. Firestone is reported to have been a model demonstrator. In Wooster he enjoyed a large practice and almost monopolized surgery in the counties of Wayne, Stark, Summit, Holmes and Ashland, acquiring rapidly an extensive reputation. In 1864 Dr. Firestone was called to the chair of obstetrics and the diseases of women and children in the newly organized Charity Hospital Medical College in Cleveland, a chair which he exchanged in 1866 for that of the principles of surgery in the same college. In 1879 he was once more transferred to the chair of gynecology, in which he continued active until a short time before his death. In 1878 he was appointed superintendent of the Central Ohio Insane Asylum at Columbus, and managed to combine the duties of this position with those of a

professor in the Wooster Medical College without detriment to either. At the close of his connection with Wooster he was made professor emeritus, and in 1874 received the degree of LL. D. from the University of Ohio, located at Athens. He died of apoplexy at Wooster, November 9, 1888, leaving a son, Dr. W. W. Firestone, who continued his practice in Wooster until he also died.

Dr. Leander Firestone was president of the State Society in 1859–60 and a member of the Boston Gynecological Society.

In addition to his valedictory address to the Ohio State Medical Society ("Transactions of the Ohio State Medical Society," 1860), numerous papers from his pen are to be found in the pages of contemporary medical journals.

In 1839 he married Susannah Firestone and had two sons, William W. and M. O., who both became doctors.

H. E. H.

Columbus Medical Journal, vol. vii.
Cleveland Medical Gazette, vol. iv.

Fisher, George Jackson (1825–1893).

It takes men of all kinds to make a complete medical portraiture of the country, and the bibliophile has his place in the collection. George Jackson Fisher, of Westchester, Co., where he was born November 22, 1825, had a strong liking for natural history but was withal a decided booklover, a taste which his medical profession gave him ample excuse for indulging. He studied medicine first under Prof. Nelson Nivison in Mecklenburg and attended medical lectures afterwards at the University of the city of New York whence he graduated in 1849 and began to practise with his teacher, but in 1851 removed to Sing Sing and lived there until he died, successful as a surgeon in all the major operations including Cesarean section, ligation of the carotid artery, etc., and writing a good deal on teratology. A paper on "Diploteratology" appeared in the "Transactions of the Medical Society," State of New York, from 1863–8, and an article on "Teratology" for Johnsons "Universal Cyclopedia," vol. iv. Thoroughly imbued besides in medical history, he wrote "The Old Masters of Anatomy, Surgery and Medicine," "The Medical Men of Westchester County," and grangerized S. D. Gross' "Autobiography" by adding over four hundred illustrations and forty autograph letters. He began to illustrate also "The Gold Headed Cane." His collection of some four thousand books, his fine engravings of old doctors, his big show of over four hundred medical medals made his library a delight to himself, his confrères, and his friends.

He came by his death as many another has done, by blood poisoning after an operation, and a long-standing diabetes rendered him unable to stand against it.

He had many honors, among them the M. A. of Madison University; president of the Medical Society of the State of New York; physician to the State Prisons, Sing Sing, and twenty years brigade surgeon, New York S. M. He was also editor of "The Physician and Pharmaceutist," 1868–9.

Med. Rec., N. Y., 1893, xliii.
Tr. M. Soc. N. Y., Phila., 1893.

Fisher, John Dix (1797–1850).

John Dix Fisher, founder of, and physician to, the Perkins Institution for the Blind, was the son of Aaron and Lucy Stedman Fisher, and born in Needham, March 27, 1797. He died at his home in Hayward Place, in Boston, March 2, 1850.

He graduated from Brown University in 1820, then went to the Harvard Medical School from which he received his degree in 1825. In the same year he went to Paris, where he spent two years in medical study under Laënnec, Andral, and Velpeau. In 1829 he published a book in Boston on "Confluent and Inoculated Small-pox, Varioloid Disease, Cow-pox, and Chicken-pox" from materials collected in Paris. It is dedicated to Dr. James Jackson, from whom he con-

ceived the idea of preparing the work, and is a quarto containing life size plates made by a distinguished artist. It was a work of considerable importance. Later the plates and unsold copies were destroyed by fire.

Dr. Fisher was the first to introduce the education of the blind into this country and was connected with the Perkins Institution for the Blind, at South Boston, till his death.

A committee composed of Hon. Charles Sumner, William H. Prescott, Thomas G. Cary, George N. Russell, D. Humphreys Storer, S. G. Howe, and Edward Brooks decided to erect a monument to his memory at Mount Auburn, which was duly executed in white marble.

Dr. Fisher had been elected an acting physician of the Massachusetts General Hospital shortly before his death and was present at the early applications of ether in surgery at the Massachusetts General Hospital, being one of the first to use ether in child-birth.

A portrait of Dr. Fisher, painted by his brother, Alvan Fisher, is in the Boston Medical Library. W. L. B.

Com. Mass. Med. Society, vol. viii.
Sketch of the life and character of John D. Fisher, M. D., by Walter Channing, M. D., Bost., March, 1850.
Private Memorial by George F. Fisher, a nephew.

Fiske, Oliver (1762–1837).

Oliver Fiske was the son of the "well beloved" Nathan Fiske, a minister in Brookfield, where Oliver was born September 2, 1762.

His prompt enlistment in the patriot army in 1780, at the age of eighteen, by stimulating others to follow his example, prevented a draft from the Brookfield company of militia already paraded for that purpose. After the expiration of his term of service he returned home and continued preparation for Harvard College, which he entered in 1783. He taught school in Lincoln during the winter vacation of 1786–87, but procured a substitute and hastened to Worcester when Shays and his men appeared there, arriving in time to make the march to Petersham with Gen. Lincoln. Returning to college he graduated with his class (1787), and after studying medicine three years with Dr. Atherton, of Lancaster, began practice in Worcester in 1790. He at once took a leading position and was active in forming the County Medical Society, of which he was secretary from 1794–1802, and librarian from 1799–1804. He was the first president of the district society, counselor of the Massachusetts Medical Society, and in 1811 delivered the annual address in Boston, his subject: "Certain Epidemics Which Prevail in the County of Worcester," describing the small-pox of 1796 and "spotted fever" of 1810. In 1824 Harvard honored him with her M. D.

Popular, and a scientific physician, well acquainted with natural philosophy, chemistry and physiology, Dr. Fiske, had he devoted himself to his profession, would undoubtedly have made his mark both as practitioner and medical writer. But his profession soon became secondary to other objects. An ardent Federalist, he exerted no small influence in the party, and terse and epigrammatic articles from his pen on the questions of the day are scattered through the current literature of the time. An orator of no mean ability, he was often called on. Some of these orations and political articles have been printed; more remain in manuscript. In 1798 he was town treasurer, and in 1803 special justice of the Court of Common Pleas, also a member of the American Academy of Arts and Sciences and corresponding secretary of the Linnæan Society of New England. Increasing deafness caused him to retire from active life about 1822, and the next fifteen years were largely devoted to horticulture and agriculture.

He lived in the old Judge Jennison house on Court Hill, removed when State Street was opened, with an estate reaching from the Dr. Dix place to the Second Church, and extending up the hill as far as Harvard Street. He died in Boston,

January 25, 1837, aged seventy-four. A son, R. Treat Paine Fiske, A. B. (Harvard, 1818), was a physician in Hingham, where he died in 1866.

L. F. W.

Fitch, Simon (1820–1905).

Simon Fitch came of a family named Ffytche of Widdington, Essex, England, and was born at Horton, Nova Scotia, January 2, 1820, and died at Halifax, Nova Scotia September 13, 1905.

His general education was received at the academy of his native town; his professional one in London, Paris and Edinburgh, graduating as M. D. from that university August 2, 1841.

Dr. Fitch was actively engaged in professional practice for upwards of sixty years at various places, including St. John, New Brunswick; Portland, Maine; New York City; and finally at Halifax for a period of twenty-eight years.

He was a fellow of the Royal Obstetrical Society, London; a member of the British Medical Association; the Parisian Medical Society; the American Medical Association; the New York Medico-Legal Society, and the Maine Medical Association.

For a time he was resident surgeon of the Edinburgh Maternity Hospital, surgeon to the St. John, New Brunswick, Hospital, consulting surgeon to the Victoria General Hospital, Halifax, and examiner in lunacy for the state of New York and holding for many years afterwards a surgeoncy in the United States War Department.

In 1871 Dr. Fitch introduced an improvement in the double tubular trocar, by removing the protecting cannula from the outside to the inside of the puncturing tube. In 1875 he invented the "dome trocar," with application to ovariotomy, aspiration and transfusion; and the same year a coupling for instantaneous attachment and detachment of the aspirator needle. He also invented the clamp forceps in 1876, the handy aspirator in 1877, the trocar catheter in 1882, and several other valuable surgical instruments.

Although a general practitioner he gave special attention to gynecology, being a dextrous operator, and soon acquiring a large fortune. He was a tall, handsome man, dignified, punctilious, exacting, and not easy of approach. He took practically no interest in public affairs, his leisure being devoted to travel and the study of English literature, especially the Bible and Shakspeare.

Among Dr. Fitch's writings are: "Lithotomy" ("Maine Medical and Surgical Reporter," August, 1858); "Excision of a Large Uterine Fibroid Tumor" ("Boston Medical and Surgical Journal," November 20, 1862); "Peculiarities of the Operations of Three Great Ovariotomists—Wells, Atlee, Keith" ("American Journal of Obstetrics," May, 1872); "Observations upon Medical and Surgical Practice in Great Britain" ("Transactions of the Maine Medical Society," 1872); "Paracentesis, Aspiration and Transfusion" ("Transactions of the International Medical Congress," Philadelphia, 1876); "The Dome Trocar and Associated Instruments" ("British Medical Journal," February 5, 1887); "Sanity, Insanity and Responsibility" ("Medico-Legal Journal," June, 1898).

He was twice married; his first wife was Miss Paddock of St. John, New Brunswick; his second, Miss Ackerman of Portland, Maine. He had two sons and six daughters, his eldest son, Dr. T. S. P. Fitch, becoming a medical practitioner in Orange, New Jersey.

D. A. C.

Flagg, Josiah Foster (1789–1853).

Josiah Foster Flagg, a pioneer dentist and inventor, was born in Boston January 11, 1789. His father, Dr. Josiah Flagg, was long known as the "Boston Dentist," being almost the only person who confined his whole attention to dentistry.

Josiah Flagg was a student of medicine under Dr. J. C. Warren, and in 1813 made some engravings of the large arteries for Dr. Warren's work on "The Arteries." A few years afterwards he made the draw-

ings for "Comparative Views of the Nervous System" published by Dr. Warren. Dr. Warren stated that the representations of the anatomy were beautifully and accurately executed.

He invented a bone forceps which was extensively used by the medical profession, and in 1821 published in the "New England Journal of Medicine and Surgery," vol. x, page 38, a description of his improvements on Desault's apparatus for treating fracture of the femur, an apparatus which was long used in the Massachusetts General Hospital.

He graduated from the Harvard Medical School in 1815 and practised medicine for two years in Uxbridge, Massachusetts. Returning to Boston, he married May Wait, a daughter of T. B. Wait, of the publishing firm of Wait and Lilly.

In 1833 and the succeeding years he allied himself with Dr. N. C. Keep in the manufacture of mineral teeth, inventing and perfecting the best made up to that time. In 1844–5 he conceived the idea of drilling into the nerve chamber, in order to prevent the ill consequences arising from filling over the exposed or diseased nerve. His results were published in the "Boston Medical and Surgical Journal," January 27, 1847.

In 1846 he was involved in the famous ether controversy opposing the patenting of the discovery and was also much interested in homeopathy in his later years. He died December 20, 1853.

W. L. B.

Bos. Med. and Surg. Jour., vol. li, 1847.

Fleming, Alexander (1841–1897).

Born in Curmumrock, Lanark, Scotland March 8, 1841, he came to America when his father emigrated in 1859 owing to ill health. The family then settled in Sackville, New Brunswick.

He took part of his course in medicine before leaving Scotland but was unable to complete it till 1869, when he took his M. D. at Harvard, first studying at Chicago University where Dr. Brown-Sequard, going on a visit, asked if he would travel with him as assistant demonstrator at his physiological lectures, but this offer was declined: later going back to Scotland to study further and here he was granted the degree of F. F. P. and S., Glasgow, 1877. He practised at Stanley, New Brunswick, but moved to Sackville in 1871, where he remained ten years, moving in 1881 to Brandon, Manitoba.

While at Sackville a sick man was landed. The case turned out to be one of small-pox and many were not vaccinated. Dr. Fleming had a tent erected and attended to the man night and day, and there were no other cases.

Dr. Fleming was a typical family physician and as such was the trusted friend of all his patients, more especially of the poor. It is said to have been touching to see the many poor who came before the funeral to have a last look at the one who had been so good and kind to them; he even sacrificed his home and interests for such patients.

He married Louisa Gain Biden in 1867, and had ten children and died at his home in Brandon November 25, 1897 of angina pectoris.

A monument was erected to his memory by the people of Brandon, an obelisk twenty-seven and one-half feet in height, quarried in Brandon and donated for the purpose by the Canadian Pacific Railway.

J. H.

Flint, Austin, Sr. (1812–1886).

The fourth in succession of a medical ancestry, Austin Flint, surgeon, was born in Petersham, Massachusetts on October 12, 1812. Thomas Flint came to America from Matlock, Derbyshire, England and settled in Concord, Massachusetts. Edward Flint, his great-grandfather, was a physician, his grandfather, Austin Flint, did good service as an army surgeon, and his father was a surgeon. The younger Austin studied at Amherst and Cambridge, graduating in Medicine at Harvard in 1832 and at once beginning to practise in Boston. But he did not stay long, most of his early professional life being passed in

Austin Flint.

(Permission of Mrs. W. B. Atkinson.)

Buffalo, where, as editor of the "Buffalo Medical Journal" which he started and subsequently as one of the founders of the Buffalo Medical College, he began by the ability of his writings and teachings to attract general attention and was very soon called to the chair of theory and practice of medicine in the University of Louisville with S. D. Gross as associate. Gross says of Flint in his "Autobiography:" "Tall, handsome, with a well modulated voice of great compass, he is as a lecturer at once clear, distinct and inspiring. During his hour no student ever falls asleep. He ranks specially high as a clinical instructor and as a diagnostician in diseases of the chest he has few equals. I know of no one who is so well entitled to be regarded as the American Laennec."

When in 1859 he settled in New York his success was very striking. Moreover, his active pen was not only recording the fruit of his studies but all the time sending forth valuable essays and monographs. His records, begun in 1833, filled 16,922 folio pages. Advancing years did not hinder his open-mindedness towards new ideas; and this was strikingly shown in his advocation of the bacterial theory of disease. Also he did more than any one to bring the biaural stethoscope into general use. He said: "Much is to be expected from the use of instruments in detecting abnormal action within the body. It seems to me certain that the principle of the telephone will by and by be applied to intrathoracic respiratory and heart sounds to transmit them with more distinctness." "With improvement in instruments we may be able to study normal and abnormal conditions of the circulation in all the natural organs of the body by the sounds they make in the processes of secretion and excretion of nutrition and of morbid growths."

The terms "cavernous respiration" and "broncho-vesicular respiration" were proposed by him. His influence in offsetting the reactionary influence of Niemeyer, the latter discarding the doctrines of Laennec, that phthisis was dependent on tubercles. Against this Flint threw the whole weight of his experience, analyzing 670 cases and deducing evidence in support of Laennec and Louis. The book is a mine of clinical experience in consumption.

Among his noteworthy writings were: "Variations of Pitch in Percussion and Respiratory Sounds," 1852; the separate pamphlets on "Chronic Pleurisy," "Dysentery," and "Continued Fever" were published in French in one volume, Paris, 1854; "Compendium of Percussion and Auscultation," four editions, 1865; "On Disease of the Heart, "several editions, 1852; "On Phthisis," 1875; essays on "Conservative Medicine," 1874; Treatise on the "Principles and Practice of Medicine," seven editions, 1866. This work is the one by which he is best known, and the "London Lancet" (March 12, 1887), reviewing it, said: "America may well be proud of having produced a man whose indefatigable industry and gifts of genius have done so much to advance medicine, and all English-reading students must be grateful for the work he has left behind him."

And some of his positions and honors were:

The chair of the institutes and practice of medicine, Rush Medical College, Chicago; professor of the principles and practice of medicine, Buffalo Medical College; professor of theory and practice of Medicine, University of Louisville; professor of clinical medicine in the New Orleans School of Medicine; physician to the Bellevue Hospital, New York, also professor of the principles and practice of medicine there; president of American Medical Association; fellow of the Pennsylvania College of Physicians; honorary member of the Medical Society of London, of the Clinical Society of London; LL. D. of Yale, and president of the New York Academy of Medicine.

Dr. Flint died of apoplexy in March, 1886, when seventy-four years old. He married, in 1835, a daughter of Mr. N. W. Skillings of Boston.

Carpenter, W. N. In Memoriam. N. York, 1886.
Brit. Med. Jour., London, 1886, vol. i.
J. Am. M. Ass., Chicago, 1886, vol. vi.
Lancet, London, 1886, vol. i.
Med. News, Phila., 1886, vol. xlviii.
Med. Rec., N. Y., 1886, vol. xxix (A. Jacobi).
N. York Med. Jour., 1886., vol. xliii.
Gaillard's M. J., N. York, 1886, xli.

Flint, Joshua B. (1801–1863).

This surgeon was born at Cohasset, Massachusetts on October 13, 1801, and went to Harvard College, graduating M. D. there in 1825.

At the instance of Dr. Charles Caldwell he was invited to Louisville in 1837, as teacher of surgery in the Louisville Medical Institute, later known as the University of Louisville. At the close of his third term he retired but was reinstated in the same chair after the lapse of a few years.

In the winter and spring of 1847 he administered ether for the first time in Kentucky and perhaps in the west. It was for an amputation of the lower limb, the ether being then called "letheon" and-administered by the aid of a complicated apparatus. About this same time Samuel D. Gross administered chloroform for the first time in Kentucky.

From 1852 to 1854 he was professor of surgery and dean of the Kentucky School of Medicine, also co-editor of the "Medical Magazine," Boston.

His fine scholarship, literary and professional, made itself evident to all appreciative observers. He was not ostentatious in this regard. His sound judgment as a practitioner of surgery and his rare dexterity and coolness as an operator were readily recognized. In the field of operative surgery he was distinguished beyond all other men of his time for his conservatism. In teaching, his style was quiet, eminently and purely didactic. His lectures derived their ornament from correct rhetoric and classical illustrations. As a practitioner he stood coldly upon his demeanor as a gentleman and his real merits as a practitioner.

He died at Louisville March 19, 1863.

His writings included:

Sketches of military surgery: An introductory discourse delivered to the Kentucky School of Medicine. Louisville, 1852.

A discourse delivered to the class of the Kentucky School of Medicine, introductory to a course on surgery. Louisville, 1852.

A lecture, introductory to the course of surgical instruction in the Kentucky School of Medicine, 1854.

A discourse introductory to a course of clinical surgery. Louisville, 1856.

A. S.

(Lewis Rogers) Presidential Address, Trans. Ky. State Med. Soc., 1873.

Folsom, Charles Follen (1842–1907).

Charles Follen Folsom was the son of Nathaniel Smith Folsom, a clergyman, and was born in Haverhill, Massachusetts, April 3, 1842.

His life was particularly rich in experience. After graduation from college in June, 1862, he went to South Carolina, where he spent three years in raising cotton and serving on various Federal commissions to supervise plantations and care for the "freedmen and abandoned lands." In his work he was brought closely in contact with the late Gen. Rufus Saxton. Having contracted malarial fever in this arduous service, Dr. Folsom took, in October, 1865, a sailing voyage around Cape Horn to San Francisco and returned as a sailor before the mast. He then studied medicine at the Harvard Medical School under Dr. Jeffries Wyman, and received his medical degree in 1870.

Now followed a professional career of thirty-seven years in which Folsom rendered invaluable service as a physician at the McLean Insane Hospital,

as visiting physician to the Boston City Hospital, and as consulting physician to the Adams Nervine Asylum in Jamaica Plain. In addition, however, to these exacting duties and a large practice, he found time to devote to the study of hygiene. In October, 1873, he went abroad and on his return in August of the following year was appointed secretary of the Massachusetts State Board of Health.

He was in Europe again in 1875 to investigate and report on the sewerage and sewage disposal of various foreign cities, and later, as one of a commission, recommended a plan for the sewerage of Boston which was afterwards adopted in all its essential features. In 1878 he studied experimental hygiene in Munich, and a year later was appointed by the National Board of Health as one of three experts to accompany a committee of that board to report on the sanitary condition of Memphis, and the means to prevent a recurrence of yellow fever. The recommendations of this committee were adopted. Not long after he was appointed by Pres. Hayes a member of the National Board of Health.

Dr. Folsom's interest in Harvard University, especially in Harvard College and the Medical School, was great. He was lecturer on hygiene in the Medical School from 1877 to 1879, lecturer on mental diseases from 1879 to 1882, and assistant professor from 1882 to 1885. He was president of the Harvard Medical Alumni Association, fellow of the American Academy of Arts and Sciences, honorary member of the Association of American Physicians, and also of a large number of medical societies.

Dr. Folsom died in the Roosevelt Hospital, New York, August 20, 1907. In February, 1908, the "University Gazette" announced that the corporation had established in the Medical School a teaching fellowship in hygiene or in mental and nervous diseases in memory of the late Charles Follen Folsom, A. B., 1862, M. D. 1870, overseer 1891–1903. W. L. B.

Bos. Med. and Surg. Jour., Aug. 29, 1907, vol. clvii.
Harvard Bulletin of March 4, 1908.

Foltz, Jonathan Messersmith (1810–1877).

The family of Jonathan Messersmith Foltz, surgeon-general of the United States Army, came from Prussia and settled in Lancaster in 1755. Young Foltz studied medicine under Dr. William Thompson and graduated at the Jefferson Medical College in 1830 and in the following year was commissioned assistant naval surgeon, and was promoted to the rank of surgeon in 1838. Foltz rendered distinguished services during the Mexican as well as during the Civil War, for in 1862 and 1863 he was with Faragut on the Hartford. During the bloody engagements on the lower Mississippi he was frequently under fire while attending to his duties, and his coolness and bravery under such conditions were conspicuous. After the war he served as president of the Medical Examining Board. He was appointed surgeon-general of the navy in 1871 and retired the following year, dying in Philadelphia, 1877. Among his writings worthy of mention are: "Medical Statistics of the Frigate Potomac During Her Voyage Around the World" (1834), "The Endemic Influence of Evil Government as Illustrated in the Island of Minorca" (1843), and a "Report on Scurvy" (1846). A. A.

Tr. Am. M. Ass., Phila., 1882, xxxiii.

Fonerden, John (1804–1869).

Two friends, Johns Hopkins and John Fonerden, supplemented each other. Dr. Fonerden had great admiration for the business ability of Johns Hopkins, and Johns Hopkins had like admiration for the scholarship of John Fonerden. As a natural result Fonerden became Johns Hopkins' physician, and the merchant confided to his

friend, not only all his physical ailments, but whatever plans or mental perplexities he might have. And so indirectly, Fonerden, a Baltimore alienist and philanthropist, was connected with the founding of the Johns Hopkins Hospital and University.

Baltimore was his native city and he came into it on January 22, 1804. His M. D. was from the University of Maryland. He was president of the Medico-Chirurgical Society; professor of obstetrics and diseases of women and children, Washington University, Baltimore, and visiting physician to the Bay View Asylum for the Insane.

Fonerden's father died in 1817, when the young son was but thirteen, and as he was ambitious and studious, the first thing he did was to go through his father's library and pick out books that he found interesting. Among these books were the works of Emanuel Swedenborg. The father had been one of the first converts to Swedenborgianism in America.

In these doctrines of Swedenborg Dr. Fonerden became greatly interested and, in fact, thenceforwards was an enthusiastic Swedenborgian all his life.

When Fonerden was the superintendent of the Maryland Hospital for the Insane, he was much troubled always on account of the lack of room and the insufficiency of apparatus of every kind by which his efforts were hampered. The dream of his life was of a well-planned, properly erected hospital for the city of Baltimore and state of Maryland. It was the frequent topic of conversation between Johns Hopkins and himself. Fonerden was also interested in universities. He was an industrious scholar and one of the early graduates of the Maryland University, and had brought together the library of the Medical Society of Maryland, and for many years was its librarian at an insignificant salary. A great lover of books and of learning, he longed to see a university in Maryland that was sufficient for the needs of the state.

Nothing was done regarding the two institutions in 1868. In May, 1869, Dr. Fonerden died at Boston, and at his funeral Johns Hopkins was present. The next day he sent the family $200, apologizing to Mrs. Fonerden for doing so, by saying that the money was for services which Dr. Fonerden had rendered him without sending any bill.

Soon after the funeral Johns Hopkins began to purchase land property for the hospital, and in 1870 he made his will, giving the purchased hospital site to his new hospital corporation and making the university and hospital corporations joint legatees for all of his undevised property. He had already made all the provision he desired to make for his relatives, and he inserted a clause in his will cutting them out, in case they interfered with its provisions, from all participation in its benefits.

It may be added that after the death of John Fonerden, one member of his household after another shortly followed him. Miss Mary Esther Fonerden was one of the earliest pioneer trained nurses in America.

Am. Jour. of Insanity, vol. xxvi, 1869.
Cordell's The Med. Annals of Maryland, 1903.

Forbes, William Smith (1831–1905).

William Smith Forbes, the son of Murray Forbes and Sally Ennis (Thornton) Forbes, was born in Fallmouth, Stafford County, Virginia on February 10, 1831. His grandfather, Dr. David Forbes, emigrated to America from Edinburgh in 1774.

Dr. Forbes received a classical education at Fredericsburg and Concord academies: he began his medical studies under Dr. George Carmichael, and attended lectures at the University of Virginia in 1850 to 1851, completing his course at the Jefferson Medical College in Philadelphia, and while attending lectures was an office student of Joseph Pancoast, at that time professor of anatomy there. He graduated in 1852 and in 1853 became resident physician in the Pennsylvania Hospital,

where he served as interne until March, 1855. Dr. Forbes then served in the English Military Hospital at Scutari during the Crimean War.

Upon returning to America, he opened in Philadelphia, opposite the Philadelphia School of Anatomy, a private school of anatomy and operative surgery, which school was suspended during the Civil War, but afterwards reopened and continued until 1870.

In 1862 Dr. Forbes was appointed surgeon of the United States Volunteers, serving as medical director of the thirteenth Army Corps until 1863, and afterwards as contract surgeon in charge of the Summit Hospital at Philadelphia.

In 1866 he took his M. D. at Pennsylvania University. From 1879 to 1886 he was demonstrator of anatomy in the Jefferson Medical College, and from 1886 up to the time of his death was also professor of anatomy and clinical surgery.

One of the greatest services rendered by him was the drawing up of the anatomical law passed by Pennsylvania in 1867. This law was slightly amended in 1883, and is one of the best of its kind in the country, and has served as the basis of many similar acts. Curiously enough, Dr. Forbes, fifteen years after the passage of this act, was arrested for complicity in the crime of robbing graves in Lebanon Cemetery, but was later acquitted of taking part in a traffic he had done so much to suppress. Perhaps the most important of Dr. Forbes' publications is his "History of the Anatomical Act of Pennsylvania."

Dr. Forbes was a popular teacher and after his appointment to the chair of anatomy at the Jefferson Medical College, his practice was subordinated to collegiate duties.

He died December 17, 1906, in Philadelphia.

His chief writings included:

"Harvey and the Transit of the Blood from the Arteries to the Veins" 1878.

"The Liberating of the Ring Finger, in Musicians, by Dividing the Accessory Tendons of the Extensor Communis Digitorum Muscle," 8°. Philadelphia, 1884. (Reprinted from "Proceedings of Philadelphia County Medical Society," 1884.)

"The Removal of Stone in the Bladder." (Reprinted from "Medical News," Philadelphia, 1894, lxiv.)

C. R. B.

Henry, Frederick P., Memoir of Dr. William S. Forbes. Repr. from Tr. Coll. Phys., Phila., 1897.

Ford, Corydon L. (1813–1894).

Corydon L. Ford's father was Lieut. Abner Ford, a lineal descendant of William Ford who emigrated from England on the ship Fortune, landing at Plymouth, Massachusetts, November, 1621. Corydon L. Ford, physician and anatomist, was born August 29, 1813, near Lexington, Greene County, New York, and an attack of infantile paralysis in early life left him crippled for severe labor. He taught in the common schools for eight years, the intervals of teaching being spent in studying medicine with the doctors around. He completed his general education at Canandaigua Academy where he formed a deep friendship with Dr. Edson Carr, the physician of Canandaigua who not only befriended him while at school but introduced him to Geneva Medical College where he supported himself by serving as librarian and curator of the museum. In 1842 he received his M. D. from Geneva Medical College and on the same day was appointed demonstrator of anatomy. In 1847 Dr. Ford was appointed demonstrator of anatomy in the University of Buffalo, New York; in 1849 he was professor of anatomy in Castleton Medical College, Castleton, Vermont. In 1852, to become professor of anatomy in Syracuse Dental College, he resigned both chairs, and in 1854 became professor of anatomy and physiology in the University of Michigan. During the vacations he gave courses of lectures at other schools. In 1879–80 and again

in 1888–91 he was dean of the medical department of the University of Michigan. In 1859 Middlebury College, Vermont, gave him her M. A.; in 1881 Michigan University her LL. D. To the University library Dr. and Mrs. Ford gave an endowment of $20,000. Nature made him a teacher, and industry and necessity compelled his highest evolution. He taught only the science of anatomy as it applied to the work of the active physician and surgeon, but his own enthusiasm for it so infected his students that they saw the dry bones live and many became notable physicians and surgeons. He was five feet ten inches tall, dark hair, large head and prominent features. His mild blue eyes scintillated marvelously to aid in expressing his thoughts always in unison with his gestures and body movements. His few words, short sentences, were most clearly enunciated and emphatic. In April, 1865, he married Mrs. Messer of Pittsfield, Massachusetts. They had no children. He died in Ann Arbor, Michigan, April 14, 1894, from apoplexy. L. C.

Hist. Univ. Mich., Ann Arbor, Mich., 1904.
Representative Men in Mich. West. Pub. Co., Cincin., O., 1878, vol. ii.
Memorial Discourses on Corydon L. Ford, by Dr. V. C. Vaughn and Martin L. D'Ooge, Ann Arbor, 1894.
There is a portrait by Ravenaugh in the Medical Faculty Room at Ann Arbor.

Forster, Edward Jacob (1846–1896).

Edward Jacob Forster was the son of Jacob and Louisa (Webb) Forster, descendants of one Reginald Forster, who settled in Ipswich, Massachusetts in 1638. He (Edward) was born in Charlestown, Massachusetts July 9, 1846, and went to public schools, graduating from the Harvard Medical School in 1868 then studying medicine in Paris and in the Rotunda Hospital, Dublin, where he was an interne. In 1869 he was a licentiate in midwifery of the King and Queen's College of Physicians in Ireland, returning to begin practice in Charlestown the same year. He had his home and a major part of his practice in Charlestown, a part of Boston, until 1891 when he removed to the Back Bay district. He was city physician of Charlestown from 1871 to 1872. For eight years he was visiting physician to the Boston City Hospital and was one of the two original visiting physicians for the diseases of women on the formation of the department of gynecology in that institution in 1892, holding the position at the time of his death. He was one of the original members of the Massachusetts Board of Registration in Medicine when it was first created in 1894, an active member of the Obstetrical Society of Boston; surgeon of the Fifth Regiment for ten years, then medical director of the First Brigade and finally surgeon-general of Massachusetts.

Dr. Forster was the author of a "Manual for Medical Officers of the Militia of the United States," New York, 1877; "Mushrooms and Mushroom Poisoning," Boston, 1890; "A Sketch of the Medical Profession in Suffolk County," Boston, 1894; "A Catalogue of the Officers, Fellows and Licentiates of the Massachusetts Medical Society, 1781–1893," Boston, 1894.

He married September 5, 1871, Anita Damon, daughter of Dr. Henry Lyon (Harvard College, 1835). They had three children, all girls. Dr. Forster died suddenly of cerebral hemorrhage May 15, 1896 in New York on his return from Philadelphia, whither he had gone on official duty as surgeon general of Massachusetts. W. L. B.

Physicians and Surgeons of America, I. A Watson.
Hist. of Boston City Hos., 1906.

Foster, George Winslow (1845–1904).

Although practising and occupying hospital positions in several states of the union, George Winslow Foster did most of his medical work in Maine, and died while in charge of the Eastern Maine Insane Asylum at Bangor.

He was born in Burnham, Maine,

September 2, 1845, the son of Benjamin Oliver and Martha Winslow Foster, but spent the earlier portion of his life in Bangor, graduating from Bowdoin in the class of 1868, obtaining his A. M. and Ph. D. from the same college in 1870, and graduating from the Medical School of Maine in 1874.

After some additional study in New York, he practised at Bangor until 1880, and at that time, having previously been more or less interested in nervous diseases, became assistant in succession at the Insane Hospital at Taunton, Massachusetts, at the New Hampshire Insane Asylum at Concord, and then of the female department of the Hospital for the Insane at Washington, District of Columbia.

At each of these places he was noted for his extreme tact and his true zeal in the study of insanity. About the year 1882 he was obliged to go to the West to settle up the family estate, so continued his work in Lemare, Iowa, and Salt Lake City, Utah.

In the year 1901, the Eastern Maine Insane Asylum at Bangor being nearly completed, he accepted the position of superintendent. Busy and interested in a new and thoroughly equipped hospital, he worked energetically until his sudden death in 1904. Dr. Foster was married to Miss Charlotte Elizabeth Adams, of Weathersfield, Connecticut, October 31, 1871 and had three children, one of whom became a doctor.

He was also a professor in mental diseases in the medical department of the Columbia University of Washington, District of Columbia.

Among his numerous papers were one on "Asylum Needs," another on "The Hydro-therapeutic Treatment of the Insane" ("American Medical Journal of Insanity," 1891) and one on "Mental Diseases."

Dr. Foster's charming wife was taken suddenly ill with double pneumonia December 23, 1903, and despite every possible care, she died on the twenty-eighth. Returning from her grave, Dr. Foster was himself attacked with the same disease, and despite the best care, he also rapidly failed, and died, his death occurring on January 4, 1904.

J. A. S.

Trans Maine Med. Assoc., 1904.

Foster, Thomas Albert (1827–1896).

The fifteenth child of a family of twenty-one, the son of Thomas Dresser and Joanna Carter Foster, he was born in Montville, Maine February 20, 1827. His mother was left a widow when he was about eight, but when twelve Thomas was able to add to her small income by his labor. He had an ordinary education and taught school for several years, and it was not until he was twenty-six that he began to study medicine with Dr. Nathan Rogers Boutelle, of Waterville. While a student in 1855, he showed his steadiness of purpose by attending fearlessly a large number of cases of cholera at Waterville and Bangor (of which fifteen died), and he was a temporary victim himself of a mild attack, but was saved by powerful sedatives. Graduating at the Philadelphia Medical School in 1856, in 1858 he took a post-graduate course in medicine and settled in Portland in 1859. He served briefly during the Civil War, and was afterwards appointed chief pension examiner. He was a member of the Maine Medical Association, once serving as its president, and was instructor in anatomy and physiology in the Portland School for Medical Instruction for several years. His large obstetric practice placed him in the front in that branch of medicine, and he was the second physician in Maine to do a successful Cesarean section.

He contributed to the "Transactions of the Maine Medical Association" numerous papers on obstetrics, physiology, and mental diseases, and was also interested in the co-education of the sexes. He would have been pleased to live in the twentieth century when psychical medicine has so boldly come to the

fore. He was a great friend of John Fiske, the learned historian and psychologist and encouraged him to read in Portland his remarkable lectures on American history. Like Fiske, he believed that death is the end of all, and that there was nothing afterwards.

Dr. Foster was married three times and had seven children, two of his sons, Barzillai Beau and Charles Wilder, became doctors.

A man highly thought of by everyone in the profession, he was often chosen a delagate to the meetings of their medical associations as a representative. He was rather short and spare, walked with a quick step, had a sandy head of hair, and beard trimmed short.

The bent of his mind is best shown by the subjects chosen by himself for prize essays to be written by the members of the association: "Physiology of Habit;" "Habits Which Endanger Health;" "Hygiene of country towns and villages;" "Hereditary Causes of Disease."

He had a very firm belief in the influence of mind upon the body, as demonstrated in the dealings which he had, with the lives of many families and practitioners.

After a long illness, he died suddenly from chronic Bright's disease November 27, 1896, ending a life which all could recall with pleasure.

J. A. S.

Trans. Maine Med. Assoc.
Personal Rememberances.

Fox, William Herrimon (1814–1883).

He was born September 14, 1814, in Moate-a-Granough, in the County of West Meath, Ireland, but at the age of nineteen came to the United States with six brothers and three of his four sisters. Upon arrival he entered at onee upon the study of medicine in Cleveland, Ohio, under Dr. Robert Johnstone of that place.

After finishing these studies young Fox entered Willoughby Medical College, near Cleveland, Ohio, from which he graduated February 21, 1839, after which he went at once to Lima, La Grange County, Indiana, where he began to practise. On December 24, 1841, he married Cornelia Raymond Averill, daughter of Mills Averill, and great grand-daughter of Col. Benjamin Simonds of Williamstown, Massachusetts, one of the heroes of the Revolution.

Impelled by a desire to move further west, in the spring of 1843 he went to Wisconsin, settling on lands which afterwards became a part of the township of Fitchburg in Dane County, about ten miles south of Madison. Here in 1843 he began the erection of a log cabin which, though composed of but two rooms, became famous throughout the region for its splendid hospitality, it being said that no wayfarer ever knocked at the doctor's door without receiving a generous welcome. In 1844 the doctor moved his family and belongings by prairie schooner to their new Wisconsin home. He was accustomed to say that wolves gave him the most trouble and the greatest fear; that he was seldom molested by highwaymen, never by Indians, with whom he was always fast friends and their much revered "medicine man."

Four daughters and one son composed his family. The second daughter, Adeline, died unmarried at twenty-one; the others were Catherine, Anna, Lucia and Arthur O.

His experience as a pioneer settler and physician covers nearly the entire annals of both territory and state, and he has left an honorable record as a noble and good man. He died upon his farm at Oregon, Dane County, Wisconsin, October, 1883, and according to his wishes was buried in the Oregon cemetery, which overlooks the spot he selected for his pioneer Wisconin home and is almost within sight of the log cabin which he built in 1843.

Among the archives of the family in the Tower of London is the story of how the Fox family of Ireland originally had

their name. The original name was O'Catharnaigh, and this family originally owned the major part of the county of West Meath and a part of the barony of Kilcoursey, in King's County, Ireland. About 1185, A. D., because of some deed of valor in war by one of the O'Catharnaigh lords, he was called "An Sionnach" (The Fox); thereafter all of his descendants to the present have borne the name. Galtrim House, now the property of Hubert Fox, Esq., still stands near Dublin, the last remaining monument of this family name and estate in Ireland. Upon one of the walls of this house still hangs an old oil painting representing Queen Elizabeth in the act of re-granting certain tracts of land to Matthew Fox and his four sons, James, John, Joseph and William, and conferring on the eldest the title of Lord of Kilcoursey. The Queen stands with parchment in hand, the Earl of Leicester near her, and the five Foxes standing in front of them. Copies of this picture were made some twenty years ago by Melville E. Stone of Chicago, a relative of the Fox's, then traveling in Europe.

The professional success of William H. Fox became an inspiration to young men of his family connection, several of whom studied and practised under him, so that, to-day, there are numerous physicians of the Fox family throughout the state.

A. O. F.

History of Dane County, Wis., vol. iii, issue of 1906.
"The Fox Family," a private publication by Melville E. Stone, 1890.

Francis, Samuel Ward (1835–1886).

This New York physician who did so much biographically to perpetuate the memory of his confrères was born on December 26, 1835, the son of Dr. John W. and Mary Eliza Cutler Francis. His mother was a grand-niece of Gen. Francis Marion and a relative of Charlotte Corday.

Samuel Ward took his A. B. and A. M. from Columbia College, New York, and his M. D. in 1860 from the University of New York. In 1859 he married Harriet H., daughter of Judge McAllister of California. When he became M. D. he also became physician for diseases of the head and abdomen at the New York Dispensary, but he is best known for his writings which included:

"Report of Prof. Valentine Mott's Surgical Clinics in the University of New York," 1859–60 (Mott prize essay).

"Life and Character of Prof. Valentine Mott."

"Biographical Sketches of Distinguished Living New York Surgeons," 1866.

"Biographical Sketches of Distinguished Living New York Physicians," 1867.

"Curious Facts Concerning Man and Nature," 1874, and with additions in 1875.

"Invention of Transparent Treatment."

He also patented twelve inventions including a gynecological examining table and a device for heating and ventilating railroad cars.

Obituary. Newport Daily News, 1886, March, 26.
Am. Phrenol. Jour., N. Y., 1857, vol. xxvi.
Med. Rec., N. Y., 1886, vol. xxix.
Tr. Rhode Island M. Soc., 1886, Providence, 1887, vol. iii.

Francis, John Wakefield (1789–1861).

John Wakefield Francis, medical editor and writer, had for father a German immigrant who kept a grocer's shop in New York where John was born on November 17, 1789.

First a printer's apprentice, he afterwards went to Columbia University and graduated thence in 1809 and from the College of Physicians and Surgeons, New York, in 1811, between these years studying under Hosack and becoming his partner on graduating.

One year before this Hosack started "The Medical and Philosophical Register." Up to 1812 it appeared anonymously, but thereafter with the co-editorial names of Hosack and Francis, the latter able to sign himself professor of the institutes of medicine and materia medica

in the College of Physicians and Surgeons, though only twenty-five. In the first volume appeared Francis' "Case of Enteritis" which was really one of septic peritonitis due to strangulation of the ileum by a Meckel's diverticulum coincident with an appendicitis. The four volumes are full of information and owe their delightful tone to his writings.

Francis was most popular as a lecturer. Up to 1820 he was incessantly teaching, writing and practising, his receipts for that year amounting to $15,000, a large sum for a young man but nine years in practice in a small city such as New York then was. His work broke him down and he went to Europe for a year, returning in 1815 and being made professor of the institutes of medicine in the College of Physicians and Surgeons; in 1817 of medical jurisprudence, and in 1819 of obstetrics.

In 1826, with Hosack, Mott, McNevin and Mitchell, he resigned from the college and organized Rutger's Medical College where he became professor of obstetrics and forensic medicine. After five years the institution was ended by legislative act and with this the teaching of Francis also.

Thirty years later this busy popular doctor died on the eighth of February, 1861, and Dr. James G. Mumford has given pleasant glimpses of him in his "Narrative of Medicine in America" (1903).

His writings included:

"A Case of Enteritis," 1810.

"An Inaugural Dissertation on Mercury," 1811.

"An Historical Sketch of the Origin, Progress and Present State of the College of Physicians and Surgeons of the University of the State of New York," 1813.

"Cases of Morbid Anatomy," 1815.

"Letter on Febrile Contagion," 1816.

"New York During the Last Half Century," 1857.

"Reminiscences of Samuel Latham Mitchell," 1859.

Eulogy on the late John W. Francis (Valentine Mott), N. Y., 1861.
Am. M. Month. and N. Y. Rev., 1861, vo . xv (A. K. Gardner).
Am. M. Times, N. Y., 1861, vol. ii.
Bull. N. York Acad. Med., 1862, vol. i.
Med. and Surg. Reporter, Phila., 1861, vol. v.
N. Amer. M.-Chir. Rev., Phila., 1861, vol. v.
There is a portrait in the Surg.-gen. Library at Wash., D. C.

Franklin, Benjamin (1706–1790).

The medical side of Franklin—little known—is, necessarily, the only one to be dealt with in a book about doctors. Born on January 17, 1706, headed by a procession of fourteen little Franklins, he was followed eventually by two more, to the household of Josias and Abiah Folger Franklin of Boston, Massachusetts. The whole family some thirty years later were glorified by the fame of the member who had become statesman, diplomist, philosopher and author, and when he died in Philadelphia on April 17, at the ripe age of eighty-four, did not see him descend into the obscurity his early modesty had predicted when he wrote:

THE BODY
OF
BENJAMIN FRANKLIN
LIKE THE COVER OF AN OLD BOOK
ITS CONTENTS TORN OUT
AND STRIPPED OF ITS LETTERING AND GILDING
LIES HERE, FOOD FOR THE WORMS.
BUT THE WORK SHALL NOT BE LOST,
FOR IT WILL, AS HE BELIEVES APPEAR ONCE MORE
IN A NEW AND MORE ELEGANT EDITION
REVISED AND CORRECTED
BY
THE AUTHOR.

He married, in 1730, a widow named Read who had been one of his early loves, and had a son and daughter.

Although not a graduate of any medical school, he was elected member of several medical societies. In those days many practised who had no degree, and an old engraving by P. Maren has under the bust "A. Benjamin Franklin, Docteur en Medecine."

Among the many medical subjects he discussed with his doctor friends was one on which he afterwards wrote; this was "Diet and its Effect on Health and Disease," in which he remarked that "in general, mankind, since the improvement of cooking, eat about twice as much as nature requires."

He also remarked that bathing would quench the thirst and stop diarrhea, and that bathing or sponging with water or spirits would reduce the temperature by evaporation in fevers. One of his most capable letters is on the heat of the blood and the cause thereof, and also upon the motion of the blood, and he had in his library a glass machine demonstrating this motion through the arteries, veins and capillaries. He discussed learnedly the absorbent vessels and perspiratory ducts of the skin and carried on experiments to prove his theories, while sleep, deafness, and nyctalopia all engaged Franklin's attention. He invented bifocal lenses for spectacles and a flexible catheter and was much interested in medical education, holding decided views on the subject. He helped many young medical students in their desire to study abroad, among them Rush, Morgan, Shippen, Kuhn, and Griffitts. Although Thomas Bond originated the idea of the Pennsylvania Hospital, Franklin created it and was its first president.

His letters on lead poisoning are wonderful, and would have been a credit to any physician of that age; his observations upon gout—and they were personal observations—are shrewd and exact. Much could be written of his treatment of nervous diseases by electricity, for many patients consulted him; many doctors wrote to him for advice; even Sir John Pringle begs him to come and treat the daughter of the Duke of Ancaster. Franklin was not carried away by his temporary successes with his method of treatment—"Franklinism," as it has been called—but gives a very reserved opinion upon its value.

Interested in vital statistics and the mortality of different diseases, he wrote about the great death rate of foundlings and among children not nursed at the breast by their own mothers, and on the growing habit among the French to neglect this duty. He discussed the doctrines of life and death. On several occasions he wrote about the possibility of infection remaining for long periods in dead bodies after burial. His ability and knowlege in everything pertaining to medicine led the King of France to appoint him a member of the commission which investigated Mesmer's work, and it was Franklin who wrote the report. He proved himself a comparative anatomist in a description which he wrote about some fossil elephant teeth that he examined. Even Dr. Jan Ingenhousz, physician to Maria Theresa and Joseph II sought his advice before inoculating the young princes.

One of Franklin's papers was "A Conjecture as to the Cause of the Heat of the Blood in Health and of the Cold and Hot Fits of Some Fevers," 1750 (?). A curious little pamphlet is a "Dialogue between Franklin and the Gout," dealing with the hygiene and treatment of the disease which plagued him. It was written during one of his visits to Passy.

In 1754, by request, he wrote "Some Account of the Pennsylvania Hospital from its First Beginning to the Fifth Month, called May, 1754," fifteen hundred copies being printed in quarto, Franklin and Hall the printers.

Desirous of helping those who knew little of vaccination, he wrote "Some Account of the Success of Inoculation for the Small-pox in England and America, together with Plain Instructions by Which any Person may be Enabled to Perform the Operation and Conduct the Patient through the Distemper." London. Printed by W. Strahan, MDCCLIX.

Franklin received the Copley medal from the Royal Society in recognition of his discoveries in electricity and held the LL. D. from St. Andrews; the Yale and the Cambridge (Massachusetts), M. A. for the same reason.

The Medical Side of Benjamin Franklin (W. Pepper), Univ. of Penn. Med. Bull., Phila., 1910, vol. xxiii.
Benjamin Franklin from the Medical Viewpoint (C. G. Cumston), N. Y. Med. Jour., 1909, Jan. 2.
Oeuvres complètes (P. J. G. Cabanis), Paris, 1825, vol. v.
The Story of a Famous Book (Franklin's

Autobiography). S. A. Green, Boston, 1871.
Biography of the Signers of Independence. T. Cowperthwait, Phila., 1849.

Frazee, Louis J. (1819–1905).

Louis J. Frazee, son of Dr. Ephraim Frazee, of Mayslick, Mason County, Kentucky, was born at this place, August 23, 1819. He read medicine with his uncle, Dr. Anderson Doniphan, in Germantown, Kentucky, and graduated from the Louisville Institute (now University), in March, 1841, settling in Maysville in 1842. With the exception of an absence of eighteen months during 1844–1845 in Europe, he practised medicine there until December, 1851, when he removed to Louisville. In 1849 he published "The Medical Student in Europe," a volume of 297 pages, descriptive of his trip, and referring to some of the objects worth seeing in Europe, with sketches of the prominent physicians, surgeons, and hospitals of Paris. A second edition appeared in 1852. He was editor of the "Transylvania Journal of Medicine" in 1852 and 1853; also of the "Louisville Medical Gazette" in 1859, and wrote a report on "Indigenous Botany," and one on the "Mineral Waters of Kentucky," both published in the "Transactions of the Kentucky State Medical Society." He also contributed some articles to journals and held the chair of materia medica and therapeutics in the Kentucky School of Medicine for seven years, and the same chair during one session in the University of Louisville. For four years he was dean of the faculty of the first-named school.

D. W.

Atkinson's Phys. and Surgs. of the U. States.

Freer, Joseph Warren (1816–1877).

Of this Chicago surgeon, Joseph Warren Freer, one biographer gives just the dry facts, the other some of the struggles with fortune which form the basis of his life's romance. One Elias Freer, of Washington County, mechanic, weds Polly Paine of Vermont and on the tenth of August, 1816, Joseph Warren comes into the world, leads the life of many country boys, helping, until he is sixteen, in his father's business and attending winter school. The future surgeon has a taste of a dry-goods store; of the drug-shop of his uncle, Dr. Lemuel Paine, where he picks up a little medicine and finally works under the doctor at Albion. Meanwhile his family buy a claim—Forked Creek—in Wilmington, Illinois, and Joseph quits medicine and for nine years lives a free hard-working life on the farm.

Of course he marries; most impecunious young farmers do, but this Emmeline, daughter of Phineas Holden, dies two years later leaving him with a little boy, Henry C.

Now Joseph Warren had an idea that his wife's life had been sacrificed to scanty medical knowledge, so he is seized with a desire to return to the study of medicine. He mounts a load of wheat that he may not lose time, and repairs to Dr. Brainard in the then village of Chicago and asks to be taken as pupil. He looked rather a rustic specimen, this young widower from the farm, but Dr. Brainard was wise in taking him and Joseph graduated at Rush Medical College in 1848. After this he spent his life there as demonstrator of anatomy professor of physiology and microscopic anatomy, president and, besides other appointments, was on the staff of the Mercy Hospital and St. Joseph's Hospital. His practice was devoted largely to surgery. He performed nearly all the operations of note including excision of the knee-joint; the elbow-joint with the entire ulna and head of radius. This before Carnochan's case.

In June, 1849, he married Katherine Gatter of Wurtemberg, Germany, and had a daughter and three sons. A good many months each year, from 1868 to 1871, were passed in foreign clinics with the result of much added brain power and a large collection of curiosities, the latter all swept away in the Chicago fire.

He died on the twelfth of April, 1877, when sixty-one years old.

D. W.

Early Medical Chicago. J. N. Hyde, Chicago, 1879.
Distinguished Phys. and Surgs. of Chicago. F. M. Sperry, Chicago, 1904.

French, George Franklin (1837–1897).

The son of John Andrew and Mary Elizabeth (Twombly) French, he was born on October 30, 1837 in Dover, New Hampshire and fitted for college at the Dover High School, graduating from Harvard in 1859 and taking his M. D. there in 1862, the M. A. being conferred on him by his alma mater in 1871.

After nearly a year's experience in the hospitals of Alexandria, Virginia, as acting assistant surgeon he was, in 1863, commissioned surgeon of the United States Volunteers by Pres. Lincoln and entered on the personal staff of Gen. Grant, with whom he remained until the latter departed for Washington in 1864, when he was assigned to duty in establishing field hospitals in the wake of Sherman's army. On Sherman's march to the sea he was surgeon-in-chief of the first division of the fifteenth army corps. At the close of the war he was breveted lieutenant-colonel and tendered a commission in the regulars, which he declined, entering into practice at Portland, Maine, where he remained thirteen years, occupying also the chairs of physiology, practice of medicine and obstetrics in the Portland School of Medical Instruction. On October 14, 1862, he married Clara A., daughter of Dr. Levi G. Hill of Dover, New Hampshire. In 1879, on account of the ill health of his wife, he removed to the city of Minneapolis, Minnesota, where he lived until his death. Here he was at once accorded first rank by his professional brethren. He had the zeal of a true humanitarian, laboring assiduously and earnestly to build and foster hospitals and a school of medicine in his adopted city where he died on July 13, 1897.

He was one of the founders and incorporators of the Minnesota College Hospital and professor of gynecology there, later occupying the same chair in the Minnesota Hospital College, now the University of Minnesota; president of the Medical Society of Maine and the American Medical Association. His contributions to the current medical literature of his day are in "The Medical and Surgical History of the War of the Rebellion;" "The Maine Medical Transactions;" "American Journal of Obstetrics;" the "Reports of the American Medical Association."

B. F.

Frick, Charles (1823–1860).

Charles Frick, a son of the Hon. William Frick, judge of the Superior Court of Baltimore City, was born in Baltimore on August 8, 1823. Educated at Baltimore College, he afterwards studied engineering, but after three years abandoned this intention and in 1843 began to study medicine under Dr. Thomas H. Buckler. In 1845 he graduated M. D. in the University of Maryland, his inaugural thesis being on "Puerperal Fever," the contagious character of which he maintained in accordance with the view then recently advanced by Dr. Oliver Wendell Holmes, and he supported his opinion by cases observed by himself at a time when the character of the disease in this respect was not so generally admitted. An important pamphlet from his pen in 1846 in which Dr. Washington F. Anderson was associated with him, was cases illustrating the pigmentary changes in the liver in remittent fever corresponding with the observations of Dr. Stewardson which were then new. While still an undergraduate, Dr. Frick gave much attention to the study of renal pathology and published, in 1850, his work on "Renal Affections." In this he aimed at clearing up the somewhat confused ideas existing as to the relation between albuminuria and the organic changes in the kidney, and showed that the mere presence of albumin does not of itself indicate organic disease—a truism now, but one which he helped to establish.

In 1858 Dr. Frick was elected to

the chair of materia medica and therapeutics in the University of Maryland. His didactic and clinical instructions from this chair gave proof of original thought and wide learning and fully justified the expectation which had been formed of his success as a teacher. But his career in this new field of work was short. In attempting to give relief to a poor patient he contracted malignant diphtheria of which he died on March 25, 1860 in his thirty-seventh year.

In memory of his virtues and worth, his friends within and without the medical profession founded the Frick Memorial Library in the Medical and Chirurgical Faculty of Maryland in his native city of Baltimore.

S. C. C.

Lives of Eminent Amer. Phys. and Surgs. S. D. Gross.
The Med. Annals of Maryland. E. F. Cordell.
Maryland M. J., Balt., 1879, vol. iv, (F. Donaldson).
Maryland and Virginia M. J., Richmond, 1860, vol. xiv.

Frick, George (1793–1870).

George Frick, the first in America to restrict his professional work to ophthalmology, author of a valuable treatise on diseases of the eye, the first work on this subject written in America, was born in Baltimore in 1793. After obtaining a broad classical education he entered the University of Pennsylvania, where he obtained his M. D. in 1815, and in 1817 was admitted as licentiate of medicine into the Medical and Chirurgical Faculty of Maryland. He then spent several years abroad, returning to Baltimore about 1819 to engage in the practice of ophthalmology. He was appointed surgeon to the Baltimore General Dispensary in 1823. In 1822 he delivered clinical lectures at the Maryland Hospital.

He was a member of the various medical societies; secretary of the Medical and Chirurgical Faculty in 1823, and joined the Maryland Medical Society in 1822. He was much interested in general science, and was one of four physicians to organize a society for promoting its study in 1819.

He devoted himself to the practice of ophthalmology and to the cultivation of general scientific studies, as well as to music, for a number of years. He was unfortunate in growing very deaf before middle life, and it is probable that this interfered greatly with his practice of medicine; for somewhere about 1840 he entirely relinquished it and left Baltimore to spend most of his time in Europe, paying occasional visits to this country. He died in Dresden, March 26, 1870, aged seventy-seven. Dr. Frick never married. He was a man of very retiring and modest character and of kind disposition, a careful scientific student whose work and writings deserve high praise.

His first writing was his thesis for the degree in medicine; its subject, "On the Melœ Vesicatorium" (1815). In 1820–21 his article on "Observations on Cataract and the Various Modes of Operating for its Cure" appeared in the "American Medical Recorder" of Philadelphia. These articles cover over forty pages. In 1821 an article on "Observation of the Various Forms of Conjunctivitis" appeared in the same journal, and in 1823 his paper on "Observation on Artificial Pupil and the Modes of Operating for its Cure." His most important work, however, was "A Treatise on the Diseases of the Eye; Including the Doctrines and Practice of the Most Eminent Modern Surgeons and Particularly Those of Prof. Beer," which was published in Baltimore in 1823. It was inscribed to his teacher, Dr. Physick, of Philadelphia. It is well and clearly written, the system upon which it is classified is excellent, and no greater praise could be given it than stating the fact that it was republished three years later in London by an English surgeon, Richard Welbank, a member of the

Royal College of Surgeons and of the Medical and Chirurgical Society of London, and dedicated to the ophthalmologist William Lawrence. Numerous foot-notes were added, but the text suffered no change. H. F.

Early History Ophthalmology, Friedenwald. John Hopkins Hospital Bulletin. 1897.
The Development of Ophthalmology in America, 1800 to 1870. Alvin A. Hubbell, 1908.
Med. Annals of Maryland. E. F. Cordell, 1903.

Friedenwald, Aaron (1836–1902).

Aaron Friedenwald was born December 20, 1836 in Baltimore, Maryland, and after receiving an ordinary school education, entered a counting room. When he reached the age of twenty-one he took up medicine, becoming an office student of the late Dr. N. R. Smith, and graduating in the spring of 1860 at the University of Maryland. He then visited Berlin, Prague, Vienna, Paris, and London to continue his medical studies. He was particularly attracted by Arlt and Von Graefe. While spending much time on general medicine, he devoted himself especially to ophthalmology. Returning to Baltimore, he did not limit himself to special work, but like many others of that day practised general medicine beside the specialty. At the time of his return there was no other ophthalmologist in the city, George Frick having retired from practice a long time before.

In 1873 he was elected to the professorship of diseases of the eye and ear in the College of Physicians and Surgeons, a position which he filled with great merit until his death, August 26, 1902.

"He was always interesting . . . and enthusiastic. As he grew older his interest did not flag, and there was no change in the tone and vigor of his lectures. He was always ready for a joke or a good story to enliven his class, and there existed between teacher and student a very pleasant good fellowship."

He held a high position in the profession of his state, and in 1889 was elected president of the Medical and Chirurgical Faculty of Maryland. Besides this he contributed numerous articles on ophthalmological subjects, the subject of his special interest being the relationship between diseases of the eye and other parts of the body. He was deeply interested in all medical affairs and in communal matters as well. A service of the most important kind was his calling into existence, in 1890, the present Association of American Medical Colleges, which has played so important a part in raising the standard of medical teaching in this country.

He died in Baltimore August 26, 1902.

H. F.

Life, Letters, and Addresses of Aaron Friedenwald, by Dr. Harry Friedenwald.

Frissell, John (1810–1893).

John Frissell was born in Berkshire County, Massachusetts March 8, 1810, his father a farmer, Amasa Frissell, whose forebears were Scotch, his mother of English parentage, by name Wilcox. Their four sons were given a good education and John Frissell went from the old Hadley Academy to Williams College, where he graduated A. B. in 1831. He then studied medicine with Dr. Ebenezer Emmons, a physician in Williamstown. Young Frissell served as his assistant for two years in the laboratory and during the next three years attended lectures at Berkshire Medical College, Pittsfield, Massachusetts, graduating M. D. in 1834 and taking the degree of A. M. from Williams College the same year. During these years and that following he was also prosector and demonstrator of anatomy under Prof. Willard Parker.

In 1846 he went to Wheeling, West Virginia, and soon became the leading surgeon of the state and of the adjacent parts of Pennsylvania and Ohio. He was the medical founder of the Wheeling Hospital in 1850 and served as

superintendent of the Military Hospital at Wheeling during the Civil War, with the rank of assistant surgeon.

His work during fifty-five years of practice covered the whole field of surgery. For ten years before Morton's discoveries regarding anesthesia Dr. Frissell did capital operations on patients who heroically suffered or were nauseated and relaxed by antimony and wine of tobacco, or stupefied by whiskey. He practised during the periods when bleeding was a universal remedy and when it had been entirely abandoned. He saw the rise and fall of many remedies, extolled as specifics, whose very names are now forgotten. He was always the thoughtful, careful, conservative surgeon, and the wise, cautious and observing practitioner.

Dr. Frissell married, in 1850, Elizabeth Ann Thompson, daughter of Col. John Thompson, of Moundsville, Virginia. They had three sons: John Thompson, who died at twenty-six of typhoid fever; Charles M., who became a Wheeling practitioner, and a third son, Walker I.

Dr. Frissell was one of the charter members and the first president of the West Virginia State Medical Society in 1867.

He died at his home in Wheeling, West Virginia, at the advanced age of eighty-four. J. L. D.

Prominent Men of West Virginia, Wheeling, 1890.
Tr. M. Soc. West Virginia, Wheeling, 1894 (J. L. Dickey).

Frost, Henry Rutledge (1790–1867).

Born at Charleston, South Carolina, October 6, 1795, the boy had as father a clergyman, one Thomas Frost, M. A., graduate of Caius College, Cambridge, England, who emigrated to America in 1775, and for mother a woman of Hugnenot ancestry descended from the Rev. Francis Le Jau, who fled to South Carolina after the revocation of the Edict of Nantes.

He was educated at the Academy of Dr. Moses Waddell, at Wilmington, South Carolina, from which he graduated with honors, and then began to study medicine under Dr. Philip G. Prioleau, and graduated from the University of Pennsylvania in 1816. For the following two years he was resident physician in the Philadelphia Alms House.

From 1824 to 1832 he occupied the chair of materia medica in the Medical College of South Carolina and filled the same position in the Medical College of the State of South Carolina from 1832 to 1866. He was dean of the faculty from 1843 to 1846 and again from 1849 to 1861.

In 1818 he began to practise at Charleston and was for several years physician to Shirras Dispensary. In 1822, in association with Drs. Dickson and Ramsay, he delivered private lectures in the Charleston Alms House to such students as were resident in the city, and in 1824 was actively interested in the organization of the Medical College of South Carolina, in whose faculty he was elected to fill the chair of materia medica. During the many years when he was dean of the faculty he discharged the duties of his office with untiring energy. He died on April 7, 1866 from diarrhea.

His skill and his warm tenderness won for him an enviable place in the hearts of the community in which he labored.

He married Mary Deas, by whom he had six children.

His most important publication was a volume entitled "Outlines of a Course of Lectures on the Materia Medica," published at Charleston, South Carolina, 1851. R. W., Jr.

Frothingham, George Edward (1836–1900).

George Edward Frothingham, specialist in ophthalmology and otology, was born in Boston, Massachusetts, April 23, 1836, of English ancestry and his general education was obtained in the public schools and Phillips Academy at Andover, Massachusetts. After teaching for a time, he began to study

medicine with Dr. W. W. Greene, professor of surgery in the medical department of Bowdoin College, Maine, and in 1864 received his M. D. from the medical department of Michigan University. After three years' practice at North Becket, Massachusetts, Dr. Frothingham became demonstrator of anatomy and prosector of surgery at Michigan University, but spent some time at the eye hospitals of New York and cultivated eye and ear work at Ann Arbor. As a result, these cases became inconveniently numerous for the surgical clinic and a new chair was formed in 1870 for him as professor of ophthalmology and otology, and to meet the needs of a rapidly changing faculty, he for brief periods filled other chairs too. Thus in 1875 he was professor of practical anatomy; in 1876 professor of materia medica and therapeutics. While living in Massachusetts Dr. Frothingham was a member of the Massachusetts State Medical Society and the Berkshire County Medical Society. In 1874 he was president of the Washtenaw County Medical Society; in 1889 president of Michigan State Medical Society. Until 1889 he was ophthalmologist and aural surgeon to the University Hospital at Ann Arbor; from 1889 consulting ophthalmic surgeon to the Children's Free Hospital and Harper Hospital, Detroit, and during 1869–71 an editor of the "Michigan University Medical Journal." His activity both physical and mental was ceaseless; whatever he undertook had all his power, all his time.

In 1860 he married Lucy E. Barbour, and had four children. Dr. George E. Frothingham died April 24, 1900, at his home in Detroit from arteriosclerosis.

The eldest son, George E., Jr., took up his father's specialty and became ophthalmic surgeon to Harper Hospital and clinical professor of ophthalmology in Detroit College of Medicine.

Papers:

"A Case of Epilepsy Apparently Cured by Correction of Hyperopia and Relief of Ciliary Spasm." ("Journal American Medical Association," vol. ix.)

"Errors of Refraction and Accommodation as Causes of Nervous Affections." ("The Physician and Surgeon," vol. xiii.)

"The More Dangerous Forms of Conjunctivitis." ("Michigan University Medical Journal," vol. ii.)

"Sympathetic Ophthalmia." ("Transactions Michigan State Medical Society," 1876.)

"An Improved Method of Extracting Senile Cataract." ("Transactions Michigan State Medical Society," 1877.)

"Indications for the Artificial Perforation of the Mastoid Process and Best Technic." ("Transactions Ninth International Medical Congress," vol. iii.)

"Some Observations Concerning the Extraction of Cataract without Iridectomy and the Use of Bandage in After-treatment." ("Transactions American Medical Association," 1888.)

L. C.

History of University Mich., Ann Arbor, 1906.
Cyclopedia of Mich., West. Publishing Co., Detroit, 1900.
Knapps Archives of Ophthalmology, vol. xxix.

Fuller, Samuel (1580–1633).

Samuel Fuller, the first practising physician to visit New England, was born in England and baptized in Redenhall Parish Church, Norfolk County, January 20, 1580. He was the son of a butcher, Robert Fuller, but of his education we know nothing. He is heard from in Leyden where he was a deacon of the church and became the friend of William Bradford, with whom he emigrated to America with the Pilgrims in 1620. He was thrown into contact with many learned men at Leyden, among them William Brewster. Before coming to America he was thrice married, his last wife, who survived him, being Bridget Lee, of Leyden. In the list of the passengers sailing on the "Mayflower," Samuel Fuller is put down as physician, also in an account of the

sickness in Gov. Endicott's Settlement at Salem, in 1628 (Bradford's "History of Plymouth Plantation") it is said: "Having no physician among themselves it was fortunate for those planters that Plymouth could supply them with one so well qualified as Dr. Fuller." Fuller was undoubtedly serviceable to the colonists during the epidemics of typhus and small-pox in 1621. He visited the sick in Plymouth, where he was deacon of the Rev. John Robinson's Church, and also made journeys for the same purpose to Dorchester, Charlestown and Salem. In 1623 he was joined by his wife and daughter. Two children were born in America, Mercy and Samuel, and altogether he had seven.

Dr. Fuller wrote to Gov. Bradford under date of twenty-eighth of June, 1630: "I have been to Matapan (a part of Dorchester) and let some twenty of those people blood," and again writing to Gov. Bradford, his old friend, in 1630 he says: "I have had conferences with them all till I was weary. Governor Endicott is a goodly wise and humble gentleman and very discreet, and of a firm and good temper." It is plain that Fuller had a mighty influence for good in the affairs of the settlers and that he was a physician and not a preacher, as sometimes alleged.

He died with some twenty others in the small-pox epidemic of 1633. His widow was held in high repute as a midwife, even receiving a call to settle in that capacity in the town of Rehoboth, Massachusetts, in the year 1663. She declined, however, and died the following year. Dr. Fuller's son, Samuel, became a clergyman and was the first minister of the church in Middleboro, Massachusetts.

W. L. B.

Memoir by Thomas Francis Harrington, M. D., reprinted from the Johns Hopkins Hospital Bulletin, vol. xiv, Oct., 1903, No. 151.
Genealog. Reg. of the First Settlers in N. E. John A. Farmer.
Genealog. Dict. of the First Settlers of N. E., 1860. James A. Savage.
Amer. Med. Biog., 1828, James Thacher.

Fussell, Bartholomew (1794–1871).

Bartholomew Fussell passed his youth and early manhood in Maryland, graduated in medicine in Baltimore. In 1826 he married Lydia Morris of Philadelphia, and shortly afterwards settled at Kennett Square, Chester County, where he rapidly acquired a very large practice.

Dr. Fussell was an ardent advocate of the cause of abolition and was also one of the first to favor the study of medicine by women, and in 1840 he gave regular instructions to a class of women on medical science and in 1846 conceived the idea of establishing a medical college for them in Philadelphia. From this project there arose in Philadelphia the Woman's Medical College.

Two of Dr. Fussell's sons became physicians. One, practised at Chester Springs, Chester County, Pennsylvania, where he died, and the other was B. Lundy. G. A. L.

G

Gale, Benjamin (1715–1790).

The son of John and Mary Gale, he was born in Jamaica, Long Island, New York, and graduated from Yale College in 1733.

His entire professional life was spent in Killingworth (now Clinton, Connecticut) where he had studied medicine with Jared Eliot, whose daughter, Hannah, he married.

His townsmen sent him to the General Assembly of Connecticut for thirty-two sessions, and would have continued him in that position, but he declined.

The Society of Arts in London elected him a corresponding member in 1765, due perhaps to his invention of an improved drill plough.

He wrote, and wrote well on a great variety of subjects, one being "Historical Memoirs, Relating to the Practice of Inoculation for the Small-pox in the British American Provinces, particularly in New England." This was printed in the "Philosophical Transaction," vol. lv, pp. 193–204, and theological studies, particularly in regard to prophecy, occupied much of his time.

Pres. Stiles wrote of him: "He was a man of integrity and uprightness, and of great skill in the medical profession, and a successful practitioner."

There is a tradition that he desired to be buried in such a position that when he should rise from the dead, which he thought would take place in 1804, the first object to meet his eyes would be the house in which he had lived. E. E.

Boston M. and S. Jour., 1840, xxii.

Gallup, Joseph Adams (1769–1849),

On March 30, 1769, Joseph A. Gallup, son of William and Lucy Denison Gallup, was born in Stonington, Connecticut.

It is not known under whose tutelage he began the study of medicine, but at the age of twenty-one he was in practice at Bethel. Later, in 1798, he took his degree at the Dartmouth Medical School. In the fall of 1799 he went to Woodstock, where he became a general practitioner and also engaged extensively in mercantile pursuits. Dr. Gallup early acquired a wide reputation as a medical man. He was especially active in assisting in the formation of societies, county and state, being a charter member of the Windsor County Medical Society and of the Vermont State Society, the latter incorporated in 1813. Dr. Gallup was elected president of the State Society in 1818 and held the office for eleven years.

He was in 1820 elected professor of theory and practice of medicine and materia medica, also president of the Academy of Medicine, which had been established in Castleton in 1818. He occupied these positions until 1823. Afterwards he was professor for a year at the Medical School in connection with the University of Vermont and he soon after became absorbed in the formation of a medical school in his home town of Woodstock. The Clinical School of Medicine, started there in 1827, was Gallup's child and was almost wholly due to his self-denying labor. He was its first professor of the institutes of medicine, of materia medica, of clinical medicine and obstetrics. During the first few years Gallup seems to have been pretty much the whole faculty. He was the fourth in America to perform ovariotomy. Dissensions arose, however, in the faculty, which resulted in Gallup's withdrawing in 1834 from

all connection with the school. He removed to Boston, where he remained for a time, but later returned to Woodstock, where he died October 12, 1849.

His best work, the full title of which is "Sketches of Epidemic Diseases in the State of Vermont from its First Settlement to the Year 1815 with a Consideration of Their Causes, Phenomena and Treatment to which is added Remarks on Pulmonary Consumption," was published in 1815 in Boston. It is a work which involved apparently considerable labor and without doubt represented correctly the views of that day in regard to epidemic diseases. He published a more elaborate work in two volumes on the "Institutes of Medicine" in 1839 and besides these was a prolific writer of papers to the state medical societies. He was a commanding figure in the medical profession of Vermont for at least two decades.

Dr. Gallup married Abigail G. Willard in September, 1792. Their children were Lewis A., who became a doctor, Harriet A., and George G.

C. S. C.

Galt, Alexander D. (1777–1841).

This alienist, the son of Dr. John M. and Judith Craig Galt, was born at Williamsburg on December 27, 1777, his father the chief surgeon of the military hospital located at Williamsburg during the Revolutionary War. He received his education at William and Mary College, and studied medicine for a time under his father, his professional education being completed in London, where, as a pupil of Sir Ashley Cooper, he attended lectures at Guy's and St. Thomas' Hospitals.

Returning to Virginia in 1796, he began to practise in his native town and unremittently engaged in its duties to the end of his life. He was made physician to the Hospital for the Insane at Williamsburg in 1800, and filled the position for forty-one years, introducing the most approved methods of treatment.

He studied his cases with great care, used great judgment in the selection of remedies, keeping notes on the history and treatment of cases and results obtained. So accurately were these recorded that from his notes his son, Dr. John M. Galt, compiled and published in 1845 a work entitled "Galt's Practice of Medicine."

He married, in 1812, Mary D. Galt, of Richmond, and had four children, two of whom, a son and a daughter, survived him. This son was Dr. John M. Galt, the second of the name, and a well-known alienist. In June, 1840 his health had become so enfeebled as to confine him to the house, but as long as he was able, he saw patients in his room, his old patrons constantly applying to him for relief. His last illness was characterized by much suffering, but in the intervals of freedom from pain he noted down his symptoms and the remedies used. On the twentieth of November, 1840 he died and was buried in old Bruton Churchyard near the graves of his parents.

R. M. S.

Galt, Dr. John Minson (17– –1808).

It is not known when this surgeon of the Revolution was born, nor where he received his education, but he was a physician of great eminence, and chief surgeon of a military hospital located at Williamsburg during the Revolutionary War. In 1795 he was appointed visiting physician to the hospital for the Insane at Williamsburg, the first hospital of the kind to be established in this country, and filled the position until his death, his son, Dr. A. D. Galt, and his grandson, Dr. John M. Galt, holding the office for forty-one and twenty years respectively. Beginning with James, the first keeper, who was appointed in 1773, and ending with the death of Dr. J. M. Galt in 1862, the connection of the family with the hospital extended over a period of nearly a century.

Dr. Galt's wife was probably Judith

Craig, and two of their sons were physicians, one, A. D. Galt, the other, William Craik Galt, who was born in 1771, and died in Louisville, Kentucky in 1853.

Dr. Galt himself died in 1808.

R. M. S.

Galt, John M., Junior (1819–1862.)

A son of Dr. Alexander D. and Mary Galt, he was born in Williamsburg March 19, 1819, his first instruction being received from his parents and chiefly from his mother, while he next went to the preparatory school of William and Mary College, and later entered the college from which he graduated in 1838 with the degree of A. B. He read medicine under his father for a time, and then entered the University of Pennsylvania, receiving from this school his M. D. in 1841.

He began to practice in his native town, and must have been almost immediately elected superintendent of the Hospital for the Insane, the office having been created by the Legislature in February, 1841, as his term of service commenced on July 1 of that year. He filled this position over twenty years; and from the time of his election until his death, Dr. Galt devoted his entire time and attention to his duties.

Dr. Galt was a member of the Medical Society of Virginia and also a member of the Convention of Medical Superintendents and Physicians of Asylums which became, fifty years later, the American Medico-Psychological Association. He was one of the early advocates of separate hospitals for the colored insane, a movement which originated with the late Dr. F. T. Stribling, superintendent of the Western Lunatic Asylum of Virginia.

He was a good classical scholar, and knew French, Spanish, the Koran in Arabic, and wrote several books and many articles. In person he was small in stature, of much good sense and, like his father, cared only for his work, nothing for money, refusing an increase of salary. His life was devoted to the care of the unfortunates under his charge. He never married, and died at Williamsburg on May 18, 1862.

For more than twenty-five years he kept a diary in which was recorded much of interest and value. In 1843 he published "Galt's Practice of Medicine," which was compiled from notes of and histories of cases left by his father. He published in 1843 a work entitled "Galt on the Treatment of Insanity;" in 1851, two essays on "Asylums for Persons of Unsound Mind;" in 1853, a second series on the same subject; in 1856, "Galt on Insanity in Italy," and in 1859, "Lectures on Idiocy." For medical journals he prepared many medical reviews and also wrote articles on botany. One manuscript, a "Life of Albert Galt the Sculptor," was written but never published.

R. M. S.

Garcelon, Alonzo (1813–1906).

The great grandson of David Davis, one of the earliest pioneers of New England, and a man distinguished in his native state, both medically and politically, he deserves careful mention. He was born in Lewiston, Maine, May 6, 1813, the son of Col. William and of Mary Davis Garcelon. As a boy he lived mostly on a farm of his father's in the outskirts of the city and worked on it tilling the soil, but he had an excellent education at the academies in Monmouth, Waterville, and New Castle, Maine, and graduated at Bowdoin College in the class of 1836, afterwards teaching school at Alfred, Maine, and Fryeburg, but studying medicine in the meanwhile with Abiel Hale, of the latter town, and earning enough money to attend the medical school at Dartmouth. While there, he attracted the attention of Prof. Reuben Dimond Mussey by his anatomical dissections, so much so that the professor invited him to act as his anatomical demonstrator at the Medical College of Ohio, then situated at Cincinnati, where Garcelon took his

degree in 1839. Not long after he returned to Lewiston, and began at once an active practice which continued for sixty-seven years.

It is said of him that he did the first mastoid operation ever done in Maine, and it is also well known that he was an excellent surgeon from the beginning of his career, which might have been expected from the unequalled instruction received at the hands of Prof. Mussey. He soon became one of the best known medical men in Maine, and with the outbreak of the Civil War, came rapidly to the front as a most capable military surgeon. He was appointed surgeon-general of the state early in 1861, and gave his entire time to the preparation of troops, later going himself, and being present at the first battle of Bull Run. After that he went through the Peninsula Campaign, was at Antietam and elsewhere until, worn out with malarial fever, he came home for a rest. Recovering rapidly, he returned to the army and was chief surgeon at the "White House" and "City Point" in Virginia during Grant's campaigns, finally returning home after four years of active service.

Dr. Garcelon resumed active practice at once, but gradually became again interested in politics. He was also elected president of the Maine Medical Association and read before it several papers of medical and surgical interest.

In 1886, when seventy-three years old, he read an excellent paper on "Dislocation of the Shoulder Backward." It has also been claimed that he was the first in the state to remove the thyroid gland.

The first newspaper in Lewiston was started by him and he was for a long time its chief editor in spite of many demands on his time as a medical man.

In 1841 he married Miss Ann Augusta Waldron, of Dover, New Hampshire, by whom he had four children. She dying in 1857, he married again in 1859 Miss Oliva Spear, of Rockland, Maine, and had a daughter.

He was chosen governor of Maine by the Legislature in 1879.

Dr. Garcelon maintained his remarkable vitality to the last; he had neither ache nor pain to the day of his death, testifying as an expert only a few weeks before this occurred, and also made a fine address on "Preventive Medicine" before the City Board of Health a few weeks before he died.

He was found dead in bed December 8, 1906, while making a visit to his daughter in Medford, Massachusetts.

In his old age he was thin and spare of feature and body, clean shaved, rather peaked face, largely free from wrinkles, and wore always an old-fashioned black stock with a high standing wide open collar which gave him a venerable appearance.

J. A. S.

Trans. Maine Med. Assoc., 1907.

Garden, Alexander (1728–1792).

Born about 1728, son of the Rev. Alexander Garden of Aberdeen, he not only came to the States but stayed thirty years. Yet not one in a thousand either here or in England knows after whom the *Gardenia Jasminoides* was named.

His medical education was with the celebrated Dr. John Gregory in Edinburgh and at Aberdeen University. He arrived in South Carolina about 1750 and settled down to practise with a Dr. Rose in Prince William parish. At once he started on his favorite study of botany, but ill health compelled a voyage northward and he was offered but declined a professorship in New York Medical College. Returning to Charleston, he began what was to be a very successful practice. An odd little glimpse of his life at this time is given in a letter to John Bartram the botanist: "Think that I am here, confined to the sandy streets of Charleston where the ox, where the ass, and where men as stupid as either fill up the vacant space, while you range the green fields of Florida." The study of zoology, especially fishes and reptiles, filled up his leisure left from a large prac-

tice and botanizing. He kept up an active correspondence also with Linnaeus and with John Ellis the botanist who named the beautiful Cape Jessamine "Gardenia" in his honor.

Thacher, who loves to disguise weaknesses in wordy dressing, says Garden was "particularly fond of refined female society and to it devoted a considerable portion of his time, *but enough was reserved for mental improvement,*" About 1772 he was made a fellow of the Royal Society of London and eventually vice-president. Eager to extend his knowledge, Garden in 1755 accompanied James Glen, governor of South Carolina, when he penetrated into the Indian country and formed a treaty with the Cherokees and discovered an earth equal to that used for Worcester china, but history does not record what came of the discovery. He introduced into medical use the *Spigelia marilandica* or pink, as a vermifuge, and anyone who would like to know more of Garden's travels and pretty reverent letters about nature should get the *Linnaean Correspondence* edited by Sir J. E. Smith. A somewhat pathetic interest is attached to his little granddaughter named Gardenia. Her father, Garden's only son, joined Lee's Legion against the British and was never forgiven nor the little girl with the flower name received into the house.

Tuberculosis, hitherto successfully fought, began to tell on Garden's health and, although it was hoped that "revisiting the haunts of his youth and the pleasing recollections of juvenile scenes would have salutary influence in arresting the disease," nothing of the kind occurred. As far as can be seen the good time every learned man tried to give him during his progress homewards must have considerably exhausted his strength. It is told that he stayed with his wife and two daughters in Cecil Street, off the Strand, London, and there, patiently realizing there was nothing to be done, he put on paper all he could of his Carolina work, enjoyed the men who flocked to him, and got ready for the last long journey. That he was ready all biographers show, and he died peacefully in London, 1792.

D. W.

Memorials of John Bartram and Humphry Marshall; W. Darlington, 1849.
Am. Med. Biog. Thacher.
Memoir of Dr. W. C. Wells, 1818.

Garlick, Theodatus (1805–1884).

On March 5, 1805, Theodatus Garlick was born in Middlebury, Addison County. His father, though a poor farmer, was respectably connected, and probably furnished his son with as good an elementary education as his situation afforded. In July, 1816, when only eleven years old, in company with an elder brother, Abner, he walked from his home in Vermont to Elk Creek (now Girard), Pennsylvania, where his oldest brother, Rodolphus, had settled some six years before and was occupied as a blacksmith. The boy remained with his brother Rodolphus for some two years and learned the trade of a blacksmith, but about 1818 travelled on to Cleveland and learned stone cutting from Abner who had come west with him and had settled in that city. The next few years were spent in Cleveland, on Black River or in Newbury, Geauga County, sometimes with one brother, sometimes with the other, but always engaged in either blacksmithing or the lettering of tombstones. Indeed, from the period when he left home in 1816 the doctor assures us that he never received any pecuniary aid from his father, but supported himself by his own work. In 1830 another brother, Anson, rented a farm in Brookfield, Trumbull County, Ohio, and joining this one, Theodatus resolved to study medicine and prepared himself for the work by collecting a large number of stones suitable for tombstones, and manufactured for himself the tools necessary to enable him to cut them properly. Having secured a suitable shop for his work, he then enrolled himself as a student of medicine with Dr. Ezra W. Gleason of Brookfield, and, after the removal of Dr. Gleason, with Dr. Elijah Flower, a reputable physician of the same town. His system of labor was

to spend his morning hard at work in his shop, accomplishing if possible a full day's work in this time. At noon he removed his overalls, washed himself clean and devoted the remainder of the day and the evening to the study of medicine. A careful pursuit of this rigid system enabled him to save some money, and in 1832 he felt able to meet the expense of a course of medical lectures. Accordingly he went on to Baltimore and matriculated there in the Washington Medical College. His chief aspiration was to become a good surgeon, and with this in view he devoted a large share of his time to careful dissection. In the spring of 1833 he returned to Brookfield and resumed faithfully his old system of work and study, so that in the autumn he was again prepared to take another course of medical lectures. On this occasion, however, he matriculated in the University of Maryland, taking also a course of clinical lectures in the infirmary connected with that institution. Dissection of the human body was again his delight, and one of his dissections was commended by the professor of anatomy as the best made in the university. Graduating in the spring of 1834, Dr. Garlick remained in Baltimore until late in August assisting Dr. Nathan R. Smith in his operative work.

The winters of 1850 and 1851 were largely spent in Cleveland, and in the dissecting-room of the Cleveland Medical College, where Dr. Garlick devoted much time to dissecting the important surgical regions of the body and the preparation of plaster casts. It is probable that this work brought him into contact with Prof. Horace A. Ackley of the college and led to the partnership which speedily ensued. At all events, Dr. Garlick came to Cleveland in 1852 and formed with Dr. Ackley a partnership which continued until a few months before the lamented death of that surgeon in 1859. Garlick's death was due to an obscure disease of the posterior spinal nerve roots, the beginning of which he himself dates very precisely as January 30, 1864. After an uninterrupted course of more than twenty years it resulted in his death December 9, 1884.

Dr. Garlick married three times. His first two wives were sisters, and daughters of his preceptor, Dr. Flower. The third wife, who survived him, was Mary M. Chittenden of Youngstown, whom he married in 1845. One son, Dr. Wilmot Hall Garlick, did not engage in medical practice.

Dr. Garlick was an interesting character and of wonderful versatility. A courageous and skillful surgeon, he had twice tied the common carotid artery, thrice he had removed one-half the lower jaw, once he had removed for necrosis the entire outer table of the frontal bone, and in the allied department of operative midwifery he had performed version, embryotomy and Cesarean section. The manufacture of a set of amputating and trephining instruments for his own use has been already noticed, and there is in the museum of the Cleveland Medical Library Association a pair of obstetric forceps, the handiwork of Dr. Garlick, which only very careful examination can distinguish from the work of the best instrument-makers of New York or Philadelphia. But his life had also an artistic side. Even while in attendance upon the lectures of the University of Maryland in 1834 he made medallion likenesses in base relief of Dr. Eli Geddings, the dean of the faculty, and of the professors N. Potter, N. R. Smith, Robley Dunglison and Hall, all of which were so excellent that Dr. Garlick was invited to go to Washington and model a similar likeness of Pres. Andrew Jackson. The fine anatomical models constructed and colored by the doctor in 1851 have been already mentioned, and were readily disposed of to various colleges. Prof. R. D. Mussey purchased a set for himself, and declared them far superior to the work of Auzoux of Paris. A number of casts of pathological specimens colored by Dr. Garlick were equally admired.

It is also worthy of remark that in December, 1839, Dr. Garlick made a camera

with which he took one of the earliest daguerreotypes ever taken in this country (a landscape), and in the following year he was able to take likenesses of his friends with the same instrument.

Finally it should be recorded that Dr. Garlick was the first person in this country to essay the artificial culture of fish, an experiment which he carried out successfully on the farm of Dr. Ackley, some two miles out of Cleveland, as early as 1853. His experiments and results were reported in a paper read before the Cleveland Academy of Natural Sciences on February 7, 1854, and were published under the title "A Treatise on the Artificial Propagation of Fish, with Description and Habits of Such Kinds as are Suitable for Domestic Fish Culture" in 1857. A second edition was published by the Kirtland Society of the Natural Sciences in 1880. He was also an early member of the Ohio State Medical Society.

No portraits of Dr. Garlick, other than crayon drawings or photographs are known. H. E. H.

Cleave's Biographical Cyclopedia of the State of Ohio, Part I, Cuyahoga County, 1875.

An autobiography in pencil in possession of his daughter.

Garnett, Alexander Velverton Payton (1820–1888).

Alexander V. P. Garnett, of Essex County, prominent surgeon of the Confederate Army, came of a well-known Virginia family. He was educated by private instructors on his father's plantation and graduated in medicine at the University of Pennsylvania in 1841, his thesis being "Extrauterine Gestation." Soon after, he was commissioned assistant surgeon in the United States Navy, and after five years' service in different parts of the world returned to the United States in 1848 and married Mary E. Wise, the daughter of the well-known Virginia governor, and retired from the navy and began to practise medicine in Washington, District of Columbia. When the Civil War broke out Garnett chose the fortunes of his native state and entered the Confederate Army as surgeon. He was the physician and intimate friend of Jefferson Davis and Gen. Lee. At the close of the war he resumed practice in Washington where by his skill and urbanity he rose to be one of its first practitioners. Garnett was a classic writer on medical subjects and took active part in the medical life as well as in the promotion of all benevolent and charitable institutions of the capital. A. A.

J. Am. Med. Ass., Chicago, 1888, xi.

Minutes of Medical Society, D. C., July 13, 1888.

J. B. Hamilton's "Remarks," etc., Washington, 1888.

Trans. Amer. Climat. Asso. (1890–1891), vii.

Twentieth Cent. Biog. Dict., 1904.

Geddings, Eli (1799–1878).

Eli Geddings was born in Newberry District, South Carolina, 1799. He received his early education in Abbeville County, South Carolina, and was licensed to practice by the Examining Board in July, 1820, in Charleston. In 1820–21 he took a course of lectures at the University of Pennsylvania and in 1825 at the inauguration of the Medical College of South Carolina had the proud satisfaction of receiving the first degree at the first commencement. In the spring of 1825 he went to Europe to attend Paris and London hospitals, especially the former. In May, 1826, and for one year he discharged the duties of demonstrator of anatomy in his alma mater. In 1851 he was invited to accept the chair of anatomy and physiology in the University of Maryland and stayed there until 1837. While in Baltimore he edited in 1833 the "Baltimore Medical and Surgical Journal," a quarterly which was converted in 1834 into a monthly journal known as the "North American Archives of Medical and Surgical Sciences," and his prolific pen was often engaged in contributing valuable papers to the present "American Journal of Medical Sciences."

The chair of pathological anatomy and medical jurisprudence having been created for him, he returned to Charleston in

1837 and filled it until that of surgery was made vacant by the death of his colleague Dr. Wagner. In 1847 Dr. Samuel Henry Dickson removed to New York and Dr. Geddings was transferred to the chair of practice of medicine. Here he remained discharging the duties with his accustomed ability until 1850 when Dr. Dickson returned and he resumed the chair of surgery.

Dr. Geddings received many offers on foreign service during his professional career: About 1830, when Prof. Eberle removed to Cincinnati, he was chosen to the vacant chair of the practice of medicine in the Jefferson Medical College, and upon the organization under Chancellor Mathews of the New York University, was solicited to take the professorship of anatomy. When Prof. Drake seceded from the Medical College of Ohio and formed a new school Prof. Geddings was offered the chair of anatomy with a guarantee, and on the organization of the University of Louisville, was offered by Caldwell the choice of whichever chair he should desire.

Familiar with Latin, French, German and Spanish, with these languages at his command he performed an incredible amount of literary work. Previous to the civil war he had so far completed a work on "The Practice of Medicine" that the title page had been set up in Philadelphia, but the stirring events of 1860–1865 put an end to all that.

Dr. Geddings first married Mrs. Gray, née Wyatt, by whom he had three sons and one daughter. His sons all became physicians. Dr. Geddings next married Laura Postel, but had no children. He died in Charleston, South Carolina October 9, 1878, eighty years old.

An excellent portrait is in the hall of the Medical Society of South Carolina and a steel engraving with a biographical sketch was printed in the "Charleston Medical Journal" for 1857. W. P. P.

In Memoriam. Eli Geddings, Charleston, 1878.
Tr. Am. Med. Ass., Phila. vol. xxx, 1879 (J. M. Toner).

Gentsch, George Theodore (1850–1880).

This brilliant, legal physician—"whose budding manhood was untimely blighted by the frost of death"—was born in New Philadelphia, Ohio, August 22, 1850 and was distinguished, even in early boyhood for his love of learning and his generous and affectionate disposition. At the age of four he lost his father, but his interest in study was fostered by his mother continually. At seventeen he graduated from the New Philadelphia High School and for a number of years acted as clerk in the drug store of William Rickert, at Canal Dover, Ohio. In the intervals of work, and by self-training merely, he acquired, under the circumstances, an extraordinary knowledge of analytical chemistry, and was often called upon to make analyses of ores and make other chemical tests. In this way he thus earned sufficient money to defray his expenses when later he studied at the University of Michigan at Ann Arbor where he graduated in 1871 with the degree of pharmaceutical chemist, in 1876 becoming professor of chemistry at Wooster University, Cleveland, Ohio, where in 1878 he received his M. D.

The following year 1879, was spent in study at Vienna and London, and on his return he was engaged as expert in a number of poisoning cases, notably that of the Charles family, which was tried at Findlay, Ohio, and which excited national comment.

He wrote very little but his articles were full of promise of great achievement; his lectures were simple, clear, and interesting.

Dr. Gentsch died unmarried when only thirty years old. He passed away on the night of March 3–4, 1880. Upon going to bed he had complained of headache to the family with whom he was living, and had bade them a cordial good night. In the morning he was found dead and cold, evidently having died early in the night, probably of apoplexy. T. H. S.

Atkinson's Physicians and Surgeons of the United States, Phila., 1878 (a very brief mention).

Gerhard, William Wood (1809–1872). Born in Philadelphia in 1809, of German and Moravian descent, he was educated at Dickinson College and graduated from the University of Pennsylvania in 1832 and studied medicine under Dr. Joseph Parrish, going that same year to Paris, then the medical center of the world, to study under Chomel, Andral and Louis. How willing to study can be seen from this little bit from a letter to his brother:

"Jackson, Pennock and I were all desirous of studying auscultation, of studying it in such a manner as to be sure of our ground on our return and to be capable of appreciating the advantages of the art. Louis' public instructions were valuable but his private lessons upon a subject demanding minute and patient inquiry we knew would be infinitely more so. I therefore, in the name of my friends, addressed him a polite note accompanied by a handsome pecuniary offer; we did this with little hope of success but happily for us he accepted our proposition and next week we are his private pupils at La Pitié."

"He appears," says Osler, "to have been an indefatigable worker, and the papers which he published based upon material gathered in Paris are among the most important we have from his pen. With Pennock he described Asiatic cholera in 1832. Devoting himself particularly to studying diseases of children he issued a very interesting paper on small-pox and two of very special value—one on tuberculous meningitis and one on pneumonia in children. Both of these mark a distinct point in our knowledge of the two diseases. He is usually accorded the credit of the first accurate clinical study of tuberculous meningitis." Above all he avoided any dependence on books and relied chiefly on personal observation and study. His thoughtful works on pediatrics are now little known, but the essential part of them still benefits the doctor of to-day.

In 1833 he went back to Philadelphia and became resident physician to the Pennsylvania Hospital and while there demonstrated the common continued fever of the United States to be identical with the typhoid he had studied in the wards in Paris. When in 1836 typhus broke out in Philadelphia he had opportunities of studying hundreds of cases and showed the identity of the disease with that seen in Edinburgh and dissimilarity of both from typhoid. The honor of the discovery has been divided between Perry of Glasgow (1836), Lombard of Geneva (1836), Gerhard and Pennock of Philadelphia (1836), Shattuck of Boston (1836), and others, but according to Osler, Gerhard's papers in the "American Journal of Medical Sciences," 1837, are the first in any language which give a full and satisfactory account of the clinical and anatomical distinctions we now recognize.

Gerhard's training made him specially desired as clinical lecturer at the Philadelphia Hospital, and he soon had a special reputation in diseases of the heart and lungs. At his lectures students saw that truth was his object, not display; the advancement of science and not the gratification of personal feelings.

An attack of typhoid in 1837 hindered work and left him broken in health, so that a visit was made in 1843 to Europe. In 1868 he retired after a busy life and on April 28, 1872, Philadelphia lost one of her most genial, kindly and clever physicians.

He held among other appointments the post of resident physician to the Pennsylvania Hospital, 1834; assistant professor institutes of medicine, University of Pennsylvania, 1838; visiting doctor, Pennsylvania Hospital, 1845; member of the Philadelphia Medical Society; College of Physicians; American Philosophical Society, and president of the Pathological Society.

Among his writings are found:

"Observations on the Cholera in Paris," 1832 (with C. W. Pennock).

"On the Typhus Fever Which Occurred in Philadelphia in 1836, Showing the Difference between This . . . . and Typhoid," Philadelphia, 1837.

"Diagnosis, Pathology and Treatment of Diseases of the Chest," Philadelphia, 1842.

D. W.

Hist. of Med. in Phila., Chicago, 1897.
Influence of Louis on America Med., Wm. Osler. Johns Hopkins Hospital Bulletin No. 77. 1897.
Memoir of W. W. Gerhard. T. Stewardson. 1874

Gesner, Abraham (1797–1864).

Abraham Gesner, a descendant of that "very famous naturalist and author," Konrad Gesner, of Zurich, Switzerland (1516–1565), was born at Cornwallis, Nova Scotia, May 3, 1797 and died in Halifax, Nova Scotia. April 29, 1864. His father, Col. Henry Gesner, was a native of New York, and served during the Revolutionary War on the royalist side, subsequently settling in Cornwallis.

Young Gesner had but little opportunity of securing a good general education, but he had that vigor and activity of mind which find a way to intellectual achievement in spite of difficulties. A "self-made man" in general learning, he early took to reading the book of nature at first hand in the rocks and minerals, fauna and flora, of his native land, and throughout life, geology, mineralogy, and the chemistry connected therewith were his favorite studies. By the time he was twenty he had made considerable advance in these subjects, and eagerly grasped at an opportunity afforded him of visiting the West Indies and part of South America that he might extend his scientific knowledge by an examination of the earth and its products in other countries than Nova Scotia. For some years he continued these studies abroad and at home, and about 1825 became a student of medicine in London, where he studied at both St. Bartholomew's and Guy's. In connection with his numerous papers published in the "Geological Journal" (London) the author's name regularly appeared thus: "Abraham Gesner, M. D., F. G. S." He was also fellow or member of many other learned societies in both America and Europe.

Having practised for a time in Cornwallis, he removed to Parrsboro, and from the preface to his first published work, "Remarks on the Geology and Mineralogy of Nova Scotia," it is shown that in 1836 he was still there and practising.

This book proved of great public service, both by bringing many of the reading people of Nova Scotia into touch with geological science, and by becoming the guide-book to the greatest geologist of the age, Sir Charles Lyell, who, in 1842, visited the province and made a "careful examination of some of the most difficult features of its geologic structures." He had not only Gesner's book, but also the author himself as guide on part of that survey, and both proved of great assistance to him.

Among Gesner's other and separately published works are the following:

"Reports on the Geology of New Brunswick," Nos. 1, 2, 3 and 4, St. John, 1839–42.

"Report on the Geology of Prince Edward Island," 1846.

"New Brunswick, Early History, Natural History, Etc.," London, 1847.

"Industrial Resources of Nova Scotia," Halifax, 1849.

"A Practical Treatise on Coal, Petroleum, and Other Distilled Oils," New York and London, 1861. Second revised edition, 1865.

Dr. Gesner has been frequently referred to as the discoverer of kerosene and the originator of the name, derived from the Greek Κηρός, wax. As early as 1846 Dr. Gesner had extracted oil from the "Albertite" of New Brunswick, and other bituminous minerals.

From 1843 to 1851 he was engaged in making analyses for Lord Dundonald of the bitumen of Trinidad and other products of the West Indies. Next he sought to turn his scientific discoveries to commerical use, and, proceeding to New York, set up two large factories for the manufacture of the illuminating oil he called kerosene. The "New Oxford Dictionary," under the definition of the word kerosene, says: "First manufactured by Abraham Gesner shortly after 1846."

Dr. Gesner was of vigorous frame, always busy, but of kindly social disposition, and held in great respect by his intimate acquaintances and the scientific men of his day.

Shortly after his medical graduation, Dr. Gesner married Miss Webster of Kentville, Nova Scotia, a sister of the naturalist, Dr. Webster, and had a large family.

A portrait of Dr. Gesner was published in the special mining number of "The Nova Scotian" (Halifax), October, 1903.

D. A. C.

Gibbes, Lewis Reeve (1810–1894).

Lewis Gibbes, mathematician and naturalist was born at Charleston, South Carolina, August 14, 1810, a descendant of Gov. Robert Gibbes of South Carolina, through whom he traced descent from the ancient Gybbys family of Warwickshire, England.

He graduated from the South Carolina College in 1829 and took his M. D. in 1836 from the Medical College of the state of South Carolina. Subsequently he attended lectures at Paris under Velpeau, Andral and Louis, studying at the same time at the Sorbonne and the Jardin des Plantes.

He was a member of the American Association for the Advancement of Science and of the Academy of Natural Sciences of Philadelphia.

He was tutor in mathematics in the South Carolina College from 1831 to 1834; acting professor of mathematics in the same institution, 1834–35; professor in the College of Charleston from 1838 to 1892, occupying first the chair of mathematics and later that of astronomy and physics.

Dr. Gibbes never practised medicine, but was devoted to scientific research and teaching. The extent and versatility of his knowledge were extraordinary. While astronomy seemed to be his chief love he likewise excelled in mathematics, chemistry, physics, botany and zoology; and in every field his work was characterized by thoroughness and accuracy. The elder Agassiz on one occasion referring to a certain investigation remarked that as Dr. Gibbes had gone over it no further research was necessary. As a teacher he was exceptionally gifted, insisting always upon attention to the smallest detail.

He married Anna Barnwell Gibbes September 21, 1848, and had nine children and died in his home at Charleston, South Carolina, November 21, 1894, from the effects of a stroke of apoplexy received four months previously.

His writings consisted only of brief records of his work, of which the following will serve to indicate the range of his activity.

"Path of the Storm of Eighth of September, 1854." ("Charleston Evening News," November 24, 1854.)

"Monograph of Genus of Cryptopodia." ("Proceedings of Elliott Society of Natural History," eleventh of June, 1856.)

"Discovery of New Species of Fir in Mountains of North Carolina, allied to Abies Canadensis. Proposed to call it Ab. Carolinensis." ("Proceedings Elliott Society Natural History," July 1, 1858.)

"Remarkable Flight of Thousands of Butterflies of Genus Callidyas across Charleston Harbor." (In "Canadian Entomologist.")

"Observations made upon the Earthquake of Thirty-first of August." ("Proceedings of Elliott Society of

Natural History," twenty-eighth of July, 1887.)

W. P. P.

Gibbes, Robert Wilson (1809–1866).

Robert Wilson Gibbes was born in the city of Charleston, South Carolina, on the eighth of July, 1809 and died at his home in the city of Columbia, South Carolina, on the fifteenth of October, 1866. Gibbes was descended from an English family, several branches of which settled in Barbadoes.

Gibbes graduated at the South Carolina College in 1827 and the following year was elected assistant professor of chemistry, geology and mineralogy. He graduated in medicine at the Medical College of South Carolina (Charleston) in 1830; and in 1834, having severed his connection with the South Carolina College, entered on practice in the city of Columbia, where he established a large practice, which in later years he turned over to his son, Robert Wilson. Dr. Gibbes was often selected as delegate to the American Medical Association, and for several years was president of the Medical Association of South Carolina. He had a genius for scientific pursuits and published papers in the "Journal of the Academy of Natural Sciences"; in the second volume of the "Smithsonian Contributions," and in other journals. He made very large and precious collections of autographs, coins and specimens in palæontology, geology, mineralogy and conchology, and his collection of fossils of South Carolina was important, as illustrative of the tertiary formation. He devoted much attention to the subject of ornithology. Apart from his medical and scientific papers, Dr. Gibbes made other publications of value, including a "Documentary History of the American Revolution" (three volumes, 1853), a "Memoir of DeVeaux," a young South Carolina artist of promise, and a volume entitled "Cuba for Invalids" (1860). In 1852–60 he edited the "Daily South Carolinian." During the Civil War Dr. Gibbes was surgeon-general of South Carolina, and twice held the office of mayor of Columbia. He married Caroline Elizabeth Guignard and left a large family. His son, Dr. Robert Wilson, became a doctor in Columbia, South Carolina, also his grand-son, Dr. Robert Waller Gibbes, practised in the same city.

The following is a partial list of the societies in which he held membership: American Association for the Advancement of Science, New York Historical Society, Pennsylvania Historical Society, Royal Society of Northern Antiquaries, of Copenhagen, Academy of Natural Sciences, Philadelphia.

R. W., Jr.

Gibson, Charles Bell, M. D. (1815–1865).

This surgeon was born in Baltimore, Maryland about 1815, the son of Dr. William Gibson, professor of surgery in the University of Pennsylvania, and Sally Hollinsworth of Baltimore. He was named after his father's preceptor, Sir Charles Bell.

His professional education was received at the University of Pennsylvania, where he graduated in 1836, the subject of his thesis being "Apoplexy."

In 1848 he was elected professor of surgery in the medical department of Hampden-Sidney College, now the Medical College of Virginia. In 1861 Gov. Letcher appointed him surgeon-general of the state of Virginia, which position he held until the military affairs of the state were merged into those of the southern confederacy.

Dr. Gibson was a noted and skillful surgeon and a teacher of marked ability. He was one of the first in Virginia to make use of anesthetics, and in 1848 reported five cases of the successful employment of chloroform or ether, the former being used in three cases and the latter in two ("Transactions American Medical Association," vol. i). In 1851 he was one of a committee of the Medical Society of

Virginia appointed to report upon anesthetics, which they did in a full and valuable paper entitled "Report on the Utility and Safety of Anesthetic Agents" ("The Stethoscope," vol. i, April, 1851). He was an extensive contributor to medical literature and published reports of many of his most interesting cases.

He died in Richmond in 1865.

The following are some of his contributions to medical literature:

"Aneurysm of both Femoral Arteries Cured by Ligature." ("American Journal of Medical Sciences, vol. xii, 1847.)

"Dislocation of the Femur into the Foramen Ovale probably Complicated with Fracture of the Acetabulum, Etc." ("Virginia Medical and Surgical Journal," vol. iv, 1854.)

"Surgical Reports." *Ibid* iii, 1856.)

"Excision of an Osteosarcomatous Tumor of the Inferior Maxilla." *Ibid* iv, 1857.)

R. M. S.

Gibson, William (1788–1868).

"Scientist, scholar, artist, musician, traveller—some one should write a life of him" says Dr. Mumford in his "Medicine in America;" and if the diary which William Gibson continued for sixty years and which ran to 150 volumes could be found, every side of him could be written up.

He was born in Baltimore on March 14, 1788, one of twin boys, and was educated at St. Johns College, Annapolis, and at Princeton, leaving before his class graduated.

He began to study medicine with Dr. John Owen of Baltimore and in 1806 heard lectures at the University of Pennsylvania. Here, as at college, his refreshing frankness spoke out on occasion: he was afraid of no one.

He did not stay long in Philadelphia. In 1806 he took his bachelor's degree from Princeton and left for four years in Europe. The first three were given to Edinburgh where he took his M. D. in 1809 with a thesis "De forma ossium gentilitia" and John Bell was his master in surgery. That same year he went to London and followed Sir Charles Bell, who became his friend. He took also to painting and studied under Robert Haydon, the eccentric artist then busied on Bell's great work "On the Hand." He added to this, music, ornithology, botany, fishing and boxing, so he enjoyed splendid health, but with all these distractions he was a brilliant student. Astley Cooper loved and predicted great things of him taking him on his journeyings about England.

The Peninsular War was then raging and Gibson entered with the greatest enthusiasm. In December, 1808, he with some friends chartered a transport and sailed for the scene of the fighting and was in time to see the battle of Corunna where his friend Sir John Moore was killed. Six years later he was travelling in the neighborhood of Waterloo and took part in the battle, seeing much hard fighting and receiving a slight wound. Indeed, he was an ubiquitous person, after that he returned to London and in 1810 sailed for America. He had scarcely settled at his old home in Baltimore when he became interested in establishing a medical department for the University of Maryland, and in 1811, with sundry other spirits of kindred ambition, succeeded in launching the new school, himself in the chair of surgery. And at this time he was only twenty-three! The school throve apace and Gibson as a bold original operator seems to have been a great attraction. As he grew in experience he acquired a vast knowledge of and intimacy with the fine arts, literature, history, politics and men which, with his direct, homely, convincing way of lecturing captivated his hearers. It fell to his lot to do an operation which made him famous. In 1812 he tied for aneurysm the common iliac artery—an operation never before performed on the living, a proceeding almost as bold

and original as Astley Cooper's ligature of the aorta, five years later but also unsuccessful.

Two years later we were again at war with Great Britain and Gibson operated on Winfield Scott after Lundy's Lane and extracted a bullet. He saw the repulse of the British at Baltimore and from all this found abundant material for his surgical skill. Eight years he held the chair of surgery in Baltimore and after the retirement of Physick, the same chair in the University of Pennsylvania.

Before the founding of the Maryland School he had married Sarah Charlotte Hollingsworth and became in time the father of three sons and two daughters. Later on he married a second wife and had three children. The careful recorder adds "he was five feet seven inches tall, broad and round-shouldered."

In Philadelphia, Gibson had a long and honorable career. For nearly thirty years he divided the surgical honors with George McClellan, and it was not until 1855 that advancing age compelled him to retire from teaching. During his active years he produced his best book, "The Institutes and Practice of Surgery," which for eight editions was a deservedly popular textbook. But there were other productions which are better worth reading to-day: "Sketches of Prominent Surgeons," "Rambles in Europe," "Eminent Belgian Physicians and Surgeons," and his numerous addresses before the University students.

He had one hobby—to lead a crusade against tobacco; and became vice-president of an anti-tobacco society, though in other respects he liked the good things of life. But perhaps from the beginning what astounded people most was his absolute frankness. He published his surgical failures and told how in four cases he ruptured axillary arteries and the patients died. But, on the other hand, he had the unique experience of twice doing successfully Cesarean section on the same woman, the life of the mother and of both children being saved. Of his remarkable memory one admirer tells how he made an off-hand bet that he could quote 300 lines of Virgil taken at random, and reeled off the hexameters until his audience begged him to stop.

He withdrew from the university at the age of sixty-seven, having filled the professor's chair thirty-six years, and for thirteen years longer—a keen bright-eyed old man—he watched the busy world. It was a tumultuous time for retired old age. However, he saw the end of the War of the Rebellion and resumed his travels when it was over and continued them until he died in Savannah in the winter of 1868.

Among his writings are:

"Rambles in Europe in 1839," Philadelphia, 1839.

"Lectures Introductory to a Course on Surgery," various pamphlets on this subject published at intervals in Philadelphia, from 1822 to 1850.

(From "Medicine in America," 1903. Dr. J. G. Mumford.)

Boston Med. and Surg. Jour., 1849.
Med. and Surg. Reporter, Phila., 1868.
Richmond and Louisville Med. Jour., Louisville, 1869.
Reminiscences. Busey, Wash., D. C., 1895.
Med. in Amer. Dr. J. G. Mumford, Phila., 1903.
Hist. Med. Dpt. of the Univ. of Penn. Dr. Carson, Phila., 1869.

Gihon, Albert Leary (1833–1901),

Albert Leary Gihon, a naval surgeon, was born in Philadelphia September 28, 1833 and received the degree of A. B. at the Central High School of that city and graduated in medicine at the Philadelphia College of Medicine and Surgery in 1852. Princeton conferred upon him the degree of A. M. in 1854. In the following year he entered the United States Navy as assistant surgeon and made several sea voyages, being in 1861 promoted to the rank of surgeon. During the greater part of the Civil War he was on duty in European waters cruising after Confederate privateers. In 1872 he was appointed medical in-

spector, and medical director in 1879. In 1895 he was promoted to the rank of commodore and retired from active service September 28 of the same year. He died in New York November 17, 1901.

Gihon was a pioneer in the field of naval hygiene. His book "Practical Suggestions in Naval Hygiene" (1871), was a standard work at the time of its publication. He wrote numerous articles on naval hygiene, public health, vital statistics, and medical demography and climatology. Gihon was a charming companion, a man of brilliant talents, simple in manner, and sweet in temper. A. A.

Buffalo Med. Journ., 1901–2, xli.
Journ. Am. Med. Ass., Chicago, 1901, xxxvii.

Gilman, Chandler Robbins (1802–1866). Chandler Robbins Gilman, obstetrician and medico-jurisprudentist, was born September 6, 1802, at Marietta, Ohio. His father and grandfather were among the earliest pioneers of Washington County, and, in his later days, Dr. Gilman was fond of telling stories of Indian life and adventure.

When Chandler Robbins was eleven years old he was taken by his father to Philadelphia to live, and shortly afterwards was sent to Phillips Academy at Andover, Massachusetts, and later to Harvard College. At the latter, however, owing to adverse circumstances, he had no opportunity to continue his work until he could receive a degree. For a time he studied medicine under the famous Dr. Joseph Parrish, but afterwards attended the medical department of the University of Pennsylvania, where he received his M. D. in 1824.

Soon after graduation Dr. Gilman removed to New York City. There he underwent the sorest of trials and struggles while attempting to secure a professional foothold. At this time he married Serena Hoffman, daughter of a New York merchant.

In 1835 he became severely afflicted with rheumatism. To recover his health he visited, in company with a friend, the pictured rocks of Lake Superior. In the territory round about he remained for a long time, fishing, trapping, and hunting. At last his health was completely restored. On his return to civilization, he published the results of his observations on the lake region in a little book entitled "Life on the Lakes." Another volume from his pen soon appeared, entitled "Legends of a Log Cabin." He then for a long time assisted his relative, Charles Fenno Hoffman, in editing the "American Monthly Magazine." During these literary labors he was also practising medicine.

In November, 1840, he was offered and accepted the chair of obstetrics and diseases of women and children in the College of Physicians and Surgeons in the city of New York.

In 1841–42 he lost by death his wife and two of his children. The shock was very great, and for a time his friends almost expected to see his reason dethroned.

In September, 1844, he married Miss Hannah Marshall, daughter of Capt. David Marshall, of New York City.

In 1851, on the death of Dr. John B. Beck, the chair of medical jurisprudence in the College of Physicians and Surgeons, which had been held by Dr. Beck, was offered to Dr. Gilman and accepted.

Dr. Gilman was not a copious writer on medical or lego-medical subjects. He was frequently urged to write a work on medical jurisprudence, and one on obstetrics; but, at such times, he always shrugged his shoulders and replied, "Oh, that mine enemy would write a book!" His contributions to medical magazines and to Appleton's "Encyclopedia," however, were always highly valued, and so was his admirable memoir of Dr. John B. Beck. He revised and published the manuscript notes of Dr. John B. Beck on "Materia Medica," and also edited two of the

editions of Dr. Theodric Romeyn Beck's celebrated "Elements of Medical Jurisprudence."

In person Dr. Gilman was tall but heavily set, of dark complexion and with jet black hair and eyes. He was careless in his dress, and unregardful of the conventions of society. He displayed, however, to those who had fallen in the world, a deference and a courtesy which other people seldom had a chance to see in him.

In 1863 his health again began to fail—this time permanently. A summer which he spent amid the Pompton Hills in New Jersey, was expected to improve his condition, but did not.

On the evening of September 26, 1865, while all his family and a number of his older friends were sitting round about him, he seemed suddenly to fall asleep. All efforts to arouse him were availing. The good doctor had indeed gone, and in the very manner in which he had always prayed that his final departure might be permitted—"very calmly and very swiftly."

He was buried in the cemetry at Middletown. T. H. S.

Doctor's Recreation Series, vol. xi. "A Biographical Cyclopedia of Medical History." Tr. M. Soc. N. York, Albany, 1866 (W. H. Roberts).

Gilman, John Taylor (1806–1884).

The founder of the Maine General Hospital, John Taylor Gilman, son of Col. Nathaniel and Dorothy Folsom Gilman, was born in Exeter, New Hampshire, May 19, 1806; fitted for college at Phillips, Exeter Academy, and graduated at Bowdoin in the class of 1826, afterwards studying medicine with William Perry of Exeter and taking his M. D. at the Medical School of Maine in 1829. He also took additional instruction in anatomy and clinical medicine in Philadelphia, but began to practise in Portland, Maine, and spent the rest of his life there.

He was president of the Main Medical Association, but his fame will rest upon the foundation of the Maine General Hospital. He was a venerable gentleman, and lived long enough to see the hospital a magnificent success to all classes of suffering people. A remarkable physician, it is difficult not to exaggerate his skill in diagnosis, or his accuracy in therapeutics. Sometimes finding a patient restless, he would walk slowly round the room, looking at the pictures with a critic's eye, setting them straight if misplaced on the wall, and then gradually taking up the thread of conversation when the patient had grown quieter. He was not formal, but dignified. Although high strung and of a quick temper, he had great self-control. "You don't want a tonic, but a little self-reliance," were his words to a restless child. It pleased him, when walking in the streets, to have the workmen wave their hats to him. For fifty-two years he practised in Portland, during which time he was very forcible in his denunciations of the filthy sanitary conditions of the so-called "dump" and did all he could to get it abolished.

He wrote an excellent paper on "Rupture of the Uterus, Twice in the Same Patient in Two Successive Deliveries, and Recovering after gastrotomy," 1863. He is said to have done the first Cesarean section in Maine, saving both mother and child.

Doctor Gilman married Helen Williams of Augusta by whom he had a daughter.

He died gradually at the last, and departed calmly January 16, 1884. J. A. S.

Trans. Maine Med. Assoc., Portland, vol. viii, 1884.

Gilmer, George, Jr., M. D. (1742– ——).

Born at Williamsburg on the tenth of January, 1742, he was the second of the four sons of Dr. George Gilmer, a native of Scotland and for fifty years a successful physician, surgeon and druggist of that town, and Mary Peachy Walker, his second wife.

He read medicine with his uncle, Dr. Walker, a physician and early explorer of Kentucky, and afterwards studied at Edinburgh, University, graduating therefrom. He first settled in Williamsburg, but after a time removed to Albermarle County, where he soon built up a practice.

As early as 1774 he represented his county in the House of Burgesses, and was the mover of a resolution on the subject of the Crown Lands which was seconded by William Henry. Quite an orator, he harangued his countymen, when Dunmore seized the power of the colony, to such effect that a company was formed to march to Williamsburg and demand redress. He was chosen lieutenant of this company. In 1775 he was sent by his county to the Convention of that year as the alternate of Thomas Jefferson.

He married his cousin Lucy, the daughter of his preceptor, who was a patriot worthy of her patriotic husband. It is related that in the early days of the Revolution she handed Mr. Jefferson her jewels and begged him to use them in her country's cause.

R. M. S.

Gilpin, John Bernard (1810–1892).

John Bernard Gilpin was born September 4, 1810, at Newport, Rhode Island, where his father, J. Bernard Gilpin, of Vidar's Hill, Hants, England, was for many years British Consul.

His general education was received at Trinity College, Providence, Rhode Island, where he took his M. A., and studied medicine at the University of Pennsylvania, graduating thence M. D. in 1834. Immediately afterwards he studied in London, and became M. R. C. S. (London).

He first practised at Annapolis, removing to Halifax in 1846 and there continuing till 1886, when he returned to Annapolis where he spent the remainder of his days, dying there March 12, 1892.

He was a member of the Medical Society of Nova Scotia and one of the original founders of the Nova Scotian Institute of Natural Science in 1863, of which he became a vice-president in 1864 and was president from 1873 to 1878. He was also a member of many scientific and learned societes in the United States and Great Britain.

While highly esteemed both as a medical man and as a citizen, he never acquired a very extensive practice but devoted much of his time and energy to the study of natural history, in which he did much original and useful work. His paper on the "Common Herring" was the first one read before the Nova Scotian Institute of Natural Science after its formation, the first of a series on the food fishes of Nova Scotia, and the first of some thirty-four papers of his read before the institute, which, if collected, would form a very interesting and valuable work on the natural history of the Province. Besides being a clear and graceful writer, he was skillful with pencil and brush to illustrate those subjects of his study, which can be so well served by those arts. He was constantly doing his utmost to assist and encourage the study of natural history in the province, and was frequently consulted by Prof. Baird, of the Smithsonian Institute as to the determination of new or doubtful species of fish and as to their migrations in these northern waters.

In 1858 Dr. Gilpin published at Halifax a pamphlet of considerable scientific interest on "Sable Island, Its History and Natural History."

A portrait of Dr. Gilpin was published as a frontispiece to Part II. of Volume X. of the "Transactions of the Nova Scotian Institute of Natural Science." D. A. C.

Transactions N. S. Institute of Nat. Science.

Girard, Charles (1822–1895).

Born in Mülhausen, France, March 9, 1822 he was educated in Neuchatel, Switzerland, where he became the pupil

and assistant of Agassiz, and accompanied him to the United States in 1847, remaining with him until 1850, when Girard removed to Washington, District of Columbia, and became attached to the Smithsonian Institution. In 1852 he was naturalized as an American citizen, and after taking his M. D. in 1856 at Georgetown College, District of Columbia, remained in the Smithsonian Institution until 1859, being for some time engaged with Prof. Baird in the investigation of reptiles. His publications were: "Mammalia" in the "Iconographic Encyclopedia of Science, Literature and Art," New York, 1851; "Monograph of the Cottoids," Washington, 1851; "Reptiles," (in collaboration with Prof. Spencer F. Baird) in Stansburg's "Exploration and Survey of the Great Lake of Utah," 1853; "Bibliographia American Historico Naturalis," 1852; "Catalogue of North American Reptiles in the Museum of the Smithsonian Institution—Part 1, Serpents" (in collaboration with Prof. Baird, 1853); "Researches upon Nemerteans and Planarians I, Embryonic Development of Planocera Elliptica," Philadelphia, 1854; "Life in its Physical Aspects," Washington, 1855; "Reptiles, Fishes and Crustaceæ" in Gilliss' United States Naval Astronomical Expedition to Chili," 1856; "Herpetology of the United States Exploring Expedition under the Command of Cap. Wilkes," 1858; "General Report upon Fishes in the United States Explorations and Surveys for Railroad Routes from the Mississippi River to the Pacific Ocean," 1859; and the "Report upon Fishes" in "Emory's Survey of the United States and Mexican Boundary," 1859.

He died in France the twenty-ninth of January, 1895.

D. S. L.

Drake's Biog., 1872. Bull. 41, 1891, U. S. National Museum.
Appleton's Biog., 1887.

Glasgow, William Carr (1845–1907).

William Carr Glasgow, one of the founders of the Laryngological Society and its president in 1890, was born in St. Louis on January 16, 1845 and graduated from the St. Louis Medical College and also from the University of Vienna. He held the chairs of clinical medicine and laryngology at Washington University, and was consulting physician to the City Hospital of St. Louis and the Martha Parsons Hospital for Children.

He was an original thinker and writer and his essay on "Cellular Infiltration of the Lungs" first described with exactness the physical signs and symptoms of influenza, calling it septic cellular edema.

In 1887 he pointed out certain measures for the relief of congestive headache, the condition which is now coming into prominence in the rhinological world as nasal headache. In 1885 he wrote on what is now discussed as "rhinitis nervosa." In 1887, in a paper entitled "The Etiology and Mechanism of Asthma," he pointed out the interarytenoid membrane as the starting-point of the asthmatic reflex in some instances.

A full list of his writings should include:

"Papillomatous Growths in the Vocal Cords of a Child (Ten Years); Successful Removal." (There is no date on this reprint but its text records that it antedated the discovery of cocaine).

"Plastic Bronchitis." ("Transactions of the American Medical Association," 1879.)

"Varicose Aneurysm of the Aorta; a Report of a Case of the Aorta Communicating with the Superior Vena Cava." ("St. Louis Courier of Medicine," January, 1885.)

"The Etiology and Mechanism of Asthma." ("American Journal of the Medical Sciences," 1887.)

"On Certain Measures for the Relief of Congesitve Headache." ("New York Medical Journal," September 3, 1887.)

"Cavernous Angioma of the Larynx; Removal." ("American Journal of Medical Sciences," April, 1889. Read at the tenth annual Congress of the American Laryngological Association, 1888.)

"A Septic and Unusual Form of Lung Disease Existing in the Mississippi Valley during the Years 1886–7–8–9–90." ("American Journal of the Medical Sciences," March, 1890.)

"A New and Distinguishing Sign of Latent Aneurysm of the Aorta." ("New York Medical Journal," September 15, 1894.)

"The Physical Signs of Septic Cellular Edema of the Lungs Considered in their Relation to the Pathological Changes." ("Transactions of the American Climatological Association," 1894.)

Dr. Glasgow married, in 1877, Fanny Englesing of Port Gibson, Mississippi and died at St. Louis when in his sixty-third year, leaving a widow, four sons and a daughter.

D. W.

St. Louis Med. Review, June, 1907.
Quar. Bull. Med., Dpt. Washington Univ.' June, 1907.

Gleason, Rachel Brooks (1820–1905).

One of the early women physicians, she was born in Winhall, Vermont, November 27, 1820, and married a young Vermont doctor who opened an infirmary in the country for chronic invalids, shortly after acquiring his own diploma. In the management of his lady patients, the young doctor often found it an advantage to be assisted by his wife as an intermediary—on the one side to relate symptoms, on the other to prescribe the directions. Thus the wife became gradually associated with the husband's work, while he remained generously alive to her interests. At that time, 1849, the Philadelphia school for women had not yet opened, so Dr. Gleason, in order to secure an opportunity for his wife for some kind of systematic medical education, persuaded the eclectics assembled in council to open the doors of their new school at Rochester, New York, to women.

Mrs. Gleason died in Buffalo, New York, March 14, 1905. She had two children, one of whom, a daughter, was educated as a physician. She wrote:

"Talks to my Patients, Hints on Getting Well and Keeping Well."

A. B. W.

Personal Information, Mary Putnam Jacobi.
Woman's Work in America in Medicine, Henry Holt Co., 1891.

Gleaves, Samuel C. (1823–1890).

Physician and surgeon in the Confederate States Army, he was born in Wythe County, Virginia, October 12, 1823 and educated at Emory and Henry College, Virginia, and studied medicine at the University of Pennsylvania, graduating in 1840. He then settled in Wytheville.

In 1861 he entered the service of the Confederate States as surgeon of the forty-fifth regiment of Virginia Infantry. Later on he was made a medical director. At the end of the war he resumed practice, taking the most active interest in everything that could in any way advance the profession.

The fact that he was elected a president of the state society when none but those of the very highest standing in the profession were accorded that honor speaks for itself.

He was twice married; first in September, 1849, to Maria L. Crocket of Wythe County, Virginia, and had three sons, all of whom survived their father. His first wife died in March, 1878, and in June, 1822, he married Mrs. F. D. McCaa, of Mobile, Alabama, but had no children.

After a lingering illness of several months he died at his home in Wytheville, Virginia, January 14, 1890.

As has been said, he was a ready writer and made numerous communications of value to medical literature.

"Pistol Shot Wound of the Right Ileum." ("Transactions of the Medical Society of Virginia," 1873.)

"Ovarian Tumor, Fatal." ("Virginia Medical Monthly," vol. iii.) R. M. S.

Trans. Med. Soc. of Va., 1890.

Gloninger, John W. (1798–1874).

John W. Gloninger was born in Lebanon, Pennsylvania, in 1798 and had his early training under a famous local

pedagogue, one McMullen, "brisk wielder of the birch and rule," afterwards being sent to a school in Harrisburg and thence to Baltimore, where he completed his education. In 1815 he began studying medicine under a Dr. King, early in 1816 going to Philadelphia and becoming a private pupil of Prof. Dorsey, then in the height of his fame, at the same time attending lectures at the University of Pennsylvania and Blockley Hospital. On the death of Dr. Dorsey in 1818, he went to New York and studied under Prof. Hosack, attending lectures at the College of Physicians and Surgeons whence he graduated April, 1819. Then he is heard of as being in New York pursuing his studies in the hospitals, returning to Lebanon, in 1820 and there beginning to practise.

He soon took and maintained for thirty years a leading position as physician and surgeon. As a surgeon he was eminent in diseases of the eye, particularly successful in cataract. Gloninger was an omnivorous reader, especially of medical works, and had a remarkable retentive memory, also he was a frequent contributor to medical literature, many of his articles showing him not only a careful observer, but a close student keeping pace with the progress of medical science. In 1823 he was elected member of the Pittsburg Medical Society and in 1826 fellow of the University of New York, Jefferson Medical College conferring on him her honorary M. D. In 1838 he was elected honorary member of the New York State Medical Society, and in 1841 the University of Maryland gave him the honorary M. D., the University of Pennsylvania doing the same in 1848. In his intercourse with his professional brethren Dr. Gloninger maintained the most cordial relations. Possessed of abundant means and high social and professional standing, he was particularly kind to some of the older members of the profession, and in several instances through his personal influence secured for them the honorary M. D., which degree they had failed to procure earlier.

In personal appearance he was tall, with a slight stoop and a large strong face with a pleasant expression. His dress was the professional black swallow-tailed coat, black or figured satin vest, dark trousers, low shoes, white stockings and he always wore a black silk hat.

Five children were born to him, two of whom were eminent in their profession—Dr. Cyrus Dorsey, who practised in Lebanon, and Dr. D. Stanley, of Philadelphia.

Dr. Gloninger died March 10, 1874.

J. H. R.

From an accounnt read before the Lebanon County Historical Society, October 19, 1900 by J. H. Redsecker.

Godding, William Whitney (1831–1899). William Whitney Godding was born May 5, 1831 at Winchendon, Massachusetts, the son of Dr. Alvah and Mary Whitney Godding his mother's people coming over from Whitney-on-the-Wye in 1635 to Watertown, Massachusetts.

In 1850 he entered the freshmen class at Dartmouth College, graduating A. B. there and reading medicine with his father. His first course of lectures was at the College of Physicians and Surgeons, New York City; the next at the Medical College, Castleton, Vermont, where he took his M. D.

He then practised with his father at Winchendon for eighteen months, until appointed assistant physician, State Hospital for the Insane, Concord, New Hampshire, and to the close of his career devoted all his time and energies, with the exception of a single year, to his great life work. He married, December 14, 1860, Ellen Rowena Murdock, daughter of Elisha Murdock, of Winchendon. In 1862 he resigned to enter private practice at Fitchburg, Massachusetts, but in September, 1863, entered St. Elizabeth Hospital for the Insane, Washington, as second assistant physician, where he proved himself a man of great energy and industry, remaining very closely at the hospital and seldom leaving it to find recreation outside, except in long country

walks of which he was very fond. The history of St. Elizabeth he knew from its beginning, every stone and stump within its boundaries. A great reader of books, he accumulated those of general medicine and his specialty and the best literature of the day. He made close study of cases of special interest and wrote them up.

Two good pamphlets of his are: "Two Hard Cases," Boston, 1882; and "The Rights of the Insane in Hospital," Philadelphia, 1884. In April, 1870, he was appointed superintendent of the State Hospital for the Insane, Taunton, Massachusetts, which he made altogether up to the highest standard of that time.

On September 23, 1877 Godding returned to St. Elizabeth to take the place of the only superintendent the Government Hospital for the Insane had then known. He died on May 6, 1899.

D. S. L.

Minutes of Medical Society, D. C., May 10 and June 7, 1899.
Transactions Medical Society, D. C., 1899, iv.
Proceedings of Amer. Med. Psych., Assoc., 1899, vi.
Bull. Philos. Soc., Washington, 1895-1900, xiii.
Jour. Amer. Med. Assoc., 1899, xxxii.
Journal Mental Science, London, 1900, xlvi.
National Medical Review, 1899-1900, ix.

Godman, John D. (1794–1830).

The few early glimpses to be had of John Godman the anatomist when he fought ill health and adversity show what wonderful energy can be generated by certain circumstances calculated to drive most men to despair. Born at Annapolis December 30, 1794, the son of one Capt. Samuel Godman, his mother died before he was two, his father a year later and an aunt to whose care he was given left him more than orphanless when he was six. He says: "Before I was six I was fatherless and friendless. I have been deprived by fraud of property which was mine. I have passed the flower of my days in little better than slavery and have arrived at what? manhood, poverty and desolation."

At the age of sixteen he was bound apprentice to the printer of a newspaper in Baltimore and in 1814 began the study of chemistry, but during the same year enlisted in the navy as a common sailor.

In 1815 he was without employment and without means to prosecute his studies. At that time he received an invitation to live and study with Dr. Luckey of Elizabethtown, Pennsylvania, of which he immediately availed himself, and entered into the work with great zeal. He remained five months with Dr. Luckey, then returned to Baltimore in search of greater facilities, eventually becoming the pupil of Dr. Davidge of the University of Maryland and attending the lectures of 1816–17 and 1817–18, and graduating in the latter year. He began practice in the town of New Holland, but the quiet village life was not suited to his ardent temperament. He longed for, and expected a professorship in the University of Maryland. Disappointed in this, he removed to Philadelphia, where he was solicited by Dr. Daniel Drake to accept the chair of surgery in the Medical College of Ohio. He reached Cincinnati about November 1, 1821 and soon after an introductory lecture trouble arose in the faculty and he resigned. Immediately afterwards he established the "Western Quarterly Reporter," but the enterprise proved a failure and ceased after the sixth number. In this brief time Dr. Godman contributed three-hundred pages to its contents.

In October, 1822 he arrived in Philadelphia after one year in the West, just as the students were assembling for the annual course. Installing himself in rooms Godman began a course of lectures which soon made his talents a theme of remark among medical and scientific men. His elaborate anatomical investigations giving a minute account of the fasciæ of the human body were published in 1824, but his stay on the banks of the Patapsco had given him chances of natural history study, and in Philadelphia he had an opportunity of extending his investigations as a member of the Academy of Natural Sciences. To write his *magnum opus*

meant much labor outside his usual duties. But to it he went and produced in 1826 three volumes of "American Natural History," a valuable addition to the scientific literature of the country, and did all this, added to reviews for the "Quarterly" and Latin, French and German translations, also his annoted edition of Sir Astley Cooper's "Dislocations and Fractures." He also co-edited the "American Journal of the Medical Sciences," beginning in 1824, and contributing to it until his death.

During this time of constant toil which brought in little pecuniarily he was offered the chair of anatomy in Rutgers College, New York. It was a post of honor and he accepted and lectured with almost unparalleled popularity the ensuing winter. But by the next winter his health began to give away. It was evidently advanced tuberculosis. A spring at Santa Cruz failed to relieve him and he began to labor with his pen to support his family, continuing to work for the "Encyclopedia Americana," the natural history section being entirely held by him.

On the seventeenth of April, 1830, this comparatively young leader in the profession departed this world cheerfully trusting in God, after a life in which he had sought no relaxation save change of occupation.

He married, in October, 1821, a daughter of Peale, the artist.

From "Liberty Hall and Gazette" of June 22, 1822 I copy the following "card."

"A Card.

"Dr. John D. Godman respectly informs the public that the apparatus for sulphurous fumigations will shortly be ready for use at his office. The success with which diseases of the skin have been treated by this method is such as to astonish and gratify all who have witnessed its application. In Philadelphia, Baltimore, and other cities it is daily becoming more known and justly esteemed. A printed description of the origin and importance of the remedy, with numerous cases of disease cured by it, will in a few days be ready for delivery." Two weeks later a further announcement appeared as follows: "The apparatus is now established at the office of Dr. J. D. Godman, and will be ready for the reception of patients after the fourth of July (1822). Poor persons afflicted with diseases of the skin, chronic rheumatism, palsy, etc., who are recommended as proper objects of charity by a clergyman, physician, or respectable citizen, will be operated on free of charge." "August 17, 1822, a number of patients have been benefited and many cured. Charges fifty cents an application."

S. D. Gross, in his "Autobiography" says: "I had heard so much of Godman and saw before me a thin, frail sickly man with a pallid face, black hair and eyes and a clear sonorous voice. Godman was poor all his life. Poverty literally pursued him from the cradle to the grave. Gifted beyond most of his professional contemporaries he failed in almost everything. With great powers as an anatomical teacher he attracted large but unremunerative classes. For eighteen months after he took to literary pursuits he daily performed an astonishing amount of work, breathing as he did, with only one lung. His was a life of true heroism. His 'Rambles of a Naturalist,' 1883, has had many admirers on account of the beauty and fascination of its style."

A. G. D.

Lives of Eminent Am. Phys. and Surgs. S. D. Gross.
The Medical Annals of Maryland. E. F. Cordell.
A Narrative of Med. in Amer. J. G. Mumford.

Goforth, William (1766–1817).

William Goforth, born in the city of New York, was the son of Judge Goforth, one of the earliest and most distinguished pioneers of Ohio.

Equipped with a good preparatory education he had for medical professor Dr. Joseph Young, a physician of some eminence, who in 1800 published a small volume on "The Universal Dif-

JOHN D. GODMAN.

(By permission of Dr. E. F. Cordell.)

fusion of Electricity, and Its Agency in Astronomy, Physiology and Therapeutics,' speculations which his pupil cherished through life. He also enjoyed the more substantial teachings of an anatomist and surgeon, Dr. Charles Knight, but the school was dispersed by a mob raised against anatomists.

Goforth went West with his brother-in-law, Gen. John S. Gano, and on the tenth of June, 1788, landed at Maysville, Kentucky, then called Limestone. Settling in Washington, four miles from the Ohio River, he was soon popular, and for eleven years held the principal practice around.

In 1799 he came to Columbia, a suburb of Cincinnati, where his father lived and in 1800 removed to the city, occupying the house known as the Peach-Grove House, bringing with him a high reputation; where he soon acquired an extensive practice. Dr. Drake says he had the most winning manners of any man he knew. He dressed with precision, and never left his house in the morning until his hair had been powdered, or without his gold-headed cane in his gloved hand.

In 1801 he introduced vaccination into Cincinnati, Dr. Waterhouse of Boston having brought it from Europe in the previous year. In 1803, at great expense, he dug up at Big Bone Springs, in Kentucky, the largest, most diversified, and remarkable collection of fossil bones ever disinterred at one time in the United States. These he entrusted to a Thomas Ashe, or Arville, who sold them in Europe and kept the proceeds. Dr. Goforth was the patron of all who were engaged in searching for precious metals. They brought him their specimens and generally managed to quarter themselves on his family while the necessary analyses were made. In these researches "Blennerism," or the turning of the forked stick, held by its prongs, was regarded as a reliable means of discovering metals, as well as water.

Dr. Goforth was fond of associating with French people, and sympathized with the refugees from France. This led him to go and live in Louisiana, which had been recently purchased from France and was filled with French exiles.

Early in 1807 he departed in a flat-boat for the lower Mississippi, where he was soon after elected Judge, and subsequently chosen by the Creoles of Attacapas to represent them in forming the first Constitution of the State. Soon after he went to New Orleans, and during the invasion of the city by the British, acted as surgeon to one company of Louisiana volunteers. By this time his taste for French manners had been satisfied, and he determined to return to the city he had left in opposition to the wishes of his friends So he quitted New Orleans May 1, 1816, and reached Cincinnati on the twenty-eight of December, after a voyage of eight months, to find his popularity still high. Not long, however, did he enjoy it. During his summer journey from the South he had contracted disease, and died in the following year, 1817, the second physician to die in Cincinnati, Dr. Allison having preceded him but a year.

A. G. D.

Ohio Med. Reposit., Cincin., vol. i, 1826.

Goldsmith, Middleton (1818–1887).

Middleton Goldsmith (born Smith), physician and surgeon in Kentucky and Vermont and army surgeon during the Civil War, was the son of Dr. Alban and Talia Ferro Middleton Smith of Virginia. (Dr. Alban Smith's name was changed to Goldsmith by Act of the New York Legislature.) Middleton was born at Fort Tobacco, Maryland August 5, 1818, and was educated at Hanover College, Indiana, and in 1837, when his father was called to the College of Physicians and Surgeons of New York, as lecturer on surgery, he accompanied him, matriculating in the same institution and graduating therefrom in 1840. For some time after his graduation Middleton

acted as assistant to his father but for a brief interval went to China as ship's surgeon, making a study in that country of ophthalmia. He and his father are credited with being the first practitioners in this country to adopt the practice of lithotrity. During these early years of practice in New York, he acted as coroner's physician and became intensely interested in pathological anatomy. Together with his personal friends, Dr. Lewis A. Sayre, and John C. Peters, Dr. Middleton Goldsmith founded the New York Pathological Society, in which he ever maintained a great interest. Shortly before his death he gave the Society $5000 to endow the lectureship, which bears his name.

In 1844 Goldsmith was called to the chair of surgery in the Castleton (Vermont) Medical College. His reputation as a surgeon was wide, his counsel largely sought throughout the state. He was president of the Vermont State Medical Society in 1851 and in 1856 was called to Louisville, Kentucky, to the chair of surgery in the Kentucky School of Medicine, formerly held by his father, and later became dean of the faculty.

In 1861 he entered the Federal Army as brigade surgeon and went into active service in Buel's army, participating in many engagements, including the battle of Shiloh. After other assignments of a supervisory character, he was placed in charge of the construction, and later became medical director in charge of the large General Army Hospital at Jeffersonville, Indiana. This hospital at times had as many as four or five thousand patients in its wards. Dr. Goldsmith maintained his connection with this hospital to the end of the war. While in charge here, he made exhaustive studies of pyemia and hospital gangrene and the action of bromine in these and kindred diseases. These studies and their practical application became widely known and the bromine treatment of hospital gangrene within, as well as outside, army circles became generally recognized as the most successful yet discovered. The mortality from this disease in the field hospitals had always been high and the new treatment undoubtedly resulted in great saving of life. It was during these studies into its action and that of other disinfectants in diseased tissues that Dr. Goldsmith became interested in the subject of the germ theory of disease.

He was an indefatigable and brilliant student of anatomy and pathology and was thoroughly in touch with the latest European theories. Virchow cordially received him in 1874, and even invited him to lecture to his students.

In 1866 Goldsmith resumed practice in Louisville. The trustees of the old Kentucky School of Medicine, which had been moribund during the war, appointed him president of the school and he began to re-organize it on strictly professional lines. Factional feeling at that time in Kentucky ran high and Goldsmith finally relinquished his efforts and in the autumn of 1866 removed to Rutland.

In Rutland, during the succeeding years of his life, Dr. Goldsmith occupied a prominent and picturesque position, not only professionally, but in other directions. He was interested in agriculture and in the dairy interests of the state and gave much time to promoting scientific methods. In 1878 he was appointed special commissioner to examine the State Insane Asylum, in regard to which he made an able and critical report. He established the Rutland Free Dispensary. A most convincing expert witness before juries, his appearance on the witness stand was very apt to increase the court attendance of the laity.

Of large frame and commanding presence, he was instantly conspicuous in any gathering. Brusque in manner, sometimes even gruff, he was withal a gentleman, and his generosity and

unselfishness were best known by the poor and afflicted.

He maintained to his last days a lively interest in every new discovery in his profession, and followed eagerly the early developments of the germ theory. His medical library was the best private library in the state. At his death this went to the New York Academy of Medicine.

Dr. Goldsmith married in June, 1843, Frances Swift, daughter of Henry Swift of Poughkeepsie, New York. She died suddenly of heart disease in November, 1887, and the doctor survived the shock of her death but a few days. His death occurred November 26, 1887. Of three daughters one died in infancy, the other two, Rebecca Swift and Mary Middleton, survived him.

C. S. C.

In Memoriam, Middleton Goldsmith., (J. C. Peters), 1889.
Med., Rec., N. Y., vol. xxxii, 1887.

Goldsmith, William B. (1854–1888).

William B. Goldsmith was born January 11, 1854 in Bellona, Yates County, New York and graduated from Amherst in 1874, beginning at once to study medicine under Dr. John B. Chapin with the object of specializing as an alienist.

He graduated with high honor from the College of Physicians and Surgeons of New York in 1877 and after a short term in the Presbyterian Hospital was appointed junior assistant in the Bloomingdale Asylum.

Wishing to enlarge his experience he resigned in 1879 that he might work under Dr. Clouston in Edinburgh and have six months with Dr. Major at the West Riding Asylum. Two months more were spent in London with Hughlings-Jackson when he received the appointment of senior assistant at the Bloomingdale Asylum. In March, 1881, he accepted the position of superintendent of the Danvers Lunatic Hospital where he remained until he again went to Europe to pass a year in studying with Westphal, Krafft-Ebing, and others.

Dr. Goldsmith was made superintendent of the Butler Insane Asylum in Providence, Rhode Island in 1886 where he remained until his death March 21, 1888.

M. K. K.

Am. J. Insanity, Utica, N. Y., 1887–8, vol. xliv.
Boston M. and S. Jour., 1888, vol. cxviii.
Med. News, Phila., 1888, vol. iii.
Tr. Rhode Island M. Soc 1888. Providence, 1889, vol. iii (H. C. Hall).

Goodell, William (1829–1894).

For the last fifteen years of his life William Goodell was known in Pennsylvania as a leading gynecologist. He was one of the small group of pioneers who made the gynecology of this country what it is and, moreover, possessed the literary faculty to a high degree.

The son of a missionary, the Rev. William Goodell, he was born in Malta on October 27, 1829, getting his college and medical education in America but practising first in Constantinople before he settled down in West Chester, Pennsylvania. He was appointed lecturer on obstetrics and diseases of women in the University of Pennsylvania in 1870 and clinical professor of the diseases of women and children in 1874 and taught gynecology for twenty years, on resignation being made honorary professor of gynecology. He established a school of treatment and operative technic whose methods the oncoming generation found still progressive, though Dr. Goodell was not as facile nor as successful an operator as some of the younger men who grew up around him.

A prolific writer, he was also a reliable one and would often spend his leisure month after month in getting accurate data. His happiest hours were spent in the college library among the old books and he might have lived longer had he spent more time there. In 1894 failing health obliged him to resign work and he died on the twenty-seventh of October, 1894, aged sixty-five.

In September, 1857, he had married Caroline Darlington, daughter of Judge Thomas S. Bell of West Chester, Pennsylvania.

Dr. Goodell was one of the founders and president of the American Obstetrical Society and of the American Gynecological Society, honorary fellow of the Edinburgh Obstetrical Society, corresponding fellow of the London Obstetrical Society, honorary fellow Imperial Medical Society of Constantinople, fellow of the College of Physicians of Philadelphia, professor and honorary professor of gynecology in the University of Pennsylvania.

Among his contributions to medical literature there was only one in book form, "Lessons in Gynecology" (1879), which passed through three editions in his lifetime. A full list of articles can be seen in the Surgeon's-General Catalogue, Washington, District of Columbia. Some of the more important are:

"Concealed Accidental Hemorrhage of the Gravid Womb," 106 cases, 1869.

"On Turning in Pelves narrowed in the Conjugate Diameter," 1875.

"Extirpation of Ovaries for Some Disorders of Menstrual Life," 1879.

"Prolapse of the Womb," 1873.

"A Year's Work in Ovariotomy," 1883.

"Early Diagnosis Essential to the Cure of Uterine Cancer," 1892.

D. W.

Am. Gyn. and Obstet. J., N. Y., 1895, vol. vi (W. H. Parish).
Am. Jour. Obstet., N. Y., 1894, vol. xxx (T. Parvin).
Med. News, Phila., 1894, vol. lxv.
Tr. Am. Gyn. Soc., Phila., 1895, vol. xx (B. C. Hirst).

Goodman, Henry Ernest, (1836–1896).

Henry Ernest Goodman was born in a small town near Speedwell, Philadelphia, on April 12, 1836. He received his doctor's degree from the University of Pennsylvania in 1859 and his first medical experiences as resident physician of the Philadelphia Hospital. After the expiration of his term as resident a position was given him in the Wills Eye Hospital where he followed the line of work that especially interested him in his profession.

Dr. Goodman served in the twenty-eighth Pennsylvania Infantry and later rose to the rank of medical director of the army of Georgia, ranking as a colonel. At his own request he was mustered out November 3, 1864.

The medical world will remember him as a founder of the Orthopedic Hospital and an originator of the Pennsylvania State Hospital for Women. At the time of his death, February 3, 1896, he was emeritus professor of surgery in the Medico-Chirurgical College.

M. K. K.

Tr. Coll. of Phys., Phila., vol. xix, 1897.

Goodwin, James Scammon (1793–1884).

Col. James Scammon, of Saco, was a man of infinite jest, as it stands on his tomb stone to this day. It was probably from him that James Scammon Goodwin got his name. He was born at Old Fields, at the old Goodwin homestead in South Berwick, Maine, November 11, 1793, the youngest of eleven children of a family widely known in that part of the country for their public services as well as for personal worth: his father was the then famous Maj.-Gen. Ichabod Goodwin, of Revolutionary renown, and his mother, Mollie Wallingford, of Berwick.

James Goodwin fitted for college at the Berwick Academy under the charge of Maj. Josiah Seaver, and entered Dartmouth College when fourteen. He was sent there thus early in order to be under the observance of an elder brother Dominicus, who graduated with him in the class of 1811. James then studied medicine at the Dartmouth Medical School and took his degree in 1814, when twenty-one.

He obtained a surgeon's appointment at the latter end of the war of 1812–15 but did not actually serve. His

life was spent in the practice of medicine, first in Saco, then in South Berwick, and finally as Saco, where he returned at the urgent and repeated demands of his friends and former patients, and remained in practice until he retired at the age of sixty-five, when he moved to Portland to spend the rest of his life with his children.

He married Hannah Googin, a direct descendant of Daniel Googin.

He made his name known throughout the state of Maine, at the age of thirty-two, by an amputation high up in the thigh upon a young girl on whom every doctor in the neighborhood had positively refused to operate, declaring her condition hopeless, an operation nothing short of murder. The operation, decided upon with the patient's consent, was begun with prayer, a proceeding not at all unusual in those days of genuine religion.

As no physician could be found to assist Mr. Ether Shepley, a lawyer of Saco, stood by and assisted Dr. Goodin to the best of his ability.

The operation was a complete success, the patient living as long as her skillful surgeon.

Goodwin was a member of the Maine Medical Association but does not seem to have left any medical papers. He lived to be ninety-one, dying at last from sheer old age, March 14, 1884.

J. A. S.

Trans. Maine Med. Assoc.
(Family Papers.)

Gorham, John (1783–1829).

Dr. Gorham was the son of Stephen Gorham, a merchant of Boston, Mass., and was born there February 29, 1783.

He graduated from Harvard College in 1801 and began the study of medicine with John Warren. In 1804 he took his B. M. from Harvard College and his M. D. there in 1811. Afterwards he went abroad and studied for about two years in London, Edinburgh and Paris.

On returning to Boston he married the daughter of Dr. John Warren and began to practise. Through Warren's introduction he had become acquainted with Dr. Aaron Dexter, professor of chemistry at Harvard, and shortly (1809) was appointed adjunct professor of chemistry and materia medica in Harvard College. He held this position until 1816 when he was made Erving professor of chemistry to succeed Dr. Dexter. After 1824 Dr. Gorham's labors were confined to teaching in the Medical School in Boston, the corporation having decided that the Erving professors ought to live in Cambridge, and Dr. Gorham, being unwilling because it interfered with private practice, resigned his position in 1827.

During his professorship he published a system of chemistry in two volumes, 1819 and 1820. He wrote many papers for the "New England Journal of Medicine and Surgery," of which he was joint editor for about fifteen years. When this periodical was succeeded in 1828 by the "Boston Medical and Surgical Journal" he contributed to the latter. For many years after 1810 he gave private courses of instruction in chemistry in Boston.

He died of pneumonia March 27, 1829. Dr. James Jackson said of him: "During twenty years and more I know not that he has made an enemy." He was a popular and successful teacher and practitioner. A lithograph portrait of him taken from a painting in the possession of his descendants is now in the Boston Medical Library.

W. L. B.

Hist. Harvard Med. School, H. C. Ernest, 1906.
Bos. Med. and Surg. Jour., vol. ii, 1829.
Hist. Har. Med. School, T. F. Harrington. (Portrait).
A Sermon by J. G. Palfrey, Boston, 1829.

Gorrie, John (1803–1855).

Among those things for which the fever-stricken have to be grateful is artificial refrigeration, invented by John Gorrie of Charleston and Apalach-

icola, Florida, who, like most inventors, met with ridicule and neglect.

He was born in Charleston, South Carolina on October 3, 1803; educated in a northern college and went to Apalachicola in 1833, practising there very successfully until his death in 1855.

In 1847–8, while preparing a series of papers for the London "Lancet" on the subject of "Equilibrium of Temperature as a Cure for Pulmonary Consumption," one of his chemical experiments on air cooling resulted in the making of artificial ice. He immediately set about perfecting this idea with the result that the first ice machine ever made and operated was patented in 1850. Twelve years before the work of M. Carré in Paris. Dr. Gorrie's claims for air cooling in hospitals were definitley established. It was never his intention to perfect a process for ice making or to exploit his discovery, but rather, in a town where the extreme heat meant torture to fever patients, to cool the air, and during his lifetime no one gave him the encouragement he needed or advanced the necessary funds. He died at Apalachicola on June 18, 1855 after a short illness. After he was dead it was discovered by his fellow citizens that he merited a monument and he had one. This was a discovery which hardly helped Gorrie, but the monument acknowledges the debt of Apalachicola to a good doctor and scientist.

D. W.

From The Home Magazine, Nov., 1906, and personal communications.
Apparatus for the Artificial Production of Ice, New York, 1854.

Graham, James (1819–1879).

James Graham was born in New Lisbon, Ohio, May 28, 1819, the third son of George and Eliza Graham, his father coming from County Down, Ireland.

Of Dr. Graham's early life little is known. He was a graduate of Jefferson College, Washington County, Pennsylvania and later studied medicine and graduated from the medical department of the university.

He began practice in New Lisbon with his brother-in-law Dr. Fries. In 1849 he moved to Cincinnati, Dr. Fries having preceded him, where they practised together until the Civil War. The year he began practice in Cincinnati the cholera epidemic was raging, and Dr. Graham was appointed physician to the quarantine station. Soon thereafter he had charge of the County Infirmary and in 1851, when the Cincinnati College of Medicine and Surgery was founded, he was made professor of materia medica and lectured on materia medica and therapeutics in the Miami Medical College during the session of 1853–54.

In the latter year he was elected professor of physiology and clinical medicine in the Medical College of Ohio. Among other positions held were those of the professor of materia medica and therapeutics, 1855; professor of clinical medicine, 1859; professor of theory and practice, 1864; professor emeritus, 1874. For many years he was dean of the faculty.

For a period of twenty-five years he was clinical lecturer in the Commerical (now City) Hospital, and in the Good Samaritan Hospital, and president of the Academy of Medicine of Cincinnati in 1872.

Dr. Graham never married. He died October 6, 1879 of Bright's disease.

A. G. D.

Graham, James Elliott (1847–1899).

James E. Graham, dermatologist, was born in Brampton, County of Peel, Ontario, Canada, in May, 1847, the son of Joseph G. Brampton.

He received his early education in the Weston Grammar School and the Upper Canada College, and during this period showed that combination of qualities which made him distinguished in later years. He graduated from the Toronto Medical School in

Hans Burch Gram.

(By permission of Dr. T. L. Bradford.)

1869 at the head of his class, receiving both the university and the Starr gold medals. The following year he was appointed resident physician of the Brooklyn City Hospital. After this he was appointed Surgeon without Rank in the Prussian Army, which position he held throughout the Franco-Prussian War. He then engaged in post-graduate work in Vienna, after which he went to London, where he soon obtained the diploma of L. R. C. P.

On July 15, 1873, he married Mary Jane, daughter of the Hon. J. C. Aikens, and settled down to regular practice in Toronto, where he was at once recognized as a capable physician. In 1875 he was appointed a member of the visiting staff of the Toronto General Hospital, which position he held at the time of his death. After he had been in Toronto about three years he was attached to the staff of the Toronto School of Medicine, where he did work as demonstrator of anatomy and demonstrator of microscopy. He was for two years lecturer on chemistry, but gave this up, preferring to devote himself to clinical teaching in the General Hospital. On the reorganization of the medical faculty of the University of Toronto in 1887 he was appointed professor of clinical medicine and lecturer in dermatology, and in 1892 professor of medicine and clinical medicine.

Soon after commencing the practice of medicine he began to pay especial attention to pure medicine and to dermatology, and was the first physician in Ontario to give up general practice and become a consulting physician.

He was an active member of many medical societies: in 1887 president of the Dominion Medical Association, in 1889 president of the American Dermatological Association. He was one of the original members of the American Association of Physicians. In 1893 he left Toronto for a time, made his home in London, and took his M. R. C. P. (London). He was most interested in all of his medical associations, both in Canada and the United States, and was past president of nearly every association that he belonged to, including the Toronto Medical, the Toronto, Pathological, etc. At the time of his death he was president of the Ontario Medical Association.

A frequent contributor to medical literature, he also took a deep interest in matters pertaining to medical education, especially in its practical aspects, and exercised a wide influence as a clinical teacher, being one of the first to give systematic bedside instruction in the General Hospital. For many years he was a member of the Senate, first as representative of the Toronto School of Medicine, and afterwards of the Graduates in Medicine.

Strict integrity, unvarying courtesy and kindness, steadfastness of purpose, and charity towards all men were his marked characteristics.

In 1899 he went south for his health. While in Baltimore he was taken with influenza, followed by a slight pulmonary tuberculosis, which, engrafted on a system weakened by diabetes, proved rapidly fatal. He died in Muskoka, Canada, July 6, 1899, in the fifty-third year of his age, leaving a widow and four children, and was buried at Mount Pleasant Cemetery.

P. A. M.

Gram, Hans Burch (1786–1840).

Known in the States as the pioneer of homeopathy in America, Hans Burch Gram was born in Boston, 1786. His father, a wealthy sea captain of Copenhagen, was, when a young man, secretary to the Danish West India governor and came to the States soon after the Revolution and was disinherited by his father for marrying a Miss Burdick, the daughter of a hotel keeper in Boston, so he remained in that city until his death in 1807.

His eldest son, Hans, had been carefully educated and was already studying medicine when the death of his father

compelled him to return to Denmark to look after family affairs. He obtained a portion of his father's heritage and through the favor of Prof. Fenger, his uncle and physician-in-ordinary to the king, he was placed in the Royal Medical and Surgical Institution. Within a year from coming the king appointed him assistant-surgeon to a large military hospital. In 1814 he resigned and settled to general practice in Copenhagen with the highest grade of merit in the Royal Academy of Surgery.

During 1823 and 1824 Gram had become acquainted with and thoroughly tested the principles of homeopathy, and it is probable that he was induced to stay in America, when he returned to see his family, in the hope of disseminating the doctrines of homeopathy.

It is thought he must have been an homeopathist about twelve years previous to leaving Copenhagen. After staying a while in Mount Desert, Maine, to help a brother, Neils B. Gram, who was in financial difficulties and who had eventually nearly all Hans' money he began practice in New York and a few months later translated Hahnemann's "Geist der homeopathischen Heil-lehre" and published it in a pamphlet of twenty-four pages under the title "The Character of Homeopathy." The work was dedicated to Dr. David Hosack and distributed in the leading medical colleges, but Gram had nearly forgotten English and the book was difficult to understand. Hosack said he had not read it. Fifteen years later it was put into good English by a Dr. Scott, of Glasgow, Scotland. Its cold reception was a great disappointment to Gram, but he lived to see the system firmly planted not only in New York but in many other cities. He failed in health just as this came to pass. Broken in heart by the misfortunes, insanity, and death of his only brother he was attacked by apoplexy in 1838 and after many months of suffering passed away in February, 1840. He was of the Swedenborgian faith and a man of most scrupulously pure and charitable life.

The History of Homeopathy, N. York, 1905, (T. L. Bradford).
U. States Med. and Surg. Jour., vol. v, 1867.
Amer. Jour. of Homeopathy, vol. xii.
New England Med. Gaz, 1871.
Trans. N. Y. State Hom. Med. Soc., vols. i, and viii.

Gray, Asa (1810–1888).

Born in Paris, Oneida County, New York on November 18, 1810, one of his earliest occupations was to feed the bark mill and drive the horse at his father's tannery. Though he graduated M. D. at the Medical College of the Western District of Fairfield in 1831, he never practised medicine. Two years before this his interest in botany was roused by an article in "Brewster's Edinburgh Encyclopedia" and he watched eagerly for the first spring flower which he found to be the little Claytonia Virginica, named after Dr. John Clayton the botanist. The correspondence he had with Dr. Lewis C. Beck in regard to specimens led to a lasting friendship with Dr. John Torrey, and in 1833 he became his assistant professor of chemistry and botany in the New York College of Physicians and Surgeons and issued the first century of the "North American Gramineæ and Cyperaceæ," a second century followed but the work was never finished.

Gray's next post was the curatorship of the New York Lyceum of Natural History and his "Elements of Botany," 1836, prepared the way for his larger work, the "Botanical Text-Book." He declined two valuable appointments and continued working with Dr. Torrey on parts one and two of the "Flora of North America." Then followed visits to all the leading European botanists and after that a single-handed grappling for a time with the other numbers.

In 1842 he accepted an invitation from president Quincy to become Fisher professor of natural history at Harvard and under him grew the vast herbarium, library and garden which at the time of his going to Cambridge were still

Asa Gray.

(Permission of the Torrey Botanical Club.)

in their infancy. The library contains over 8000 books and pamphlets.

Always at work, 1848 saw the "Americas Boreali-Orientalis Illustrata," beautifully illustrated by Isaac Sprague. The two volumes had 186 plates, but unfortunately the work was not continued.

Perhaps the memory of his own delights and difficulties with botany when a boy made him write two charming little books—"How Plants Grow," 1858, and "How Plants Behave," 1872. "Field, Forest and Garden," 1868, proved a wonderful help to plant lovers. "His First Lesson in Botany," 1857, re-appeared, revised, in 1887 under "Elements of Botany," the two volumes being the alpha and omega of an overcrowded but fiery burning life. How much he did in the way of collecting and writing can only be estimated by those who knew how he kept in constant corresponding with old pupils and scientific friends. Those who are curious relative to that between Gray and Darwin will find it all in "Darwiniana," 1876, and will note that Gray, while accepting Darwin's theory, was a firm theist.

Gray was relieved from active duties in the college in 1872 and gave more time to literary work. When he was seventy-five the botanists of North America gave him a fine silver vase and a silver salver in token of their universal esteem.

Jane L. Loring, daughter of the Hon. Charles G. Loring of Boston, was the name of Gray's wife, a devoted companion and assistant. They made five trips to Europe, working with De Candolle, Sir William Hooker, and with European botanists. Once they went up the Nile as far as Wady-Halfa, but "a land," said Gray "which had been cultivated five thousand years is a poor land to botanize in."

There was scarcely a society of note which did not claim Gray as active, honorary or corresponding member or give him honors. He held the Edinburgh LL. D. and the Oxford D. C. L., the Harvard A. M. and L.L. D.

He made three trips to California with congenial friends, taking in Mexico; the last trip being in 1879 when they visited Roan Mountain and the place where grows the Shortia Galacifolia, whose romantic history and connection with Gray and Dr. Short should be read.

On the twenty-eighth of November, 1887, while working on "The Grapevines of North America," he had an attack of paralysis and for nine weeks lingered between life and death. On the thirtieth of January, 1888, he quietly passed away. His influence on the science of American botany can hardly be overestimated, and hundreds regretted sorely that death closed the book before the "Synoptical Flora" was all written.

D. W.

Abridged from A Notice of Asa Gray. W Deane, 1888.
Bull. Torrey Botanical Club, Mar., 1888.
Life and Letters of Asa Gray. Pop. Sci Mon., 1894–5.
Am. Acad. of Arts and Sci., Cam., 1888.
Proc. Roy. Soc. of London, 1889, xlvi.
Nat. Acad. of Sci., Wash., 1895, iii.
There is a portrait in the Surg.-gen Library in Wash., D. C.

Gray, John Perdue (1825–1886).

The biographers of John Perdue Gray with regard to his boyhood simply state that he was born of American parents on August 6, 1825. He went to the common school in Half Moon, Center County, Pennsylvania, his birthplace, and Dickinson College, taking his M. A. in 1846. His M. D. was obtained from the University of Pennsylvania in 1848 and the same year he became a resident physician in the Blockley Hospital, Philadelphia, and three years later third assistant physician to the New York State Lunatic Asylum in Utica, finally becoming superintendent when only twenty-eight.

While editor of the first journal in America devoted to insanity—"The American Journal of Insanity"—he raised it to an enviable position both in this country and abroad by his ability and by his own writings.

The high standard reached in New York in the care of the insane was largely due to his influence. As a medical witness in cases of interest he was widely known, notably in the trial of Guiteau and of Lincoln's assassin. In 1882 he was shot in Utica by a madman over the left malar, the bullet coming out in the right cheek, and never quite recovered from the shock. His health from other causes became seriously impaired, so he made a trip to Europe and came home better, but died from kidney disease in New York January 12, 1886.

"Dr. Gray," writes a biographer," was uncompromising, unyielding and in a certain sense coercive in his views of psychiatry. He did not recognize certain forms of insanity discerned by American and foreign alienists. With him moral insanity, dipsomania, kleptomania were psychiatric myths and misnomers invented to shield depravity and crime. He fought out his convictions on this line throughout a vigorous life, and, carrying these triumphantly into the forum often won there popular acquiescence, as in the case of Guiteau. To him belongs the credit of establishing in this country a microscopic study of the brain; that which made the Utica asylum a great school of instruction. His lectures attracted not only the students of his own college but others, as well.

He married, in 1854, Miss Mary B. Wetmore, daughter of Edmund A. Wetmore of Utica, who, with three children, Dr. John P. Gray, Jr., William and Cornelia survived him. Three other children died in infancy.

His appointments numbered among others: professor of psychological medicine, Bellevue Hospital Medical College, 1874, and the same appointment to the Albany Medical College in 1876; president of the New York State Medical Society, of the New York State Medical Association, of the Association of Superintendents of Asylums, and honorary member of the British, French and Italian Medico-Psychological Associations; also LL. D., Hamilton College.

His writings included:

"Thoughts on the Causation of Insanity," 1872.

"Responsibility of the Insane," 1875.

"An Abstract of the Laws of New York—Comparisons of the Same with Those of England," 1879.

"On the Sanity of Guiteau," 1882.

"Insanity: Preventable Causes," 1885.

Albany Med. Annals, vol. vii, 1886.
Am. Jour. Insanity, N. York, 1887, vol. xliv.
Med. Legal Jour., N. York, 1886, vol. iv.
Med. News, Phila., 1886, vol. xlix.
Med. Rec., N. York, 1886, vol. xxx
Tr. Med. Soc, N. York, 1886.

Green, John (1736–1799).

John Green was the son of the Rev. Thomas Green, Baptist elder and physician, one of the earliest settlers of Leicester (Greenville) where John was born August 14, 1836.

Instructed in medicine by his father, he came to Worcester and built his house on the eminence now known as Green Hill, which although relatively nearer town at that time, when many persons lived north of Lincoln Square and there were but seven houses on Main Street between that point and the Old South Church on the common, seems yet to have been at a distance that might well make prospective patients hesitate before storming the steeps in the dead of night or in bad weather. Patients came, however; medical students also from Worcester and surrounding towns; Green Lane became a county road and, although during the latter part of his life, the office was in a little wooden affair on the present site of the Five Cents Savings Bank, the doctor always lived in the Green Hill house, and there he died forty-two years later (October 29, 1799) agep sixty-three.

An earnest patriot, he was, in 1733, a member (and the only medical member) of the American Political Society, which was formed on account of the grievous

burdens of the times and did so much to bring about that change of public sentiment which expelled the adherent of the crown. He took a prominent part in all the Revolutionary proceedings, and in 1777 was sent as representative to the General Court. In 1778 and 1779 he was town treasurer, and in 1780 one of the selectmen, the only physician who ever held that office.

His first wife, Mary Osgood, died in 1761. His second wife, daughter of Gen. Timothy Ruggles, of Hardwick, survived him, dying in 1814 at the age of eighty-four. A son, Dr. Elijah Dix Green, born July 4, 1769, A. B. (Brown), 1793, was a physician in Charleston, South Carolina.

L. F. W.

Green, John Orne (1799–1885).

In the old parsonage at Lowell, Massachusetts, where his ancestors had lived since the early settlement of this country, John Orne first saw light on May 14, 1799. His father, Aaron Green, was minister there and his mother, Enuice (Orne), the daughter of John and Bridget (Parker) Orne came from England probably in the fleet with Winthrop.

As a child John attended the district school of his native town and in September, 1813, received his "admittatur" to Harvard and joined the class of 1817 with which he graduated with honor.

Immediately after he accepted the position of the teacher of a private Latin school in Castine, Maine, where he remained a year, and in September, 1818, he began to study medicine with Dr. Ephraim Buck of Malden and attended lectures in the Harvard Medical School, but in October, 1821, went to Boston to pass the remainder of his pupilage with Dr. Edward Reynolds, at that time city physician and in charge of the alms house on Leverett Street where he found abundant opportunity for clinical study and practice, in February, 1822, receiving his M. D. from Harvard.

Learning that mills were about to be erected at East Chelmsford (now Lowell) and thinking the future estimated population of one thousand might afford a field for a young physician, he moved to that place in April, 1822, and began a practice which continued with scarcely any interruption for sixty-four years. He saw the field of his labors grow from a village of a few hundred to a city of more than seventy thousand and it may truly be said he grew with it. In 1868 he was senior physician to St. John's Hospital.

He married Jane, daughter of Dr. Calvin Thomas, of Tyngsboro, Massachusetts, who died June 28, 1828; then Minerva Bucklin, daughter of John Slater, of Smithfield, Rhode Island, who died December 31, 1834; and afterwards Jane, daughter of William McBurney, of Newtownards, Ireland. Two sons only survived birth and these were of the last marriage, John Orne, clinical professor of otology in Harvard University, and George Thomas.

He died at Lowell on December 23, 1885, after a short illness, probably from a malignant disease of the chest. Two excellent portraits by Lawson and an admirable bust are extant; one portrait in the Green School in Lowell, the other portrait and the bust in the possession of the writer, his son.

Among his writings were:

"History of the Small-pox in Lowell," 1837.

Address before the Massachusetts Medical Society: "The Factory System in its Hygienic Relations," 1846.

J. O. G.

Boston Medical and Surgical Journal, vol. cxiv.

An Autobiography: Old Residents Historical Association of Lowell, Mass., vol. iii.

Green, Horace (1802–1866).

Horace Green, a noted laryngologist, was of Revolutionary stock, his father, Zeb Green, being a Massachusetts minute man who with his three brothers entered the army before the battle of Lexington and went through the whole war. He was the only survivor, his three brothers being killed. At the close of the war

he removed to Vermont, where Horace was born December 24, 1802. The lad studied medicine in Rutland, Vermont, with his brother, Dr. Joel Green, and after five years' practice there went to Philadelphia where he attended two full courses and graduated at the University of Pennsylvania. Returning to Rutland, he practised five years more and in 1834 received his M. D. from Middlebury College. In 1836 he removed to New York City where he practised till 1866 as a lung and throat specialist. In 1837 he went to Paris, attending lectures and visiting the hospitals.

He was the first to bring before the medical profession, in a paper read to the New York Surgical Society, the method and value of topical medication for diseases of the air passages, a practice of which there is now no doubt that he was the originator.

In 1854 he with his colleagues started the "American Medical Monthly" with which he was editorially connected for many years.

From 1840 to 1843 Dr. Green was professor and president of the faculty at the Medical College at Castleton, Vermont, and in 1851 with others founded the New York Medical College where he lectured until 1860, when he was made emeritus professor and retired from active teaching. He held the M. A. degree from Union College, Schenectady, and in 1853 received that of LL. D. from the University of Vermont at Burlington.

A little note from the doctor's autobiography, written for private circulation, is interesting. "After my return from my second trip to Europe in 1851, I entered with more spirit than ever into the practice of my 'specialty' the employment of local treatment of the air passages. My practice had greatly increased. My patients came from all parts of the world, but with this came also an increase of opposition from my professional brethren. Those who were unfortunate in business or from some other cause were envious of my success. They evinced a very unkind spirit and denied the possibility of my doing what I was doing in my office every day. But I would not quarrel with them, trusting that the truth would ultimately be known, and my word vindicated. For several years now I have heard nothing of this opposition." This prophecy was fulfilled. A committee was appointed to visit the doctor's office and a majority reported favorably. One physician exclaimed, "Well, gentlemen, if Dr. Green says after this that he can put his sponge probang down into a man's boots, I shall believe him!"

Dr. Green was a member of many learned societies both at home and abroad, for which he contributed many valuable articles. His published works were:

1846. "A Treatise on Diseases of the Air Passages," which reached a third edition.

1849. "Pathology and Treatment of Croup."

1852. "On the Surgical Treatment of Polypi of the Larynx and Edema of the Glottis."

1858. "Selections from the Favorite Prescriptions of Living American Practitioners," which received a French translation.

1864. "A Practical Treatise on Pulmonary Tuberculosis."

He was twice married: in October 20, 1829 to Mary Sigourney Butler of Rutland, Vermont, by whom he had one daughter who died in 1833. In 1842 he married Miss Harriet Sheldon Douglas, and had twelve children. Of his thirteen boys and girls, seven lived to maturity.

He died at his country home at Sing Sing, now Ossining, November 29, 1865 of tuberculosis.

A marble bust of Dr. Green, carved in Italy, was presented to the New York Academy of Medicine by his widow and son.

A. G. L.

Distinguished Living New York Physicians. Dr. S. W. Francis, 1886.

Green, Traill (1813–1897).

An erudite professor both of botany and astronomy, Traill Green was born at Easton, Pennsylvania, on May 25, 1813, the son of Benjamin and Elizabeth Traill Green.

From boyhood he was devoted to nature study and afterwards, deeming medicine would afford him special advantages, he studied under Dr. J. K. Mitchell and graduated M. D. from the University of Pennsylvania in 1835. Then, returning to Easton, he began practice there. But chemistry, his darling study, was not given up and in his consulting-room at night he would give lectures on this and allied subjects to a class of young people. To the botany class came Harriet Moore of Morristown, New Jersey, who in 1844 married her professor and shared his scientific labors.

In 1837 he was made professor of chemistry at Lafayette College and in 1865 professor of natural science. He received the A. M. degree from Rutgers in 1841 and was later called to the chair of natural sciences at Marshall College, Pennsylvania, and in 1866 Washington and Jefferson Colleges conferred upon him the LL. D.

Noticing with regret the incomplete training of many medical students he, with others, launched the American Academy of Medicine and was its first president. But Lafayette College was his special interest. He held so many honorable posts that the list savours of multiple personality, yet all was well done. The observatory was his gift and to it he bequeathed his books and minerals. Every good cause had an advocate in him. By voice and pen, money and enthusiasm he helped forward medical reform, temperance, the higher education of women. A full list of his writings and a portrait may be seen in "Proceedings of the Medical Society of Northampton County," June 18, 1897, the chief one being "Zoological and Floral Distribution of the United States," 1861.

He died in his birthplace, Easton, on the twenty-ninth of April, 1897. D. W.

The Lehigh Valley Med. Mag., 1897.
The Botanists of Phila. and their Work. J. W. Harshberger, Phila., 1899.

Greene, William Warren (1831–1881).

William Warren Greene, for nobody thought of calling him in any other way, was a genius in medicine and surgery. He was born in South Waterford, Maine, March 1, 1831, his father, Jacob Holt Greene, an intellectual, independent, inventive and, above all, a very just man. He was fierce in his anti-slavery defiance at a time when it needed a brave man to express any such opinions at all. From his father young Greene must have inherited most of the qualities which he exhibited during his medical career. His mother, Sarah Walker Frye, was an excellent housewife and a genial woman. Young William had the ordinary school education of those days, but, added to this, the mental guidance of his relative, the Rev. William Warren. At sixteen he began to teach school, then took up medicine with Dr. Seth Chellis Hunkins, and later attended lectures at the Berkshire Medical College and at Ann Arbor, Michigan, where he obtained his M. D. in 1855. A short time after he was offered a demonstratorship of anatomy at Ann Arbor, which he regretfully declined, for he was then doing well in his practice of medicine in Gray, Maine. For a while during the Civil War he was a surgeon in the army.

His former teachers at the Berkshire Medical School had kept track of this promising young man, and a vacancy occurring in the chair of theory and practice of medicine, he was offered it and accepted, beginning his lectures in November, 1862.

This position he held until 1868, also that of professor of surgery in the Medical School of Maine, giving his first series of clinical lectures on that important branch of medicine in 1866. From that time until 1880, he lectured constantly.

Simultaneously he was professor of surgery in the University of Michigan, but resigned after one term owing to homeo-

pathic difficulties. It should have been said that when he accepted the professorship at Pittsfield he settled there to practise, but abandoned that for Portland in 1868, remaining there thirteen years.

In 1872 he was professor of surgery in the Long Island Hospital Medical School, in all the positions occupied winning ample renown as a clear, forcible lecturer, and a clinical teacher of extraordinary proficiency. In 1880 he was president of the Maine Medical Association and in 1873 he gave a most attractive oration on the "Scientific Spirit." In 1867 he printed four surgical papers in the "Boston Medical and Surgical Journal," and one on a Cesarean operation in 1868.

He operated with grace, was rapid, yet safe, his bearing equal to his dexterity, and at the age of thirty-four he removed successfully a large bronchocele declared by the most noted surgeons to be unoperable, and was equally successful in goitre operations.

His remarkable case of resuscitation of a woman declared to be dead and already coffined, by the ingenious use of the hypodermic injection of phosphoric acid, so that the patient survived him for thirty years, will long remain apparently miraculous in the annals of medicine in Maine.

Dr. Greene was twice married; in 1855 to Lizzie Carleton, of Waterville, and at her death in 1861 to Elizabeth Lawrence, of Pownal, who died in 1876. Two children survived him; one, who married Dr. Addison Thayer, of Portland, the other, Dr. Charles Lawrence, of St. Paul, Minnesota, who inherited much of his father's talent.

In July, 1881, William Warren Greene went to England to attend the International Medical Congress, and while returning home died from uremic convulsions and was buried at sea, September 10, 1881. J. A. S.

Trans. Maine Med. Assoc. Portland, 1883, viii.

Greenough, Francis Boott (1837–1904).

Francis Boott Greenough was born in Boston December 24, 1837. He was the son of Henry and Frances Boott Greenough, his mother being a niece of Kirk Boott, one of the first cotton manufacturers of Lowell, Massachusetts.

He graduated from Harvard College in 1859 and from the Harvard Medical School in 1866. In 1870 the University gave him her A. M. Previous to graduating in medicine he spent a year in the Lawrence Scientific School connected with Harvard, and went abroad for two years studying architecture and medicine at Pisa and Florence.

He was acting assistant surgeon in the United States Army during the summer and autumn of 1864. In 1865 and 1866 he was house physician in the Massachusetts General Hospital. After graduating from the medical school he spent a year in Vienna, and in October, 1867 began to practise medicine in Boston. He gave his greatest attention to skin diseases and syphilis from the first and in the later years of his practice was regarded as an authority on genito-urinary diseases and syphilis. He was clinical instructor in syphilis in the Harvard Medical School from 1875 to 1895. He was in charge of the department of skin and venereal diseases of the Boston Dispensary from 1873 to 1900. At one time he was surgeon to the Carney Hospital (1868–1876), also to St. Joseph's Home, and physician to the Children's Hospital.

He was a member of the Massachusetts Medical Society, the Boston Society for Medical Improvement, and other societies. His tall, commanding presence was a familiar figure on the streets of Boston for thirty years.

Dr. Greenough never married and retired from active practice several years before his death, which occurred in Brookline, Massachusetts, October 16, 1904.

Among his writings are:

"Treatment of Permanent Urethral Stricture." (Boston Medical and Surgical Journal," vol. lxxvii.)

"Pediculi Vestamentorum." ("Ibid.," vol. lxxvii.)

"Gonorrheal Rheumatism." ("Ibid.," vol. lxxvii.)

W. L. B.

Bos. Med. and Sur. Jour., vol. cli.
Bulletin Harvard Alumni Asso., Apr., 1905.

Gregory, Elisha Hall (1824–1906).

Elisha Hall Gregory was born in Logan County, Kentucky on the tenth of September, 1824 and went to St. Louis and began practice there in 1849. His father emigrated from Kentucky in 1833. As a practitioner of medicine and surgery the son was eminently successful and as a teacher of anatomy and surgery for close on five years in the St. Louis Medical College few if any surpassed him. He served as president of the State Board of Health of Missouri and twice as president of the St. Louis Medical Society also once of the State Medical Association of Missouri. He was in 1866 elected president of the American Medical Association. He died on the eleventh of February, 1906.

W. B. O.

Griffin, Corbin (17––1813), Yorktown, Virginia.

He was the son of Leroy Griffin of Lancaster County, Virginia, and his wife Mary, daughter of Joseph Bertrand, a French refugee, and was born in Lancaster, the year of his birth not being known.

He received a good classical education, and studied medicine at and graduated from the University of Edinburgh. A copy of his thesis, which was published, is in the Towner collection.

Afterwards he settled and practised in Yorktown, Virginia. In the Revolution, or at least in the first years of the war, he served as state surgeon, being first in the navy and later in the hospital at Yorktown. In May, 1779 he was a member of the Virginia Senate, having been elected for three years. After the war he continued to practise at Yorktown until his death.

He married Elizabeth Berkeley and had one son who married his cousin, Mary, daughter of the Hon. Cyrus Griffin, last president of the Continental Congress.

Dr. Griffin died September 1, 1813.

R. M. S.

Griffin, Ezra Leonard (1821–1892), Hillsboro, New Hampshire.

Ezra Leonard Griffin, son of Eben and Susannah Lewis Griffin, was born September 21, 1821, his mother a Bostonian, his father a native of Gloucester.

He entered Dartmouth College in 1844. While there his health failed and forced him to abandon the preparation for the ministry which had been his choice. He left Dartford at the close of his sophomore year and entered the Berkshire Medical College where he graduated in 1848.

In the same year Dr. Griffin married Abby M., daughter of the Rev. Samuel Mason, of Newburyport, Massachusetts and began professional life in Nashua, New Hampshire. In the autumn of 1855 he removed to Fond du Lac, Wisconsin.

Griffin was prominently indentified with the medical history of Wisconsin for thirty years, being warmly interested in all that related to the practice of medicine, an active supporter of state and local medical societies, deeply interested in the subject of vaccination and was one of the first to establish in the northwest a depot for the propagation of animal vaccine.

He was a clear and forcible writer and a prime mover in the organization of the State Board of Health of which he was for many years an honored president.

He died in January, 1892.

C. S. S.

Grinnell, Ashbel Parmalee (1845–1907).

This legal physician was born at Massena, New York, December 26, 1845, the son of Josiah Heman Grinnell, a successful country practitioner of St. Lawrence County, New York. His early years were spent in study and teaching in the district schools of his own county and his medical degree was taken at the Bellevue Hospital Medical College in 1869. For a time

he practised at Ogdensburg, New York. In 1870, however, he removed to Burlington, Vermont. He was professor of physiology and of the theory and practice of medicine at the Medical Department of the University of Vermont, situated at Burlington. Of the same institution he was dean from 1874 to 1877, and again from 1884 to 1898, and professor of practice in the Long Island College Hospital from 1885 till 1887.

In November, 1904, he removed from Burlington to New York City. There he engaged in medico-legal practice until his death, and was remarkably successful.

He was of medium height, of rather heavy build. His hair red, his eyes large and deep blue. His face was always kindly, yet ever changing its expression. A quick and active man, full of nervous force and magnetism; a hard student and exceedingly fond of his profession. He loved all children and, though extremely busy, he somehow managed to spare the time in which to talk with and to play much with his own. He was also extremely friendly and helpful to his students. The present writer, one day, after a lecture by Dr. Grinnell, spoke to him in the hall concerning some matter which he had not sufficiently understood. "Come down to my house at 7:30 to-night," said the doctor. "I happen to be quite busy at the present moment." Of course I went, expecting to receive a very few moments. But Dr. Grinnell put me in a rocking chair and then, himself in another, he discoursed on small-pox for more than two full hours. Seldom have I listened to a more enjoyable lecture.

He married, in 1873, Miss Elizabeth D. Guest, of Ogdensburg, New York and had one son, Albert R., and two daughters.

Dr. Grinnell died in New York City, April 8, 1907, of malignant endocarditis, following a long attack of grippe.

T. H. S.

Atkinson's Physicians and Surgeons, Phila., 1878.

Grissom, Eugene A. (1831–1902).

Eugene Grissom, alienist and medico-jurisprudentist, a descendant of Oliver Wolcott, one of the signers of the Declaration of Independence. He was born in Granville County May 8, 1831. His mother, a person of great vitality, lived to a most extraordinary age and bore seventeen children, of whom Eugene was the sixteenth.

In his youth he studied law; later he taught in the public schools, and at the age of twenty-two was elected clerk of the superior court by a large majority. In spite, however, of his flattering prospects in the direction of law, he soon began to turn his attention to natural science and finally to medicine, taking his medical degree from the University of Pennsylvania in 1858, then settling in his native county; he soon had an extensive practice.

Dr. Grissom took a fighting part in the war of the Rebellion. In 1861 he was elected captain of Company D, thirtieth North Carolina Troops. In the "Seven Days Fight" around Richmond he was terribly wounded in the right shoulder. Before he left the hospital, however, he was elected a member of the House of Commons of the State of North Carolina. In 1864 he was re-elected. During the time of his service in this capacity he was appointed by Gov. Vance assistant surgeon-general of North Carolina.

In 1868 he became superintendent of the Raleigh Insane Asylum—a position held till 1889, and numerous medical and other learned societies were pleased to claim him as member. The vice-presidency of the Medico-Legal Society of New York was conferred upon him. The degree of LL. D. was given him by Rutherford College in 1877.

He wrote much and well on insanity and other lego-medical subjects; perhaps among the most important of his papers is "Mechanical Protection from the Violent Insane" and "True

and False Experts"—a controversy with William A. Hammond, surgeon-general, United States Army.

He married, January, 1866, Maria Anna Bryan, of Brunswick, North Carolina and had two sons and three daughters.

Dr. Grissom was a very heavy man, of fine physique, tall and well-proportioned, extremely strong and active. His complexion was dark; his hair, jet black; his eyes, steel-gray, clear, and penetrating. His manner was quick and animated, except when deciding important psychological questions. Then he became extremely slow, thoughtful, and methodical. He was a noted entertainer and converser, and made many friends. He was a man of varied interests, and widely read in history, philosophy, poetry, fiction, and general as well as medical science and an incessant student of the Bible.

He was one of those who "toil terribly," and mental breakdown was the inevitable result. The wonder was that this came to him so late. Not long before the close of his life he presented, at times, certain symptoms of paresis. In this enfeebled mental condition he began to betake himself to cocaine, morphine, and various other drugs. On a Sunday morning (July 27, 1902) when the church-bells, which he had always very much loved to hear, were ringing, he died as the result of his own act. At the time he was sitting on the front porch at the house of his namesake son, in Washington, District of Columbia. Before the unsuspecting relatives could intervene the doctor had drawn a pistol, placed it to his head a little above the right ear, and fired. He was hurried to the Casualty Hospital, but died inside of an hour.

T. H. S.

The Alumni Register (U. of Penna.), Oct., 1902.
New England Medical Monthly, vol. iii, 1883–4 (Eugene Grissom, M. D.).
Jour. Am. Med. Assn., Aug. 16, 1902, vol. xxxix.
The Raleigh Post, Raleigh, N. C., Aug. 7, 1902.

Gross, Samuel D. (1805–1884).

Many boys have an idea of what they want to be, but few are so fixedly determined as young Samuel Gross who, when a mere child, made up his mind to be a doctor. When this determination seemed well in shape he was reading one day about a man requiring operation who was sent by his physician into Philadelphia. Thereupon young Gross formed another resolution—to be so good a doctor that cases should not have to be sent to other and more prominent men. In 1884, both resolutions faithfully and efficiently kept, Samuel Gross went contentedly from this world. He came into it on July 8, 1805, the son of Philip and Juliana Brown Gross, living then at Easton, Pennsylvania. As a lad he went to the village schoolhouse, but when seventeen found his German—he being of that nationality—better than his English; his lack of the classics painfully apparent, so, leaving the country doctor under whom he had begun to study, he went to Wilkes-Barre Academy and the High School, Lawrenceville, New Jersey, and finally became a pupil under Dr. George McClellan, professor of surgery in Jefferson Medical College. Graduating thence in 1828 he entered on practice, employing all his leisure in close study and in translating French and German medical works. In 1830 this ambitious young writer wrote a volume on the "Anatomy, Physiology and Diseases of the Bones and Joints."

His income at this time from patients was only about $300 a year, yet this level-headed young doctor married a girl left a widow at twenty with one child. It was uphill work and the young people finally returned to Easton where a good practice was acquired. In 1833 he went to Cincinnati as demonstrator of anatomy in Ohio Medical College and after two years became professor of pathology and anatomy in Cincinnati Medical College. 1839 saw his celebrated "Elements of Path-

ology and Anatomy" which went through three editions, the first systematical treatise published this side of the Atlantic.

In 1840 Gross was called to the chair of surgery in Louisville University and his sixteen years (with the exception of one winter) passed in Louisville were the happiest of his life, though every year brought increasing work and increasing desire to write. It was with real regret in 1856 he set out to Philadelphia to become professor of surgery in the Jefferson Medical College, but his welcome comforted him and he conceived it an honor to be lecturing where twenty-eight years before he had been a student. "While at Louisville," he writes, "among my earliest contributions to the 'Western Journal of Medicine and Surgery' was an account of a case of axillary aneurysm for which I had tied the subclavian artery. My case was almost unique, only one similar having occurred previously. In 1852 sent to the 'Philadelphia Medical Examiner' a short account of the use of adhesive plaster in the treatment of fractures in which I proved I had been the first to describe the method in my work on 'Diseases of the Bones and Joints' (1830). The method had been claimed by a number of physicians. It was first practised by my old preceptor Dr. Joseph K. Swift of Easton." An amusing story is told by a contemporary who, when a student at Jefferson Medical College, heard Gross lecture on Lister's theory and germs, which he always called "cocci." He lectured for a week and at the conclusion said: "Gentlemen, I have given you this course because the trustees require it, but my opinion is 'tain't worth a damn."

In Philadelphia there was little leisure, yet he edited with Dr. Richardson the "North American Medico-Chirurgical Review;" prepared with Dr. Da Costa a third edition of the "Pathological Anatomy" and was hard at work on his "System of Surgery" which appeared in 1859. "I generally spent from five to eight hours a day on my manuscript, subject to tiresome interruption. I wrote with facility, as my knowledge of the subject from long study, practice and contemplation was extensive and in the main, accurate." In 1870 it had passed four editions, the last stereotyped for 6,000 copies. "What compensation" asks the author "did I obtain for this hard work, this excessive toil of my brain including original composition, the correction and improvement of new editions, and the proof-reading, in itself a horrible task, death to brain and eyes, extending over a period of not less than fifteen years? Eighty-five cents a copy all told and no extra dividends!" In 1863 the work was translated into Dutch.

In the winter of 1883 it was clearly seen that a too strenuous life was telling on his health. There was not only dyspepsia but evidence of a fatty heart. He hoped to take part in the meeting of the American Surgical Association in Washington May, 1884, but even while that same association was planning a letter of condolence on his illness the good doctor was passing away and the telegram arrived shortly after his death, a death which completed his desire of not outliving capability for work and usefulness.

His appointments, memberships and writings were many, and among them besides those already named is found: membership of the Vienna Imperial Medical Society; Royal Medical and Chirurgical Society, London; Medico-Chirurgical Society, Edinburgh; Medical Society of London; British Medical Association; one of the founders and early presidents of the Kentucky State Medical Society; co-founder and first president of the Philadelphia Pathological Society; president of the Philadelphia State Medical Society; honorary D. C. L., Oxford; LL. D., Cambridge.

His writings included also:

"An Experimental and Critical Inquiry into the Nature and Treatment

Samuel D. Gross.

(By permission of Dr. W. D. Gross.)

of Wounds of the Intestine," which reached a third edition, 1843.

"A Practical Treatise on Diseases, Inquiries and Malformations of the Urinary Bladder, the Prostate Gland and the Urethra," 1851.

"A Practical Treatise on Foreign Bodies in the Air Passages," and many other papers and translations.

Lives of Eminent American Physicians and Surgeons, 1861.
Am. J. M. S., Phila., 1884, n. s., lxxxviii (portrait). I. N. Hays.
Brit. M. Jour., Lon., 1884, vol. i.
J. Am. M. Ass., Chicago, 1884, vol. ii (J. N. Toner).
Med. Record, N. Y., 1884, vol. xxv.
N. York Med. Jour., 1884, vol. xxxix.
Tr. Coll., Phys., Phila., 1884, 3 s., vol. vii.
Hist. of Med. in Phila. Dr. F. P. Henry, Chicago, 1897.
Samuel D. Gross. An Autobiog. Phila., 1887 (port.).

Gross, Samuel Weissel (1837–1889).

It is very rare to find genius burning as brightly in son as in father; more frequently its rays are brightest in nephew or grandson, but great learning with regard to surgery and an acute power of diagnosis descended to Samuel Weissel, son of the famous Samuel D. Gross and born in Cincinnati February 4, 1837. As a lad he went to school at Shelby College, Kentucky; studied medicine at Louisville University and at Jefferson College, graduating March, 1857, then settled to practice in Philadelphia, becoming better known by his writings than his ordinary medical practice. In 1859 he reported in the November "American Medico-Chirurgical Review" "Aneurysm of the Right Femoral Artery cured by Digital Compression with Remarks on Twenty-two Other Cases so Treated." In the October number of the "American Journal of the Medical Sciences," 1867, he had a review of sixty pages on eleven French and German works on "Military Surgery" and gave statistics of over thirteen—afterwards enlarged by 20,933 amputations for gunshot injuries. His predilection for studying tumors and malignant growths may be seen in his paper on "Sarcoma of the Long Bones" ("American Journal of the Medical Sciences," 1879), his monograph on "Tumors of the Mammary Gland" and his "Tumors of the Breast," written for the "American System of Gynecology," edited by Mann. His writings were distinguished by their exactness of observation and induction, clearness of expression and practical application. His somewhat early death in 1889 prevented his adding valuable writings, and even on his desk when he died there was a manuscript on "Stone in Children," which he was preparing for a cyclopedia on "Diseases of Children."

He was a member of the Philadelphia College of Physicians, the Philadelphia Pathological Society, the State Medical Society of Pennsylvania; surgeon to the Howard Hospital, to the Philadelphia Hospital, the Jefferson Medical College Hospital; lecturer to the last college on genito-urinary organs and clinical surgeon to its hospital.

He married in December, 1876.

Hist. of Med. in Phila. F. P. Henry, Chicago, 1897.
Med. News., Phila., 1889, liv.
Med. Rec., N. York, 1889, xxxv.
J. Am. Med. Assoc., 1889, xii.
Tr. Am. Surg. Ass., Phila., 1889, vii (J. E. Mears).
A portrait in the Surg.-gen. Lib., Wash., D. C.

Gundry, Richard (1830–1891).

Richard Gundry was born at Hampstead, London, England, October 14, 1830. His father, the Rev. Jonathan Gundry, was a Baptist clergyman who early imbued his son with a love of learning and was able to send him to a private school in the neighborhood, where he gained his first knowledge of the classics. At fifteen he came with his parents to Simcoe, Canada, where after a brief period of study in a Latin school he was thrown largely upon his own resources. He obtained the means for pursuing his professional education by writing in the office of an attorney and began to study medicine under

Dr. Coverton, Toronto, graduating in 1851 at Harvard Medical School. At Harvard he had the advantage of instruction from and personal contact with such men as Oliver Wendell Holmes, Jacob Bigelow, John Ward and James B. Jackson, taking an excellent stand in his class and graduating with honor. He settled in Rochester, New York, but before he had been long engaged in practice he was able by a fortunate legacy to realize his desire to travel abroad. Returning in 1853, he settled in Rochester, New York, again, but during the year, in company with Dr. E. M. Moore, an eminent surgeon of Western New York, removed to Columbus, Ohio, where soon after he was appointed demonstrator of anatomy in Starling Medical College. In 1855 he received a provisional appointment as second assistant physician in the Central Insane Asylum at Columbus, Ohio. His fitness for the work was so apparent, the temporary appointment soon became a permanent one. From 1855 to 1857 he was one of the associate editors of the "Ohio Medical and Surgical Journal." In 1857 he was transferred to the Southern Ohio Asylum at Dayton as assistant physician, of which asylum he became medical superintendent in 1861. This position he filled with signal ability until 1872, when he was transferred to the Southeastern Asylum at Athens, Ohio, then in process of erection, to complete and prepare the buildings for occupation. Subsequently, on the completion of the asylum in 1874, he was appointed its first medical superintendent and retained the position until 1877, when he was transferred to Columbus, Ohio, to complete and make ready for occupation the very extensive buildings of that asylum.

After twenty-three years of most faithful, devoted and self-sacrificing service to the insane of Ohio in three of the asylums, he was forced to resign because his political affinities did not correspond with those of the newly elected governor. To a sensitive, high-minded physician like Dr. Gundry the blow was a severe one, and he felt the injustice of this treatment to the day of his death. He was immediately appointed medical superintendent of the Maryland Hospital for the Insane at Catonsville, and held the position until he died. In 1880 he received the appointment of professor of mental and nervous diseases in the College of Physicians and Surgeons of Baltimore, and in the following year, upon the sudden death of Prof. Howard, was appointed professor of materia medica in the same college, and there lectured with great acceptance during the remainder of his life. In January, 1890, he suffered severely from influenza, and for a time was very seriously ill; but he subsequently rallied and apparently gained his usual health. Although he lectured as usual, his duties cost him much effort. In March, 1891, the trustees of the Maryland Hospital perceiving his condition, voted to give him a long leave of absence, with the hope that his health would be restored. He went to Atlantic City and for a time seemed to improve. Subsequently, however, severe symptoms of Bright's disease developed, and it was evident that his days were numbered. In accordance with his earnest desire he was brought home where, four days later, he passed away, surrounded by his family and devoted friends.

Dr. Gundry's career as chief medical officer of an institution for the insane was most successful. The literature of alienism was familiar to him, and his speeches and writings upon all matters touching insanity showed an intimate knowledge of the work which others had done. He was also an expert in asylum construction, and the asylums at Dayton, Athens and Columbus were in turn built by him. He was an omnivorous reader, a ready writer, a clear and pleasant speaker, with rare gifts of expression and vast stores of knowledge at instant command. His mem-

ory for names, dates, facts, incidents, and of verbal quotations was phenomenal. He had great intellectual grasp, and in debate could marshal his forces most effectually. He wrote with equal facility, and the list of titles of his articles and addresses is a long one. It is to be regretted that no full record of them seems attainable. Among the number were "Observations upon Puerperal Insanity," 1860; "The Psychical Manifestations of Disease," 1881; "The Care of the Insane," 1881; "Separate Institutions for Certain Classes of the Insane," 1881; "The Relations of the Powers of the State to the Rights of the Individual in Matters Concerning Public Health," 1883; "Valedictory Address to the Graduating Class, College of Physicians and Surgeons," 1883; "Some Problems of Mental Action," 1888; "The Care of the Insane," 1890. He was a born letter writer, and his letters sparkled with wit, historical allusions and apt quotations.

Dr. Gundry was married in 1858 to Miss Martha M. Fitzharris of Dayton, Ohio, who, with eight children—four sons and four daughters—survived him. In private life he was seen at his best. His rich stores of knowledge were poured forth freely in conversation, and he was equally at home in all fields. Without neglecting his scientific work, he was a devoted student of history and of English literature. Pure in life, an enthusiast in his chosen work, an able physician, a profound scholar, an affectionate husband, a devoted father, a steadfast friend—such was his character. H. M. H.

Am. Jour. of Insanity, vol. xlix, 1892–93. H. M. Hurd.
Brit. M. J. Lond., 1891, vol. i.

Gunn, Moses (1822–1887).

His parents were natives of Massachusetts, of Scotch descent, and pioneers in Western New York. Moses was born in East Bloomfield, Ontario County, New York, on April 20, 1822 and after a general education in common schools and Bloomfield Academy, he was attacked by serious illness which kept him from study for two years and compelled him to take a sea voyage. On returning he began medical study with Dr. Edson Carr of Canandaigua, New York, and in October, 1844, entered Geneva Medical College and graduated M. D. in 1846. As the college closed, a body arrived too late for dissection and was given to young Gunn for teaching purposes. At once he placed it in a large trunk, transported it to Ann Arbor, collected a class, and within two weeks after graduating was demonstrating anatomy to his eager listeners. It is believed that this was the first course of lectures on anatomy delivered in Michigan. These courses were regularly repeated by Dr. Gunn in connection with his private practice, till the opening of the Medical Department of the University. In July, 1849, he held the chair of anatomy in the University of Michigan and in 1850 that of surgery was added. In 1854 anatomy was transferred to Dr. Corydon L. Ford. In 1853 Gunn settled in Detroit, visiting Ann Arbor twice weekly to deliver his lectures and hold clinics, adding to his work in 1857 coeditorship of the "Medical Independent," a Detroit monthly medical journal, merging in 1858 with the "Peninsular Medical Journal" under the name of the "Peninsular and Independent Medical Journal"—1858–1860—he continuing on the editorial staff. His main purpose in this was the removal of the medical department of the university to Detroit. In September, 1861, Moses Gunn joined the Army of the Potomac as surgeon of the fifth Michigan Infantry, remaining in the army till ill health compelled him to resign in July, 1862. In 1856 Geneva Medical College gave him her honorary A. M., and in 1877 Chicago University her LL. D. Among other memberships and appointments he was a member, during its second

epoch, of the Michigan State Medical Society, the Detroit Medical Society, the Illinois State Medical Society, Chicago Medical Society, the American Surgical Association, the American Association of Genito-urinary Surgeons; surgeon to the Cook County Hospital, St. Joseph's and St. Luke's Hospitals, and the Presbyterian Hospital—all in Chicago—and in 1867 he accepted the chair of surgery in Rush Medical College proving a potent factor in its larger evolution. During the winters of 1851–52–53 he made many dissections which proved that the untorn portion of the capsule in dislocation of the shoulder and hip caused the characteristic attitude assumed by the limbs and was the true obstacle to reduction. He also demonstrated that the return of the dislocated bone into its socket can easily be effected by putting the limb in such a position as will effectually approximate the two points of attachment of the untorn portion of the ligament ("Peninsular Journal of Medicine," Detroit, vol. i, p. 95). Gunn was over six feet, well proportioned, with erect military carriage, long side whiskers, heavy drooping mustache, curly hair that rested on his coat collar, and clear blue eyes. His lectures were prepared with the greatest care, and so had an effect far beyond the modern medical lecture. It is said that the great Chicago fire destroyed the manuscript of a work on surgery he had nearly completed. Gunn was a rare conversationalist and loved the art. Children ranked with his warmest friends; to these he added animals, flowers and all forms of natural beauty.

In 1848 he married Jane Augusta Terry, only daughter of Dr. J. M. Terry, and three of their four children survived him. He died November 4, 1887, after a long illness, from malignant disease of the stomach.

His papers included:

"Address in Surgery." ("Transactions American Medical Association," vol. xxx.)

"Pyemia." (Ibid., vol. xxix.)

"Shortening in Fractures." (Ibid., vol. xxix.)

"Syphilis." (Ibid., vol. xxv.)

"Philosophy of Certain Dislocations of the Hip and Shoulder." ("Peninsular Medical Journal, vol. i.)

"Luxation of the Hip and Shoulder-joint." ("Peninsular Medical Journal," vol. iii.)

"Unsuccessful Operation for Ununited Fracture." ("Medical Independent," vol. ii.)

"Urethral Stricture." ("Medical Independent," vol. iii.)

"Abscess Simulating Malignant Growth." ("Medical Independent," vol. iii.

"Resection of the Elbow-joint." ("Medical Independent," vol iii.)

"Selections from Surgical Notes." ("Peninsular and Independent Medical Journal," vol. ii.)

"Luxation of the Hip and Shoulder-joints and the Agents which Oppose Their Reduction" 1859).

(1871) "Valedictory Address, Rush Medical College." (Reprint, "Chicago Medical Journal and Examiner," 1871.)

"Treatment of Fractures of the Skull, Recent and Chronic, with Depression." ("American Practitioner," vol. xxvi.

"Fracture of the Floor of the Acetabulum." ("New York Medical Journal," vol. xli.)

"The Philosophy of Manipulation in the Reduction of Hip and Shoulder Dislocations." ("Transactions American Surgical Association," 1884, vol. ii.)

L. C.

History of Mich. University. Ann Arbor, 1906.
Life by Prof. DeNancrede, Michigan Alumnus, May, 1906.
Portrait by Ravenaugh in the Medical Faculty Room, Ann Arbor.
Memorial Sketches of Dr. Moses Gunn, by his wife, Chicago, 1889.

Guthrie, Samuel (1782–1848).

Samuel Guthrie, Jr., was the son of Samuel Guthrie, of Bloomfield, Massachusetts, whose home is still standing

very much as he left it. In this house, in the year 1782, the younger Samuel was born, and here he doubtless received his first inclination to medicine and love of science. Of his early life we know nothing, except that he studied medicine with his father, but began to practise for himself in Sherburne, New York, where his grandfather, James Guthrie resided. Shortly after (1804) he married Sybil Sexton, of Smyrna, New York, and later, his diary—still preserved—shows that he attended medical lectures in New York and at the University of Pennsylvania (Philadelphia, 1810–11).

When thirty-five (1817) he removed to Sacketts Harbor, New York, at that time a military post, established in 1812. Here Dr. Guthrie established a vinegar factory to supply the fort and began experimenting in the manufacture of percussion powder in which he was very successful. "S. Guthrie's Waterproof Percussion Priming" was for many years widely known and extensively used through the United States and Canada.

There are in the museum of Yale College, specimens of chlorate of potassium, glucose syrup and pure oil of turpentine manufactured by him in the little laboratory at the edge of the woods in Jewettsville, a little hamlet about a mile from the town of Sacketts' Harbor. Here it was that he first thought out or stumbled upon the method of manufacture of choloroform, now generally adopted the world round, viz.: the distillation of alcohol with chloride of lime. This fact he communicated to Professor Silliman, editor of "The American Journal of Arts and Science," under the caption of "New Mode of Preparing a Spirituous Solution of Chloric Ether, by Samuel Guthrie, of Sacketts' Harbor, New York." (Art. VI, vol. xxi, October, 1831.)

As early as May, 1831, and probably earlier, his attention was turned to the "medicinal value of chloric ether," as set forth in Silliman's Chemistry. Chloric ether of to-day is generally understood to mean an alcoholic solution of chloroform (1:19), and this is exactly what Dr. Guthrie unintentionally produced, although he was endeavoring to "find a more convenient method of making" a very different substance, the chloric ether of Silliman's Chemistry, viz.: "Dutch Liquid." This is proven by the note sent by Dr. Guthrie with his specimen of "chloric ether" which reads as follows: "My attention was called to the subject by the suggestion in volume ii, page 20, of "Yale College Elements of Chemistry," that the alcoholic solution of chloric ether is a grateful diffusive stimulant, and that, as it admits of any degree of dilution, it may be probably introduced into medicine."

It is evident from this quotation that Mr. Guthrie had no idea that he had discovered a new compound. His statement is that he has invented a new method of preparing the "chloric ether" described on page 20 of Silliman's Chemistry. There can be no doubt that this was Prof. Silliman's idea, as proved by his notes on the subject, which may be found on page 405, second volume, of volume xxi, "American Journal of Arts and Science," wherein Prof. Silliman expressly says: "Mr. Guthrie's method of preparing it is ingenious, economical and original, and the etherized spirit which he has forwarded as a sample is exactly analogous in sensible properties to the solution made in the manner described in the above work."

The exact date upon which this article was sent to Prof. Silliman unfortunately cannot be definitely determined. The magazine in which it was published bears date of October, 1831, and the notice to contributors desires that "comunications be in hand six weeks, or when long, with drawings, two months before the publication day." If this rule was observed in the case of Dr. Guthrie, his paper must have reached Prof.

Silliman at least as early as August, 1831, and the discovery was several months previous as Guthrie states, in his communication, that "during the last six months a greater number of persons have drunk of the solution of chloric ether, not only freely, but frequently, to the point of intoxication."

This effectively and conclusively disposes of the claims of Liebig and Soubeiran to priority of discovery of chloroform, since Liebig's discovery, viz.: the production of chloroform by the action of potassium hydroxide on chloral, was first published in November, 1831, a month later than the date of Guthrie's paper ("Liebig's Annalen," vol. clxii, p. 161).

Soubeiran, whose method was identical with that of Guthrie and apparently closely contemporaneous, claims to have published his paper on "Ether Bichlorique" in October, 1831. Fortunately for Dr. Guthrie, the desire of Liebig to establish his own claim led to his careful investigation of the date of publication of the October number of the "Annals de Chemie et de Physique" for 1831. That it could not have been printed in October, 1831, is definitely proved by the fact that the meterological report for the entire month of October is printed in the October number, which Liebig discovered did not appear until January, 1832.

From a paper by M. P. Hatfield in the "Chicago Clinic."
Mem. of Dr. Samuel Guthrie and the history of the discovery of chloroform. Chicago, 1887.
Trials of a Puhlic Benefactor. Dr. Nathan P. Rice, N. York, 1859.
Littells "Living Age," March 18, 1848.

H

Haines, Job (1791–1860).

He was born in New Jersey, October 28, 1791, and had his degree from Princeton College; that of medicine from the University of Pennsylvania, in the class of 1815.

Seeking a career in the far West, he finally made choice of Dayton, Ohio, for a permanent home (January, 1817), where his culture and strong personality gained him early recognition. He was deeply religious, and while he never offensively obtruded his belief, it was no unusual thing for him to close a professional visit with a Bible reading or short prayer. In a day when the sturdy pioneers considered whiskey one of the staples of life in this ague-stricken region, Dr. Haines was the head and front of all anti-liquor leagues, and never lost an opportunity to preach the gospel of temperance.

The Dayton Public Library contains his diary for the years 1816 to 1820. It is valuable as an index to the medical practice of his time, but the daily routine of bleeding, catharsis, blistering and sweating therein recorded is appalling to a twentieth century practitioner. In a case of meningitis, 120 grains of calomel were given in the twenty-four hours.

On the twenty-fifth day of the same illness the entry reads: "She continues to take from twenty to forty grains of calomel per day, which is neither sufficient to keep the bowels open or to produce ptyalism," and yet, in addition, "calomel was frequently rubbed on the gums and mercurial ointment on the skin." These clinical records show that in those days the lancet was seldom sheathed, and recall the trenchant sarcasm of Boileau, slightly paraphrased:

"The one died empty of blood, the other full of calomel." Dr. Haines held various municipal and county offices, and was mayor of the town in 1833, known as the cholera year, when his official acts did much to restore confidence to the panic stricken people.

He died in July, 1860.

W. J. C.

Hale, Enoch (1790–1848).

Enoch Hale was born in West Hampton, Massachusetts, in 1790. In early life his health was poor, he having a cough with hemoptysis. He went to New Haven, Connecticut, where he attended Prof. Silliman's lectures and devoted himself to the study of chemistry, later studying medicine with Dr. Hooker of his native town and then removing to Boston to continue these studies with Dr. Jacob Bigelow and John Warren. He graduated from the Harvard Medical School in 1813, with an inaugural dissertation on "Experiments on the Production of Animal Heat by Respiration." It was published and called forth a rejoinder from Sir Benjamin Brodie, in the columns of the "London Medical and Physical Journal."

Hale settled in Gardiner, Maine, where he had a friend, Benjamin Vaughan, a learned English gentleman and recent settler in Gardiner, having a large acquaintance among scientific men abroad, and the possessor of a large library. Hale studied meterological problems and wrote the "History and Description of an Epidemic Fever, commonly called Spotted Fever, which prevailed at Gardiner, Maine, in the spring of 1814."

He removed to Boston and was appointed district physician to the Boston Dispensary in 1819. In this year he published a dissertation which re-

ceived the Boylston prize in Harvard University, and another in 1821, also gaining a Boylston prize. He was one of the early visiting physicians to the Massachusetts General Hospital and in 1839 published a work entitled, "Observations on the Typhoid Fever of New England," the oration at the annual meeting of the Massachusetts Medical Society.

In the latter years of his life Hale suffered with Bright's disease and worked handicapped with great pain. He was honest, frank and somewhat intolerant of unfairness in others.

He died November 12, 1848.

W. L. B.

Bos. Med. and Surg. Jour., vol. xxxix.
Communications Mass. Med. Soc., vol. viii.

Hall-Brown, Lucy (1843–1907).

A general practitioner and keen on education, Lucy Hall-Brown was born in Holland, Vermont in November, 1843, a descendant of Gov. Thomas Dudley of Massachusetts.

She passed her early life in the Northwest, and in 1876 entered the University of Michigan for a medical course. Upon graduation in 1878 she served for six months as assistant physician under Dr. Eliza M. Mosher at the Massachusetts Reformatory Prison for Women. She then pursued post-graduate work in New York and London, being the first woman admitted to clinics in St. Thomas's Hospital, London. Later she became interne at the Royal Lying-in and Gynecological Hospital of Prof. Winckel in Dresden. Upon her arrival in Dresden, she knew scarcely any German, but after a month's study she had acquired sufficient knowledge to warrant Dr. Winckel in admitting her to his hospital. On the completion of study and service abroad, in 1879 and while still in Dresden she was appointed by Gov. Talbot on Dr. Mosher's recommendation, resident-physician to the Massachusetts Reformatory and returned at once to take up the work; later she received but declined the appointment as superintendent. In 1883 Dr. Eliza M. Mosher, being appointed professor of physiology, hygiene and resident physician to Vassar College, asked to have Dr. Hall appointed to share the work, the two at this time starting a partnership, beginning their private work in Brooklyn and serving alternately at college. At the end of three years she gave her entire time to practice in Brooklyn and continued so working until three years before her death.

Dr. Hall was a fellow of the New York Academy of Medicine, member of Kings County Medical Society, member of Brooklyn Pathological Society. Her standing in medical jurisprudence was recognized by the courts of justice in New York and she was often as an expert requested by the Supreme Court to take charge of examinations instituted by that tribunal.

In 1891 Lucy Hall married R. G. Brown, electrical engineer. In 1904, her health impaired by an increasing heart weakness, they removed to Los Angeles and afterwards made a visit to Japan, where characteristically she visited hospitals, schools, missions, prisons and police courts. So highly was her interest valued that on leaving she was urged by the officials of medical and public education in that empire to return and lecture on physiology and hygiene. The invitation was a great compliment, and she returned for several months, lecturing in leading institutions in the great cities.

She died in Los Angeles August 1, 1907 of valvular disease of the heart. She kept always in touch with scientific progress and possessed the courage to readjust opinions, and into her life came honors and responsibilities well earned and vindicated by the use she made of them to humanity.

Some of her most important articles are:

"Unsanitary Condition of Country Houses." ("Journal of Social Science," December, 1888.)

"Inebriety in Women." ("Quarterly Journal for Inebriety," October, 1883.)

"Prison Experiences." ("Medico-Legal Journal," March, 1888.)

"Physical Training for Girls." ("Popular Science Monthly," February, 1885.

"Wherewithal Shall We be Clothed." ("American Woman's Journal," May, 1895.)

A. B. W.

Obituary. Brooklyn Daily Eagle, Aug. 2, 1907.
Report of Memorial Service Field in Brooklyn, Feb. 1, 1908. (Brooklyn Daily Eagle, Feb. 3, 1908.)
Private information from her partner, Dr. Eliza M. Mosher, from relatives and from members of the American Society of Social Science, (New York Med. Jour., vol. lxxii.)

Hall, J. Randolph (1844–1900).

Randolph N. Hall, the first to operate on the vermiform appendix in the United States, was born in Eagleville, Ashtubula County, Ohio, on April 2, 1844, graduated at Rush College in 1882, and died of apoplexy on December 30, 1900.

He took his M. D. at the medical college of Leokuk, Iowa, and after practising in Iowa and Kansas came to Chicago where he practised for twenty years. During the Civil War he acted first as drummer boy in the battle of Shiloh, but was captured and spent eight months in prison. When exchanged he fought through the Mississippi campaign and afterwards in the Veteran Corps of the Army of the Tennessee and underwent a second imprisonment. In Chicago he was president of the Pathological Society; lecturer in the College of Physicians and Surgeons on anatomy and surgery and professor and president of the Illinois Medical College.

He performed the first operation on the appendix in the United States (the third on record), in May, 1886, and published it the following month in the "New York Medical Journal." The patient, a boy of seventeen, had had a reducible inguinal hernia since childhood.

This claim, if the qualifications are borne in mind, seems to be fully justified, for Krönlein's case, it will be remembered, did not recover, and that of Symonds was not performed for perforative peritonitis, nor did he resect the appendix. Hall's operation was undertaken for the relief of an incarcerated strangulated hernia, and the lesion of the appendix was discovered incidentally, so that while the first to succeed in extirpating a perforated appendix, it yet remains for us to discover who executed with intention the first successful operation for disease in that organ.

H. A. K.

Chicago Med. Recorder, 1901, xx.

Hall, Lyman (1731–1791).

This Georgian doctor has a place in medical history as a signer of the Declaration of Independence rather than for his professional work. He graduated young and established himself in Sunbury, Medway, Georgia, to which place he was accompanied by forty families from the New England States, but apparently the forty families were very healthy or imported another medical adviser, for Hall plunged into politics. When the British took Georgia his property was confiscated and he himself had to go north. But, returning in 1782, he was next year made governor of the state, settling in Burke County (a county in Georgia bears his name) and dying there when about sixty years old. An old biographer, while uncertain as to facts, seems sure on the point that he was "six feet high, with easy and polite manners and deportment affable and dignified."

D. W.

Biog. of the Signers to the Declaration of Independence, Phila., 1849.

Hall, Moses Smith (1824–1905).

He was born at Hawley Map Virginia, March 1, 1824 and died at Parkersburg, April 9, 1905.

Dr. Hall came to Ritchie County, West Virginia in 1841 and read medicine with Dr. (Gen.) Thomas M.

Harris, of Harrisville, and attended the Louisville Medical University. He held an arduous country practice in Harrisville up to 1861, and in 1861 recruited a company for service in the Union Service, serving as its captain until May, 1862, when he was promoted to be lieutenant-colonel of the tenth Regiment of West Virginia Volunteers; was twice wounded, and on his discharge in April, 1865, resumed practice at Harrisville, where he became the leading practitioner, also serving in the Legislature of 1874, and while there introducing a bill to regulate the practice of medicine and surgery in West Virginia. It was defeated and such action delayed until 1881. He was a member of the West Virginia State Medical Society, and its president in 1874. In 1850 he married Ellen F. Sampson of Ohio. Two daughters survived.

W. H. S.

Halliburton, John (1740–1808).

John Halliburton, son of a Presbyterian clergyman of Haddington, Scotland, was born about 1740 and died in Halifax, Nova Scotia, in 1808.

In 1760, or a little later, he was surgeon on board a British frigate, commanded by Lord Colville. On her arrival at Newport, Rhode Island, he became acquainted with the Hon. Jahleel Brenton and deeply attached to one of his daughters. Having completed a required term of service on the ship, he returned to Newport and married Miss Susanna Brenton in the year 1767, and settled down to practise in Newport. Here he seems to have been very successful and accumulated a good deal of property. But little good did it bring him, for, as he adhered to the side of the Motherland in the dispute with the Colonies, he was compelled during the Revolutionary War to abandon his practice and property and make his escape from Rhode Island. On the pretext of visiting patients on the mainland, Dr. Halliburton secretly left Newport in a barge and landed safely at Long Island, where the British Army was stationed. On his arrival at headquarters he presented himself to Sir Henry Clinton who (as some recognition of his services) offered him the headship of the Naval Medical Department at Halifax. Having accepted this he soon afterwards sailed from New York and reached Halifax in 1782, his wife and family coming a year later. In addition to his official duties, Dr. Halliburton entered into general practice and became a leader in his profession. In 1787 he was appointed a member of His Majesty's Council. Sir Brenton Halliburton, for a long time Chief Justice of Nova Scotia, was his son. The inscription on his tombstone in St. Paul's cemetery happily summarizes his characteristics:

"If unshaken loyalty to his king, steady attachment to his friends, active benevolence to the destitute, and humble confidence in God can perpetuate his memory, he will not be forgotten."

D. A. C.

Hamilton, Alexander (1712–1756).

Dr. Alexander Hamilton was a native of Scotland, and a graduate of medicine. He was a cousin of Dr. R. Hamilton, professor of anatomy and botany in the University of Glasgow, where it is probable he received his medical education. He "learnt pharmacy" in the "shop" of David Knox, an Edinburgh surgeon, and visited London. An elder brother, also a physician, had preceded him to Annapolis, where he was practising medicine in 1727. Hamilton was the preceptor of Dr. Thomas Bond, of Calvert County, Maryland, who settled in Philadelphia and founded the Pennsylvania Hospital in 1752. In 1745, with Jonas Green, editor of the "Maryland Gazette," he organized at Annapolis the Tuesday Club, of which he was secretary and orator, and "life and soul," during its ten years of existence. The manuscript minutes of the proceedings of this club are in possession of the Maryland Histor-

ical Society, constituting three volumes, illustrated with caricatures by the pen of Dr. Hamilton himself. He is truly depicted therein as "Loquacious Scribble, Esq'r." On May 29, 1747, he married Margaret Dulany, daughter of the Hon. Daniel Dulany, of Annapolis, "a well accomplished and agreeable young lady with a handsome fortune."

There lately appeared (1907) a remarkable diary of a journey of 1,624 miles made in 1774 by Hamilton to Portsmouth, New Hampshire, and back to Annapolis. It is called the "Itinerarium."

Hamilton bore letters of introduction to several eminent physicians, but he found the profession in a very low state, many of the doctors whom he met, especially in New York, being mere "drunken roysterers." He attended several meetings of a "Physical" (Medical) "Club," at Boston, which was presided over by the celebrated Dr. William Douglass, a Scotchman of learning, but a "cynical mortal," so full of himself that he could see no merit in anyone else. At these meetings they "drank punch, smoked tobacco and talked of sundry physical matters." One subject of discussion with his medical colleagues was the microscope, in which he shows himself an adept, having "seen Leewenhoek," the great Dutch microscopist, "and some of the best hands upon that subject."

His literary tastes are shown by his buying and reading a "Homer" in Boston, and by his allusions to current and classical literature. He also takes the "Physical News," a medical journal published at Edinburgh.

Regarding the history of the manuscript, it was given by the doctor shortly after his return to an Italian gentleman who visited him at Annapolis, and was carried by the latter to Italy. In course of time it was sold and thus got into the book stores of London, where it was found and purchased by Mr. William K. Bixby, of St. Louis. Recognizing its historical value, this gentleman printed a small edition at his own expense for private distribution. Hamilton died on May 11, 1756.

From "Old Maryland," 1908, iv.

Hamilton, Frank Hastings (1813–1886).

He was the second son of Calvin and Lucinda Hamilton, born September 10, 1813, in the hamlet of Wilmington, Windham County, Vermont. He came from ordinary people, his father being a farmer and owing a line of stages which ran between Bennington and Brattleboro, across the mountains.

In 1816 his parents moved to Schenectady, New York, where he studied at the Lancasterian School and "The Academy;" in July, 1827, he entered the sophomore class of Union College, from which institution he graduated in the Arts. He then studied under Dr. John G. Morgan, of Auburn. During this period he kept bright his anatomical knowledge by painting in oil nearly every part of the human form. A full course of lectures at the Fairfield College of Physicians and Surgeons, in 1831, a license from the Cayuga Country Medical Censors, and a formal graduation in medicine from the University of Pennsylvania in 1835, gave him the needed authority for his life work. "About this time," says the late Dr. Samuel W. Francis, "young Hamilton was appointed demonstrator of anatomy, made all the dissections, lectured to attentive students, and subsequently, when Dr. Morgan was called to the professor's chair at Geneva Medical College, in accordance with the wishes of those around him he delivered a full course of lectures on anatomy and surgery. He continued to lecture until the year 1838. On January 23, 1839, he assumed the chair of surgery in the Western College of Physicians and Surgeons, and then again, August 10, 1840, took a corresponding position in the Geneva Medical College. Here he remained for nearly four years, when, his ambition once more getting the better of him, he gave up his chair and went

to Buffalo to resume practice as a surgeon. In 1843 and 1844 a visit to Great Britain and the Continent, extending over a period of seven months, supplied materials for a diary, which soon after appeared in the "Buffalo Medical Journal."

In Buffalo Hamilton met Dr. Austin Flint, Sr., and the two became great friends. In 1846 they, associated with Dr. James Platt White, also of Buffalo, added to the University of Buffalo a medical department, which rapidly became one of the features of the institution. Dr. Hamilton became its professor of surgery. For twelve years, from 1846 to November 28, 1858, he retained his position in the University, and then moved to Brooklyn. Hardly had he got fairly settled in his new home, and become the first professor of surgery that the Long Island Hospital ever had, when he entered the army as a volunteer regimental surgeon, being assigned to the thirty-first New York Infantry. On February 9, 1863, he was appointed by the president and senate, medical inspector of the United States Army, with the rank of lieutenant-colonel. After two years and four months of active service he resigned his commission and returned to New York on September 10, 1863.

In April, 1861, he became professor of military surgery, fractures and dioslocations, and professor of clinical surgery in the Bellevue Hospital Medical College. He remained in these positions until May, 1868, when, upon the resignation of the late Dr. James R. Wood, he was made professor of the principles and practice of surgery with operations, and continued in this capacity until March 15, 1875, when he resigned.

His writings include:

A prize essay on the "Fevers of the Western Country." ("Drake's Medical Journal," Cincinnati, Ohio, 1835.)

Article on "Congenital Encephalocele." ("Boston Medical and Surgical Journal," vol. xxiii, 1840.)

"New Views on Provisional Callus," 1853.

"New Treatment for Non-union of Fractured Humeri," 1854.

Report to "American Medical Journal" on "Deformities after Fractures." Transactions, 1855-6-7.

"Life and Character of Dr. T. Romeyn Beck." Published by order of the Senate of New York State, 1856.

"Compound Fractures of Long Bones," 1857.

"Treatise on Fractures and Dislocations," 1860. Second edition, 1862.

"Treatise on Military Surgery and Hygiene." First edition, 1862. Second edition, 1865.

Many articles of his also appeared, at various times, in the "Buffalo Medical and Surgical Journal."

"A Treatise on the Principles and Practice of Surgery" was first published in 1872, a third edition of which was issued a few weeks before his death. "Surgical Memoirs of the War of the Rebellion," edited by him, was published in 1871 under the direction of the United States Sanitary Commission.

Skin-grafting was probably first suggested by Hamilton, then of Buffalo, in 1847. In 1854 he reported a case in which he had successfully grafted a large raw surface caused by a heavy stone falling on a man's leg.

As an inventor and contributor to the armamentum chirurgicum, he dispensed with the useless and clumsy for the practical and elegant. He rendered more precise the methods of amputation through the joints by a resort to so-called "keys" and "guides."

In 1855 he was chosen president of the New York State Medical Society; in 1857 was president of the Erie County Medical Society; in 1866 of the New York Pathological Society; in 1875 and 1876 of the New York Medico-Legal Society; in 1878 of the American Academy of Medicine; in 1878 and 1885 of the New York Society of Medical Jurisprudence; from 1880 to 1884 he was vice-president of the New York Academy of Medicine. In 1868 he was made Honorary Associate Member of the College of Physicians and

Surgeons, and in 1869 the trustees of Union College conferred upon him the degree of doctor of laws.

His conduct as consultant in the case of the lamented Pres. Garfield, at whose bedside he was a conspicuous figure, and his candor in joining in the publication of the true causes of the embarrassments in treatment, as revealed by the necropsy, have passed into the heroic annals of surgery.

Dr. Hamilton was twice married. His first wife was Mrs. Mary Virginia McMurran, a daughter of Isaac Van Arsdale, a planter, living near Shepherdstown, Virginia. She died on April 8, 1838, leaving one son, Theodore B. He married a second time on September 1, 1840, his bride being Mary Gertrude Hart, daughter of Judge Orris Hart, of Oswego, New York. By his second wife, who died in July, 1885, Dr. Hamilton had three children. His valuable library was purchased by Dr. J. B. Hamilton, of the United States Marine Hospital service, and his unique collection of surgical specimens was bequeathed to the Army Medical Museum in Washington, District of Columbia. He died in full possession of his faculties at his home in New York, of fibrous phthisis, on August 11, 1886, after protracted suffering.

Abridged from a biog. in Med. and Surg. Rep., Phila., 1864–5, vol. xii.

Hamilton, John B. (1847–1898).

Sometime editor of the "Journal of the American Medical Association," a successful surgeon and writer and a fine worker for reform in the United States Marine, John B. Hamilton, was born in Jersey County, Illinois on December 1, 1847 and graduated from Rush Medical College in 1869, marrying, in 1871, Mary L. Frost and having two children, Ralph Alexander and Blanche.

He entered the Marine Hospital service by competitive examinations, where, rising rapidly to the rank of supervising surgeon-general, he reorganized the whole department and introduced the physical examination of seamen and managed campaigns against yellow fever. This surgical skill won for him a position in Rush Medical College, and while in Washington he was surgeon to Providence Hospital and professor to Georgetown University, medical department, for eight years, which university gave him her LL. D. On returning to Chicago he was made professor of the principles of surgery and clinical surgery to Rush Medical College and the same in the Chicago Polyclinic. The great feature of his surgical work was accurate diagnosis and his clinic was of inestimable value to students. Among his best operations was that for hernia, he being one of the first to introduce modern methods into Chicago and improve on them.

His writings are chiefly scattered through medical journals, but he edited "Moulin's Surgery," and the "Journal of the American Medical Association" was never more successful than during his four years' editorship. A fairly full list of his writings is in the Surgeon's-general Catalogue, Washington, District of Columbia.

He died when fifty-one, of typhoid fever after an arduous life of unselfish devotion to the public good.

D. W.

Distinguished Phys. and Surgs. of Chicago. F. M. Sperry, Chicago, 1904.
J. Am. Med. Ass., Chicago, 1898, vol. xxxi.
Med. Rec., N. Y., 1898, vol. liv.
N. Y. Med. Jour., 1898, lxvii.
A portrait in the Surg.-gen. Collection, Wash., D. C.

Hamlin, Augustus Choate (1829–1905).

Augustus Choate Hamlin, surgeon in the United States Army, was educated at Bowdoin College, from which he graduated in 1851, afterwards studying medicine at Harvard and obtaining his M. D. in 1851 and settling in Bangor, Maine, as a general practitioner. At the outbreak of Civil War he was appointed surgeon of a hospital for volunteers connected with the army of northern Virginia and later was appointed medical director of the eleventh corps. At the close of the war

he returned to his practice in Bangor. He is the author of several medical treatises. In 1896 he published a book on the battle of Chancellorsville, in which he defined the conduct of the eleventh corps on that disastrous day against the accusations of some partial and superficial writers. Hamlin died in Bangor, November 18, 1905.

His writings include:

"Martyria, or Andersonville Prison," 1866.

"Transfusion, Tr. Maine M. Ass.," 1874; Portland, 1876. A. A.

Toner, Collect. Med. Biog., Congress. Libr., Washington.

Hammer, Adam (1818–1878).

Adam Hammer was born in the Grand Duchy of Baden, Germany, December 27, 1818, and received a thorough preliminary and medical education in the leading German universities. I believe that he graduated at Tuebingen. He was broadly posted and an omnivorous reader, and he delighted in the philosophy of Fichte, Hegel and Kant.

He was ahead of his time, and a rare diagnostician. There is a monogram written by Dr. Adam Hammer detailing his diagnosis upon two living subjects of the occlusion of the coronary arteries of the heart, afterwards verified and confirmed by post-mortem evidences. Nothing can take away from him the fact that he was an efficient and daring surgeon, he did what had been rarely done before: in two cases he had removed the entire upper extremity, including the scapula. Aside from these he had performed successfully many plastic operations. A splendid pathologist, an untiring histologist and microscopist.

Dr. Hammer came to St. Louis in 1848; he had so deplored the outrages of his mother country upon her people that he became a revolutionist, and he was not the first to find out that those who give the first shock to a state are naturally the first to be overwhelmed in its revolution. Hence he had to leave Germany, and came to St. Louis. He organized the Humboldt Medical College, and through untiring and earnest endeavor erected a college building, just opposite to the City Hospital on the corner of Soulard and Closey street. While he was absent in Europe the college was broken up. He became a professor in Missouri Medical College and afterwards, broken down in health and ambition, he left St. Louis and returned to Europe, and died there August 4, 1878, about sixty years of age.

Dr. Hammer was clean and square in his dealings, free from any mixture of falsehood: he lacked discretion, but he had the hardy valor of an honorable and courageous man.

His ceaseless industry in acquiring the progressive elements of pathology, surgery and microscopy made him seemingly unceasingly contradictory to those quoting old and antiquated authorities upon these subjects. Hence he was continually contradicting, and thus seemed to be seeking combat, while in reality he was aiming at the laudable purposes of substantiating progress and truth.

W. B. O.

Abridged from a paper by Dr. W. B. Outten, in the "Medical Fortnightly," 1909.
St. Louis Clin. Rec., 1878, vol. v.
St. Louis Med. and Surg. Jour., 1878, vol. xxxv.

Hammond, William Alexander (1828–1900).

A surgeon-general of the United States Army and an able neurologist, he was the son of Dr. John W. Hammond of Anne Arundel County, Maryland, and born at Annapolis, August 28, 1828, receiving his M. D. from the University of the City of New York in 1848 and after some hospital experience entering the United States Army as assistant surgeon in 1849. He served at various frontier stations in New Mexico, Kansas, Florida and at West Point, participating in numerous Indian campaigns and occupying his leisure time chiefly with physiological and botanical investigations. In 1857 he was awarded the American Medical Association prize for an exhaustive essay on "The Nutritive Value and Physio-

logical Effects of Albumen, Starch and Gum when Singly and Exclusively Used as Foods."

In 1860 he resigned military service to accept the chair of anatomy and physiology in Maryland University and remained in active conduct of his department and in professional practice in Baltimore until the outbreak of the Civil War, when he resigned, appeared before the Army Medical Examining Board, and reentered the service as assistant surgeon. On account of his previous experience he was at once assigned to administrative work in the organization of hospitals and sanitary stations, in which he was so successful as to attract the attention of the Sanitary Commission, who, being dissatisfied with the administration of the medical department of the army, successfully urged his appointment as surgeon-general. The work of the surgeon-general's office at once assumed an aspect of efficiency and force, but the promotion of Hammond over the heads of the assistant surgeon-general and the rest of the staff did not fail to create much antagonism upon the part of his confrères. More particularly his masterful and forceful administration so clashed with the autocratic spirit of Edmund M. Stanton, secretary of war, that the result was a court-martial by which Hammond was dismissed from the service, a seutence shown later to be unjust and reversed by action of Congress who, in 1878, provided for the appointment of Gen. Hammond with the full rank of brigadier-general previously held by him, upon the retired list.

During the period of his service as surgeon-general from April 28, 1862 to August 18, 1864, he accomplished many reforms in army medical administration. He inaugurated the "Medical and Surgical History of the War of the Rebellion," established the Army Medical Museum, introduced the pavilion system of hospital construction extensively throughout the service, and provided suitable habitation for the sick and wounded. The liberal issue of medical books and journals to the medical officers which has done so much towards maintaining the high standard of the department was due to him. Many other forms which later became realities were also recommended by him, such as the formation of a permanent hospital corps, the establishment of an army medical school, the location of a permanent general hospital at Washington and the institution of a military medical laboratory. In addition he urged the autonomy of the medical department in construction of buildings and transportation of supplies, a measure the full materialization of which is still believed to be essential to the service of the sick in war.

His court-martial left him in great pecuniary embarrassment and it was only through the courtesy of a professional friend, who raised a purse for his benefit, that he was enabled, pending his ultimate vindication, to go to New York where he became a noted alienist and lectured upon that subject in the College of Physicians and Surgeons, later in Bellevue Hospital Medical College, the University of the City of New York and the New Post-Graduate Medical School; of the latter he was one of the founders. He made many original investigations and utilized extensive clinical opportunities for the recognition and development of hitherto unrecorded conditions; but perhaps his description of the disease called by him, and now universally known as athetosis, is best known.

He wielded a most facile pen and even when carrying the enormous burden of directing the medical department in the greatest war in history, found time to produce a comprehensive work on "Military Hygiene." His medical books consist chiefly of works devoted to nervous affections and of these his treatises on "Diseases of the Nervous System" and "Insanity in its Medical Relations" are the best known. But he is not unknown as a playwriter, and his "Son of Perdition" is thought by some to be the best novel of the Christ ever produced.

From 1867 to 1872 he edited "The

Quarterly Journal of Physiological Medicine and Medical Jurisprudence;" from 1867 to 1869 he was editor of "The New York Medical Journal," and later, editor and promotor of "The Journal of Nervous and Mental Diseases," 1867 to 1883.

In 1878, having acquired an ample fortune and having secured his vindication from, and restoration to, the army, he returned to Washington where he lived until his death from cardiac failure. During this period he took great interest in the subject of animal extracts and was largely instrumental in their introduction into professional work.

In addition to the writings named should be mentioned his "Physiological Memoirs," Philadelphia, 1863; "Military Medical and Surgical Essays for the United States Sanitary Commission," Philadelphia, 1864; "A Treatise on Insanity in its Legal Relations," New York, 1883 and a yet fuller list can be seen in the Surgeon-general's Catalogue, Washington, District of Columbia.

J. E. P.

Encyclopedia of Contemporary Biography of New York, vol. iii., 1883 (port.).
Symposium by various authors, with complete bibliography and portrait, the Postgraduate, New York, vol. xv.
Pilcher, James Evelyn, Journal of the Association of Military Surgeons of the United States, vol. xv. 1904 (port.), and The Surgeon-generals of the United States Army, Carlisle, Pa., 1905 (Port).
J. Am. M. Ass., Chicago, 1900, vol. xxxiv.
Med. News, N. Y., 1900, vol. lxvi.
Med. Rec., N. Y., 1900, vol. xv.
Cordell's Hist. of the Univ. of Maryland, 1901 (port).

Hand, Daniel W. (1834–1889).

Of English extraction, he was born August 8, 1834, at Cape May Court House, New Jersey and educated at Lenmont Academy, Norristown, Pennsylvania, the University of Lewisburgh, and studied medicine under Dr. John Wiley, at Cape May Court House, graduating at Pennsylvania University in 1856, one year later locating in St. Paul.

In 1861 the fortunes of war had deprived the First Minnesota of its surgeons; Dr. Hand volunteered promptly as the assistant, and speedily won the confidence and esteem of his associates. He was promoted to be surgeon United States Volunteers the same year. After notable service with the Army of the Potomac in the Peninsular campaign, he filled several appointments as medical director in the department of Virginia in 1863, and in that of North Carolina in 1864–65.

It was while medical director of New Berne, North Carolina, that his ability for organization and administration was put to a crucial test. Yellow fever appeared early in September, 1864. As soon as it was recognized Surg. Hand urged and insisted upon the depopulation of the place, and at the same time instituted a thorough sanitary overhauling of what proved to be a hot-bed of pestilence. Among the white population there were, in less than two months, 705 cases and 288 deaths. Out of the medical staff numbering sixteen, eight died of the fever. Just before the close of the epidemic Sur. Hand had a slight attack but easily recovered. He exhibited a masterly efficiency in great emergency, and a manly courage in the presence of danger and difficulty which won for him as for his fellows there the highest praise. He received official reward by being brevetted lieutenant-colonel of the United States volunteers.

He was wounded at Fair Oaks in 1862, and in 1863 was captured in a skirmish and sent to Libby Prison. After his release he was on active duty till a few months after the close of the war, and was honorably discharged in December, 1865, when he returned to St. Paul and again began the work he left in 1861.

Though he did no systematic literary work, there was ample evidence that he could have done so in the occasional contributions which he made to the transactions of his state and county medical societies and to medical journals.

Dr. Hand died June 1, 1889. B. F.

Hanks, Horace Tracy (1837–1900).

Horace Tracy. Hanks was born at East Randolph, Vermont, on June 27, 1837.

As a boy he went to the Orange County, the West Randolph, Vermont, and the Royalston, Massachusetts, academies. He taught in the last-named academy and also in the public schools, like many young New England boys who have been compelled to rely upon their own efforts in procuring a professional education, and in 1859 he was studying medicine under Prof. Walter Carpenter, of Burlington, Vermont, and attending lectures at the University of Vermont. In 1861 he graduated from the Albany Medical College. One year was spent in the Albany City Hospital, and early in 1862 he received his commission as assistant surgeon in the thirtieth regiment, New York Volunteers. After serving in the field for one year and participating in several of the principal battles fought by the Army of the Potomac—notably those of Fredericksburg, under Gen. Burnside, and Chancellorsville, under Gen. Hooker—he was ordered to Washington, and for a considerable time was in charge of the Armory Square Hospital.

Returning to Royalston, Massachusetts, after being mustered out he practised in that place until 1868, when he went to New York to attend lectures at the College of Physicians and Surgeons. He decided to settle in New York, and in 1872 was appointed one of the attending gynecologists to the Demilt Dispensary.

Dr. Hanks' opportunities at the Demilt Dispensary gave to him the stimulus for work in the field of gynecology, and it was not surprising that he obtained the position of assistant surgeon in the Woman's Hospital in 1875, and that he was promoted to attending surgeon in 1889. The writer well remembers the first laparotomy performed by Dr. Hanks. It was for a medium-sized ovarian tumor in the person of a young Irish girl living on First Avenue, between Twenty-third and Twenty-fourth Streets. He will never forget the doctor's great anxiety and sense of responsibility, when the operation was completed, lest the result might not be favorable, and the joking way in which he said he would lay it all to his assistant if anything unfavorable happened. The case recovered, and the doctor was a happy man. The incident shows one of Dr. Hanks' traits very forcibly—his intense feeling, sometimes almost amounting to doubt, as to whether he was doing all that he could in every individual case.

Dr. Hanks delivered the course of lectures on obstetrics at Dartmouth Medical College in 1878. In 1885 he was chosen as one of the professors of diseases of women in the New York Post-Graduate Medical School, and held the position until 1898, when failing health compelled him to resign.

Dr. Hanks was a consulting gynecologist to the Northeastern Dispensary, Judson Dispensary, the Newark Hospital for Women, St. Joseph's Hospital, of Yonkers, and several other out-of-town hospitals. He was a member of the American Gynecological Society and of the British Gynecological Association, the New York Academy of Medicine (of which he was vice-president for three years), the New York State Medical Society, the Medical Society of the County of New York (of which he was president for two years), and the New York Obstetrical Society. He was also an honorary member of the Boston Gynecological Society.

In 1898 the University of Rochester conferred upon him the honorary degree of LL. D.

Dr. Hanks was twice married; to Miss Martha L. Fisk, whom he wedded in 1864 and who died in 1868, leaving one daughter. The daughter died in New York in 1874. His second wife, in 1872, was Miss Julia Dana Godfrey, of Keene, New Hampshire. Mrs. Hanks survived him with two daughters, Linda Tracy and Emily Grace Hanks.

For one who was so actively engaged in practice, Dr. Hanks contributed many excellent papers to the medical press. His style was forceful, clear, and concise, and always carried the conviction that he had thoroughly thought out and fully mastered the subjects upon which he wrote.

Among these papers are four read before the society and published in the transactions: "On the Early Diagnosis of Ectopic Pregnancy and the Best Method of Treatment," 1888; "Rules to be Followed in the Effort to Prevent Mural Abscesses, Abdominal Sinuses, and Ventral Hernia after Laparotomy," 1890; "Secondary Hemorrhage after Ovariotomy: Can We Prevent It?" 1892; "Total Extirpation of the Uterus and Appendages for Diseases of These Organs," 1894.

In the first-mentioned paper he took a firm stand in upholding the use of electricity for the purpose of destroying the life of the fetus in the early months of ectopic gestation.

During the last two years of his life Dr. Hanks showed the effects of constant and exhausting work. In 1900 his condition became more serious, and well-marked symptoms of actue nephritis made their appearance, which terminated his life on November 18.

J. E. J.

Tr. Am. Gynec. Soc., 1901, vol xxvi.
Albany M. Annals, 1901, vol xxii (W. C. Spalding).
Am. Gyn. and Obstet. Jour., N. Y., 1900, vol. xvii.
J. Am. Med. Ass., Chicago, 1900, vol. xxxv.
Med. Rec., N. Y., 1900, vol. lviii.
Med. News, N. Y., 1900, lxxvii.

Hare, Robert (1781–1858).

In an old volume of the "American Medical Recorder" (1820) is an elaborate instrument called a calorimotor which like all inventions was hailed by some as "new," by others as an adaptation from foregoing inventions. But whatever the real merits of the calorimotor, none refused praise to its author Robert Hare, who was born in Philadelphia January 17, 1781, the son of Robert and Margaret (Willing) Hare.

After leaving school he went into his father's brewery but there was too much chemistry and too little commercialism in his composition. He studied the composition of malt liquors and invented a barrel which would resist an extra accumulation of carbonic acid gas, then at twenty entered the Chemical School of Pennsylvania University where, with Dr. Benjamin Silliman he studied under Woodhouse. Yale in 1806 and Harvard in 1816 bestowed on him an honorary M. D. and he was elected professor of chemistry and natural philosophy in William and Mary College in 1818, where he stayed until called to the same chair in Pennsylvania University in 1819. Previous to this, in 1811 he had married Miss Harriet Clark.

In 1801 he contrived the oxy-hydrogen blow-pipe and gained the Rumford medal from the American Academy of Arts and Sciences. In 1803 the American Philosophical Society heard his paper on his apparatus for fusing large quantities of lime, magnesium and platinum. He also improved the voltaic pile and was the author of a process for denarcotizing laudanum; toxicology owes to him the method of determining minute quantities of opium in solution. One other subject to which he gave much thought was "Salt Radical Theory." A member of the American Philosophical Society and of the American Academy of Arts and Science, he contributed largely to their journals. Curiously, in later life he became a convert to spiritualism and supported these ideas by lectures and writings, and under the nom de plume of Eldred Graysen wrote a series of moral essays which appeared in the "Portfolio."

His splendid apparatus, nearly all his own invention, he gave to the Smithsonian Institute and the entire collection perished in that portion of the building destroyed by fire. The description of his working apparatus had grown to a bulky volume before he left the university. On May 15, 1858, he died at the age of seventy-seven.

D. W.

Hist. of the Med. Dept. of Penn. Univ., Dr. Joseph Carson, Phila., 1869.
Universities and their Sons (Penn.), Boston, 1902.
A memoir on some new modifications of galvanic apparatus, etc, R. Hare. The

Phila. Jour. of the Med. and Phys. Sciences, 1820, vol. i.
Portrait and list of writings in the Library of the Sur-Gen. Wash. D. C.

Harlan, Richard (1796–1843).

Richard Harlan was born in Philadelphia September 19, 1796 and previous to graduation at the medical department of the University of Pennsylvania he made a voyage to Calcutta as surgeon of an East India ship. In 1818 Dr. I. Parrish opened a private dissecting room in Philadelphia and placed Harlan in charge of it. He practised in Philadelphia, was elected in 1821 professor of comparative anatomy in the Philadelphia Museum, and was surgeon to the Philadelphia Hospital. In 1839 he visited Europe a second time, and after his return in 1843 removed to New Orleans, and became in that year vice-president of the Louisiana State Medical Society. He was a member of many learned societies in this country and abroad. He had finer mental than social gifts.

His chief writings were:

"Anatomical Investigations," comprising descriptions of various fasciæ of the brain, 10 pt. (8°, Philadelphia, 1824).

"Observations on the Genus Salamandra," Philadelphia, 1824.

"Fauna Americana," being a description of the mammiferous animals inhabiting North America, 1825.

"Professional Reputation," an oration delivered before the Philadelphia Medical Society February 8, 1826.

"Description of an Hermaphrodite Orang-outang lately living in Philadelphia," 8 pp., 2 pl. 8°. (Philadelphia, 1827).

"Medical and Physical Researches," Philadelphia, 1835.

Translation of Gannal's "History of Embalming," 1840.

C. R. B.

Harlow, John Martyn (1819–1907).

John Martyn Harlow was born in Whitehall, New York, November 25, 1819, son of Ransom and Annis (Martyn) Harlow, and at the time of death eighty-seven years old. He fitted for college at the Methodist Collegiate Institute at West Poultney, Vermont, and at the Ashby Academy, Ashby, Massachusetts. In 1840 he began to study medicine and surgery at the Philadelphia School of Anatomy, and studied afterwards at the Jefferson Medical College in Philadelphia. At the latter place he graduated in 1844.

In 1845 he began to practise in Cavendish, Vermont, where he remained for fifteen years, until obliged to retire on account of ill health. It was while at this place that he took charge of the case which gave him a world-wide fame among medical men, of a usually fatal wound of the brain. A young man who was tamping a hole in a rock with an iron bar an inch in diameter and three feet seven inches long, had the bar blown through his skull by the premature discharge of a blast. The explosion drove the bar completely through his head, and high in the air. Fortunately the bar was round in shape and smoothed by use. The event occurred on the thirteenth of September, 1848, and the victim of the acident lived until May 21, 1861, when he died in San Francisco, California.

Dr. Harlow published an account of this remarkable case, entitled, "Recovery from the Passage of an Iron Bar through the Head," and the skull and bar are now in the Warren Museum of the Harvard Medical School in Boston.

Returning to Philadelphia, Dr. Harlow passed nearly three years in travel and study, and resumed practice in Woburn in the autumn of 1861.

He died in Woburn, May 13, 1907. He married twice—first to Charlotte Davis, of Acton, who died about 1887; then to his second wife, Frances A. Kimball, of Woburn, who survived him. There were no children.

W. L. B.

Obit. Boston Transcript, May 13, 1907.

Harlow, Henry Mills (1821–1893).

Well known for his long superintendency of the Maine Insane Asylum at Augusta, Henry Mills Harlow was born in Westminster, Vermont, April 19, 1821, inheriting from his parents an excellent physical and mental constitution. He studied at the Ashley, Massachusetts, Academy and at the Burr Seminary in Vermont, teaching school when very young and studying medicine with Dr. Alfred Hitchcock of Ashley in 1841. He then took a course of lectures at the Harvard Medical School and graduated at the Berkshire Medical School in 1844. He also took private instruction in nervous diseases from Prof. Rust Palmer, a well-known alienist at Woodstock, Vermont, where he also attended lectures.

After graduating he was appointed assistant at the Vermont Insane Asylum. Active in the study of the insane, he contributed papers of great value upon this topic to the meetings of the Maine Medical Association of which he was President in 1861.

He was also active in the Society of Superintendents of the Insane Asylums of America, being often called upon by the law courts to advise concerning the mental condition of alleged criminals and never failing to give satisfaction to the bench, bar and jury.

Few physicians have met with as many misfortunes as Dr. Harlow during the course of his life. He had, for instance, the misfortune to lose largely the sight of both eyes from iritis so that for a long time he was unable to read, except with the greatest difficulty. He also lost a charming daughter, and had the additional and triple misfortune to lose almost in a single day from acute appendicitis, his eldest son Henry William Harlow, a most promising medical graduate.

Dr. Harlow married Louisa Stone Brooks, of Augusta, Maine, October 14, 1852. Two children survived him, a daughter, who married Dr. Oscar Davies of Augusta, Maine, and a son, George Arthur William Harlow, A., B. 1887, Harvard M. D. 1893.

At the end of thirty-two years of devoted care to the insane, Dr. Harlow resigned and retired to his homestead; attended to some small medical works, gave opinions when sought, and died one day quite suddenly, as he was dictating a letter, on April 5, 1893.

J. A. S

Trans. Maine Med. Assoc.
Personal Recollections.

Harmon, John B. (1780–1858).

John B. Harmon, of Warren, Ohio, founder of the Harmon family in Ohio, was born in Rupert, Vermont, October 19, 1780. He was one of the pioneer physicians of Trumbull County, coming to Ohio with his parents in 1800. He first studied medicine with Dr. Josiah Blackman of Vermont and subsequently with Dr. Enoch Leavilt of Leaviltsburg and in the War of 1812 served as army surgeon. A leading surgeon of that section of the state, he performed several major operations before the days of general anesthesia, in 1822 removing a cancerous mass from beneath the liver. About four years before his death, which occurred February 7, 1858, he retired from active practice. On February 6, 1882, he married Miss Sarah Dana of Pembroke, New York and had six children, John, Julian, Charles, Edward, Sarah and Willie. Of these, Julian became a doctor.

J. N. B.

Historical and Biographical Cyclopedia of the State of Ohio. vol. iv.

Harris, Chapin Aaron (1806–1860).

He was born at Pompey, Onondago County, New York, May 6, 1806, the son of John and Elizabeth Brundage Harris, natives of England. When about seventeen, he moved to Madison, Ohio, and studied under his brother John, who was practising medicine there. After pursuing the course of study

prescribed by law, he was examined by the Board of Medical Censors of Ohio and was licensed to practise. He commenced to practise himself at Greenfield, Highland County, Ohio, and continued there some years, when his attention was called to the possibilities of dentistry by his brother John, who had taken it up in 1827. In 1833, after study and practise of dentistry, Chapin settled in Baltimore, and during the next two years contributed to the pages of medical and periodical literature.

He published his first book in 1839; it was entitled "The Dental Art: A Practical Treatise on Dental Surgery," and went through thirteen editions. Many thousand copies of this book, probably the most popular on dental work ever published, were sold. Next came his "Dictionary of Dental Science," a dictionary of dental science, biography, bibliography, and medical terminology, 1849 (five editions), the later editions also edited by Gorgas. In 1846 he revised with numerous additions Joseph Fox's "Diseases of the Human Teeth, Their Natural History and Functions, with Mode of Applying Artificial Teeth, Etc." He also translated for the "American Journal of Dental Science" the works of a number of French authors.

He was a laborious and untiring worker, writing far into the morning after days of ceaseless labor and fatigue and keeping this up to the end of his life. For the preservation and extension of the experience of dentists he interested some of his New York brethren, and with their aid founded "The American Journal of Dental Science." In the need for educational advantages for dentists they joined him in a petition to the authorities of Maryland University to found a dental department. This effort failing, together with a similar one in one of the New York medical colleges, they determined upon independent action and during 1839–40 secured signatures of citizens to the Legislature of Maryland for the incorporation of a College of Dental Surgery in Baltimore. The charter was granted February 1, 1840. Dr. Harris received several honorary degrees—M. A. from the University of Maryland, M. D. Washington Medical College, Baltimore, 1838, D. D. S. Philadelphia Dental College, 1854. The Harris Dental Association of Lancaster, Pennsylvania, founded in 1867, was named in his honor. He was a diligent reader and student and collected a large and valuable private library.

He was remarkably handsome; was six feet two and a half inches in height and finely proportioned, with hazel eyes and a most benevolent expression.

His death occurred on September 29, 1860, after an illness of eight months from an obscure disease of the liver.

He married, January 11, 1826, Lucinda Heath, daughter of the Rev. Barton Dawnes Hawley, of White Chimneys, London County, Virginia, and had nine children.

E. F. C.

"History of the Baltimore College of Dental Surgery," by William Simon, Ph. D., M. D., and "A Biographical Review of the Careers of Hayden and Harris," with portraits, by Burton Lee Thorpe, M. D., D. D. S., in Transactions of Fourth International Dental Congress held at St. Louis, Montana, in 1904, vol. iii.

Harris, Robert Patterson (1822–1899).

Robert Patterson Harris was born in Chester Valley, Chester County, Pennsylvania, in 1822, the son of Dr. Robert William Harris who married the daughter of Robert Patterson, provost of the University of Pennsylvania and had six children whom he trained wisely but very strictly especially with regard to Sunday observance. I have not been able to discover to which school Robert the younger went as a boy nor whence his A.B. degree, but in 1843 he graduated from the medical side of the University of Pennsylvania and for a year after

worked at the Demilt Dispensary in New York. Then followed some clinical study in Paris and a final settling down to work with his father in Philadelphia where he practised for over thirty-five years. Surgery possessed the strongest possible attraction for him and he followed its development along gynecological lines with extreme interest. He was, besides, perhaps the most prominent medical statistican this country has ever seen. He presented the College of Physicians with an autograph manuscript of all the Cesarean sections in the United States up to date and this study brought to his notice cases in which laceration of the abdomen and of the uterus by the horns of cattle had resulted in the delivery of a living child. He published a paper in the "American Journal of Obstetrics" (1887) entitled "Laceration of the Abdomen and Uterus in Pregnant Women," which gave nine cases of cow-horn delivery with five living children, and in 1892 another "Abdominal and Uterine Tolerance in Pregnant Women," giving eleven more cases—"a better showing for the cow horn than the knife," as he remarked.

Another valuable statistical object was collecting the fate of all the viable extrauterine children. A statistical paper on "Ectopic Gestation" involved him in an imbroglio with Lawson Tait who called him "a library surgeon." This paper was translated into German by A. Eidman of Frankfürt-on-Maine and appeared in the "Monatschrift für Geburtshülfe und Gynäkologie" for August, 1897. Many of the editorials in the "Medical News" (Phila.) were from his pen. He took up Loretta's operation for divulsion of the pylorus. He edited "Playfair's Midwifery" in this country for Lee Brothers. The last article he wrote "Congenital Absence of the Penis with the Urethra making its Exit into or below the Rectum," appeared in the "Philadelphia Medical Journal" for January, 1898.

In the February of 1899, he had a second stroke of paralysis following one in 1895, and he died after a few days' illness in his seventy-seventh year. His income was always rather slender and he never married or kept a house but boarded out.

Besides his private value as a firm friend and Christian he is entitled to great respect and admiration as a man who investigated knowledge accumulated in the past and placed all that was valuable in it at the service of others.

H. A. K.

Am. Gyn. and Obstet. Jour., N. Y., 1899, vol. xv. (C. P. Noble.)
Brit. Med. Jour., Lon., 1899, vol. ii.
J. Am. M. Ass., Chicago, 1899, vol. xxii.

Harrison, John Pollard (1796–1849).

John Pollard Harrison, physician, teacher and writer, of Cincinnati, Ohio, was born in Louisville, Kentucky, June 5, 1796, a son of Maj. John Harrison, of Virginia, an officer in the Revolutionary War; his mother, Mary Ann Johnson, a daughter of Benjamin Johnson, sixth and youngest son of Sir William Johnson, Bart.

He received his early education from the Rev. John Todd, a Presbyterian clergyman of Louisville. When about fifteen he began the study of medicine with Dr. John Croghan and in 1817 went to Philadelphia to attend the medical lectures of the University of Pennsylvania, and studied under Drs. Chapman and Dewees. In April, 1819, he received his M. D. from the university and began practice immediately in Louisville. In 1820 he married Miss Mary T. Warner of Philadelphia.

In 1820 the Louisville Hospital was founded. Dr. Harrison was one of the attending physicians, and there began his career as a teacher. In 1835 he removed to Philadelphia, where he published a volume of medical essays. During that year also he was elected professor of materia medica in the Cincinnati College, his associates being Daniel Drake, S. D. Gross, and others of note.

In 1841 he was elected professor of materia medica and lecturer on pathology in the Medical College of Ohio, and in 1847 was transferred to the chair of theory and practice of medicine, which latter chair he occupied until the time of his death.

Dr. Harrison acquired distinction as a writer for medical journals.

The "Proceedings" of the Medical Convention of Ohio for 1841 contain two articles from the pen of Dr. Harrison: "Diseases induced by Mercury" and the "Address on Medical Education."

In 1844–5 he published his great work on "The Elements of Materia Medica and Therapeutics."

He was on the staff of the Commercial (later Cincinnati) Hospital and vice-president of the American Medical Association in 1849.

In 1847 Dr. Harrison became associate editor, with Dr. L. S. Lawson, of the "Western Lancet."

He died in Cincinnati, of cholera, September 2, 1849; his wife and six children survived him. H. E. H.

The "Boston Medical and Surgical Journal," vol. xli.

Hartshorne, Edward (1818–1885).

Edward Hartshorne, second son of Dr. Joseph Hartshorne, was born in Philadelphia, 1818. Having prepared for college at a private school in Philadelphia, he went to Princeton, and graduated B. A. in 1837; taking his A. M. in 1840. His desire to study medicine was not at first approved by his father. Edward's choice, however, was very positive, and his father consented. While a student at the University of Pennsylvania, he worked under Dr. W. W. Gerhard. His M. D. was taken in 1840, with a thesis on "Pseudarthrosis, its Causes and Treatment," afterwards published by request of the faculty of the university in the "American Journal of the Medical Sciences."

Immediately after graduating, Dr. Hartshorne was engaged for several months as first assistant physician, under Dr. T. S. Kirkbride, in the newly established Pennsylvania Hospital for the Insane, in West Philadelphia. From 1841 to 1843 he was one of the resident physicians of the Pennsylvania Hospital in the city and first resident physician in the Eastern Penitentiary, in Philadelphia in 1843.

In 1844, Dr. Hartshorne went to Europe, to extend his studies, especially by observation in the large hospitals of the Continent, then returning home, he at once began the work of a practitioner. For one year, he edited the "Philadelphia Journal of Prison Discipline." His contributions to medical literature became frequent; beginning with articles and reviews in the "Philadelphia Medical Examiner," then edited by Dr. Hollingsworth; afterwards, reviews and numerous bibliographical notices in the "American Journal of the Medical Sciences," especially between 1850 and 1870; also, in the "North American Medico-Chirurgical Review."

Dr. Hartshorne wrote an extended notice of Wharton and Stillé's "Treatise on Medical Jurisprudence," and delivered one course of lectures on that subject in connection with an association of medical gentlemen. In 1853 he was called upon to edit, with notes and additions, the American edition of Taylor's masterly work on "Medical Jurisprudence." A task so well accomplished as to meet with general approbation.

Dr. Hartshorne married, in 1850, Mrs. Adelia C. Pearse, daughter of John Swett, formerly of Boston. She survived him, with one son, Joseph Hartshorne, the only one left of five children.

He was for seven years an attending surgeon to the Wills Hospital for the Blind and Lame; afterwards, till 1864, surgeon to the Pennsylvania Hospital. With many others usually engaged only in civil practice, during the war he was on duty for a time as assistant surgeon, in the field, after the battle of Antietam; and for two or three years, as attending or consulting surgeon at the

McClellan, Nicetown, and other Army Hospitals, in and near Philadelphia. In the course of this service, a poisoned wound of his left hand, incurred while amputating a very bad limb, induced a severe illness; and this had, no doubt, a depressing influence upon his health throughout the rest of his life. He was actively concerned in the organization of the Philadelphia branch of the United States Sanitary Commission, during the war, being secretary of its executive committee.

He was successively elected vice-president and president, of the Pathological Society, and of the Ophthalmological Society of Philadelphia.

Inheriting from his father a strong constitution, with much capacity for work, he would probably have attained quite long life but for the impairment of his vital energy by the two attacks of illness which have been mentioned. After contending for eight years with chronic nephritic disease, he passed tranquilly from this life, near midsummer, 1885, aged sixty-seven. H. H.

Trans. Col. Phys., Phila., 1887, 3 s., ix (H. Hartshorne).
Med. and Surg. Reporter, Phila., 1885, liii.

Hartshorne, Henry (1823–1897).

In 1669 there came to America one Richard Hartshorne, a refugee from religious persecution, and who became one of the proprietaries with the Duke of York and William Penn. This Hartshorne was the first American ancestor of Henry, son of Dr. Joseph Hartshorne, born on March 16, 1823 in Philadelphia, his mother a daughter of Isaac Bonsall, a preacher in the Society of Friends.

When thirteen he went to Haverford College and took his B. A. in 1839 his M. D. at the University of Pennsylvania in 1845, and the honorary LL. D. from there in 1884. Three years after his election as resident physician to the Pennsylvania Hospital, in 1846, he married Mary, daughter of Jeremiah Brown of Philadelphia.

It was as teacher and writer that Dr. Hartshorne did his best work. "His broad culture and high attainments, his calm serenity of character, were universally recognized." "Once several members of the class gained possession of the lecture-room and smoked voluminously and rapidly as possible with long pipes, anticipating stupefaction on the part of Hartshorne, but he walked quietly to his desk, ordered all the doors and windows closed and the smoking to be continued, continuing to lecture calmly while the ringleaders gradually withdrew ill at ease and stomach."

The list given of honorable appointments filled, of books written, inadequately represent the human side of a man. How well he advocated the cause of women doctors in 1872; how keenly he was interested in the salvation spiritually and medically of Japan in the prohibition of opium, the care of the insane there, and in all missionary work. When, finally he died in Tokio, on February 10, 1897, the funeral was attended by Japanese and other foreigners, missionaries and merchants, teachers and medical students. All of science, religion and money Henry Hartshorne possessed he freely gave. Always successful, he was "honest in purpose, kind and pure in heart."

Among his appointments were: Professor of practice of medicine, Pennsylvania College; clinical lecturer, Philadelphia Hospital; professor of anatomy and physiology, Philadelphia Central High School; professor of hygiene, Pennsylvania University; professor of organic science and Philosophy, Haverford College; president, Howland College School; fellow of the College of Physicians.

His chief writings were:

"Essentials of the Principles and Practice of Medicine," 1867.

"On Organic Physics." "Proceedings of American Philosophical Society."

Important articles in "Johnson's New Illustrated Cyclopedia" on anatomy, philosophy, brain, breast, chest,

circulation of the blood, deaf mutes, and evolution.

"On Some Disputed Points in Physiological Optics."

"On the Theory of Erect Vision with Inverted Images."

"On Ocular Color Spectra and Their Causation."

"Medical Record for Private Medical Statistics." Prepared under the sanction of the Medical Society of the State of Pennsylvania and of the Biological Department of the Philadelphia Academy of Natural Sciences, 1859.

"Memoranda Medica," 1860.

D. W.

Trans. Coll. Phys. of Phila., 1897, 3,5, xix (J. Darrach).

Hawes, Jesse (1843–1901).

Jesse Hawes was born in Corrinna, Maine, August 21, 1843 and practised chiefly in Greeley, Weld County, Colorado, his death occurring there from angina pectoris, August 4, 1901.

He had prepared to enter Bowdoin College when the Civil War broke out and he enlisted at once in the ninth Illinois cavalry, the family having shortly before moved to that state. He served through the war, being confined in Cahaba Prison for nearly a year, which experience he embodied in "Cahaba," a volume published about 1890.

From 1865 to 1868 he studied in the University of Michigan and graduated M. D. from Long Island College Hospital in 1871. For some time afterwards he studied in Edinburgh, Scotland, but the exact date is not known.

In 1874 he married Clementine Rockwell and one child, a daughter, Mary Moneta, was born.

He was president of the Colorado State Medical Society in 1884 and professor of obstetrics in the University of Denver for some years.

He wrote many brief articles upon surgical subjects, published in the "Transactions of the American Medical Association and of the Colorado State Society. His "Report upon Charlatanism in Colorado" appeared in their Transactions for 1883.

At the beginning of his practice in Greeley Dr. Hawes lost several cases in succession from puerperal fever. This misfortune worked so against the increase of his practice that for years he struggled with poverty. No doubt the increased effort he made to win back the confidence of those families which had left him on this account, was responsible for the fact that he finally became the leading obstetrician of the northern part of the state, and a teacher of obstetrics in the University of Denver. J. N. H.

Hall's Hist. of Colorado (port.).

Hayden, Ferdinand Vanderveer (1829–1887).

This American geologist whose scientific knowledge and facile pen did so much to clothe the dry bones of governmental reports was born in Westfield, Massachusetts, September 7, 1829 and died in Philadelphia, December 22, 1887. He graduated at Oberlin College in 1850 and at the Albany Medical College in 1853, then became professor of geology and mineralogy in the University of Pennsylvania from 1865–1872.

The American Geological Expedition which set out in 1855 under Lieut. G. K. Warren to study the upper Missouri was fortunate in having him with them to write up and draw specimens collected. He edited the first eight reports of the "United States Geographical and Geological Surveys of the Territories" and wrote a "Sketch of the Origin and Progress (1877) of that Survey;" also "The Yellowstone National Park and the Mountain Regions of Idaho, Nevada, Colorado and Utah" (1877); and "Sun Pictures of the Rocky Mountains" (1870). D. W.

Century Cyclopedia of Names.
Smithsonian Contributions to Knowledge, Wash., 1865, vol. xiv.
Paleontology of the Upper Missouri, 1864.

Hayden, Horace H. (1768–1844).

Dr. Hayden was the son of Thomas Hayden, a lieutenant in the Revolutionary Army, and Abigail Parsons, and the farm upon which one William Hayden settled at Windsor in 1642 is still owned by his descendants. Horace Hayden was born at Windsor, Connecticut, October 13, 1768 and, like his father, became an architect and builder. At the age of fourteen he made two trips to the West Indies as cabin boy aboard a brig. Later, when twenty-one or twenty-two, he again visited these islands, intending to live there, but the unhealthy climate compelled him to return. When sixteen he took up his trade as mechanic and pursued it for several years.

His attention was directed to dentistry in 1795 by his needing a dentist and remarking the skill of Mr. John Greenwood, New York. He therefore borrowed books and essays from Greenwood and set to work with energy to master the subject. In 1800 he removed to Baltimore, when an opening presented itself. His knowledge of his new calling was still imperfect and he was without friends and fortune, but he was earnest and ambitious and soon drew practice and instructed students in dentistry in the evenings. It was in consequence of his attainments in these and other medical and scientific studies that the honorary M. D. was conferred on him by Jefferson Medical College in 1837 and by the University of Maryland in 1840. During the attack upon Baltimore by the British in 1874 he joined the militia, but medical men being in demand and his surgical skill being recognized he was assigned to duty at the hospital as assistant surgeon, where he cared for the wounded as long as his services were required.

Although joined by Drs. Chapin and Harris in a petition to the authorities of the university for the foundation of a department of dentistry, he failed to secure his desire and was compelled to found an independent school, the Baltimore College of Dental Surgery, which was chartered on February 1, 1840 and of which he was made president and first professor of the principles of dental science and later professor of dental physiology and pathology, which title he held until his death, four years later.

As early as 1817 Dr. Hayden advocated the formation of an association of dental practitioners, but only in August, 1840, when a number of prominent American dentists assembled in New York City and founded the American Society of Dental Surgeons was this effected. He was chosen its first president and held this office until death.

Dr. Hayden achieved fame also as a geologist, for he collected a valuable cabinet of American minerals, which in 1850 became the basis of the great collection of Roanoke College, Virginia. The literature was so limited that he was compelled to master the French language that he might have access to the best books on that subject, from which he made many translations. His researches were embodied in a volume of four hundred pages, entitled "Geological Essays" (Baltimore, 1820), said to be the first general work on that subject published in America. He discovered a new mineral which was named after him "Haydenite," and was also a botanist of distinction, writing on silkworm culture, etc. He was a great sportsman.

He died at Baltimore January 26, 1844. On February 23, 1805 he married, at Baltimore, Maria Antoinette Robinson, daughter of Lieut. Daniel Robinson of the United States Revenue Service. In 1901 mural tablets were erected at the University of Maryland and Baltimore College of Dental surgery. Hayden's license to practise dentistry is at the former institution. E. F. C.

Hays, Isaac (1796–1879).

The name of Isaac Hays is always associated with that which is well written

and worth reading in American medical literature. His editorship of the "American Journal of the Medical Sciences" (1827–1879) sustained his reputation both in America and abroad.

Born in Philadelphia, July 5, 1796, he was the son of Samuel and Richea Gratz Hays. His father, a wealthy merchant, gave his children a cultured and refined upbringing. Young Isaac was first under the Rev. Samuel B. Wylie, and afterwards graduated B. A. from the University of Pennsylvania, 1816. He wanted to be a doctor, but the father put him into his counting house, a year of which proved enough for the son who then began to study medicine under Dr. Nathaniel Chapman and his fondness for the natural sciences and mathematics determined him to study ophthalmology. In 1820 he took his M. D. at the University of Pennsylvania, his thesis being "Sympathy." When thirty-eight he married Miss Sarah Minis of Savannah, Georgia, and had four children one of whom, Dr. I. Minis Hays, was co-editor with his father of the "American Journal of Medical Sciences."

As a general practitioner Dr. Hays did not do much but gained celebrity in eye surgery, and he was connected with the Wills Hospital and the Pennsylvania Infirmary for Eye Disease. He edited and added to Lawrence's great work on "Diseases of the Eye," with the warm approbation of Sir William, which work reached several editions. The other works edited were Arnott's "Elements of Physics," Wilson's "American Ornithology," and Hoblyn's "Dictionary of Medical Terms." With Dr. Robert E. Griffith he translated two volumes by Broussais "The Principles of Physiological Medicine" and "Chronic Phlegmasia." He did project an "American Cyclopedia of Practical Medicine and Surgery," but the country was not ripe enough to bear the expense and "A" to "Azygos" stands all forlorn to mark where an ambitious doctor would have led. "The Medical News" was next, in 1843, to give the profession matters of general interest and some of it was devoted to exposing quacks, with the usual hot results.

Of the human side of the man various writers give glimpses, and those pleasant ones. Handsome, tall, benevolent, a bland and dignified gentleman of the old school with courteous manners and a warm heart. Plenty of friends too; a frequent guest at the Wistar Parties; intimate relations with Prince Lucien Bonaparte and all scientists; as a doctor bringing the same patient minute attention to a little pauper with bad eyes as to the distinguishing dental characteristics of the Mastodon.

To the very end of his long life Dr. Hays took a keen interest in the editing of the journals with which his name was inseparably associated. To the very last his mind was unclouded. An attack of influenza from which he never rallied was the cause of death on the twelfth of April, 1879.

Among other distinctions he was president of the Academy of Natural Science, Philadelphia; corresponding member of the Royal Society of Northern Antiquarians, Copenhagen, and other foreign societies; fellow of the College of Physicians; first president of the Ophthalmological Society of Philadelphia; honorary member of the American Ophthalmological Society.

Am. J. M. Sci., Phila., 1879, n. s., vol. lxxviii (port.). S. D. Gross.
Proc. Am. Phil. Soc., Phila., 1879.
Med. Rec., N. Y., 1879, vol. xv.
Tr. Coll. Phys., Phila., 1881, 3 series vol. v. (A. Stillé.)

Hayward, George (1791–1863).

George Hayward, the first to do a major surgical operation with ether anesthesia, was born in Boston, March 9, 1791 and died in the same city October 5, 1863.

He received the degree of A. B. from Harvard College in 1809, and also from Yale in the same year, and the degree of M. D. from the University of Penn-

sylvania in 1812. Then he studied abroad under Sir Astley Cooper, Abernethy and other eminent teachers of the time. Of a sanguine temperament he put great energy and zeal into his medical work from the first. On his return from abroad he was one of the members of a private medical club including in its membership Channing, Bigelow, Gorham, J. C. Warren and Ware, who met weekly for the reading of medical papers to be published later in the "New England Journal of Medicine and Surgery." In 1830 Hayward joined with J. C. Warren and Enoch Hale in forming a private medical school, which lived eight years.

He translated Bichat and Béclard's "General Anatomy," four volumes, 8°, and assisted in framing the report upon small-pox of the consulting physicians of the city of Boston, in 1837, outlining the procedure adopted to-day in handling contagious diseases.

He devoted himself largely to surgical work and was known as a careful and judicious operator, so that in 1835, when Harvard established a professorship of the principles of surgery and clinical surgery, he was chosen to fill the chair. He held teaching clinics at the Massachusetts General Hospital, where he was visiting surgeon, and it was he who did the second surgical operation ever done upon a patient under the influence of ether, the removal of a fatty tumor of the shoulder, on October 17, 1846, occupying seven minutes. This was the day following the first operation under ether, by J. C. Warren. On November 7, 1846, he did the first major operation under ether anesthesia in the same institution, amputation of the thigh, occupying a minute and three-quarters exclusive of the tying of the vessels. The operation was done before a large audience of students and physicians, and the patient, a delicate girl of twenty, with a scrofulous knee-joint, was entirely ignorant that her leg had been removed.

When in 1852 he was chosen president of the Massachusetts Medical Society he was made one of the seven fellows of Harvard College, an office he held until his death, a rather unusual honor to be bestowed on a member of the medical profession. He seems to have been almost morbid in his fear of publicity, and destroyed all papers that might have been used by future biographers. He published "Some Account of the First Use of Sulphuric Ether by Inhalation in Surgical Practice" in the "Boston Medical and Surgical Journal," April 21, 1847.

W. L. B.

Hist. Harvard Med. School, T. F. Harrington.
Com. Mass. Med. Society, vol. x.
The Introduction of Surgical Anesthesia, R. M. Hodges. M. D., Boston, 1891.

Haywood, Edmund Burke (1825–1894). Of distinguished English and North Carolina ancestry, he was born in Raleigh, North Carolina, January 13, 1825, and during his day was the greatest physician in the state capital. His collegiate education was obtained at the University of North Carolina and his professional degree from the University of Pennsylvania, in 1849.

From 1861–65 he continuously rendered service to the Confederacy as surgeon of Raleigh Light Infantry; inspector of military hospitals, Morris Island, South Carolina; surgeon-in-charge of Fair Grounds Hospital, Raleigh, North Carolina; surgeon at Seabrook Hospital during the fights around Richmond; later surgeon-in-charge of Pettigrew's Hospital, Raleigh, North Carolina.

He served as president of the North Carolina Medical Society (1869), and of the Raleigh Academy of Medicine, having been one of the founders of that institution. The University of North Carolina conferred upon him the degrees of A. M. and LL. D. His contributions to medical literature were considered of great value, among them being "The Physician, His Relation to the Community and the Law."

It was largely through his influence that the institution for the colored insane of the state was erected at Goldsboro,

he also urged the establishment of the Western Asylum for the insane at Morganton. As a surgeon he ranked at the head of his profession and performed with success many of the important cases such as: the Cesarean section, in August, 1874; strangulated inguinal hernia, two cases out of four being cured; lacerated perineum. In 1869 he successfully performed ligation of the right iliac artery for traumatic aneurysm of femoral atery, the first operation of the kind ever performed in the state, and considered so important that it was published in pamphlet form by the State Medical Society. In April of the same year he assisted Dr. Washington Atlee of Philadelphia in performing, at Raleigh, an operation (ovariotomy). The patient being left entirely in Dr. Haywood's charge, recovered and afterwards became the mother of three children. He operated twice successfully for the removal of submucous fibroid of the uterus. He performed many other notable surgical operations among those important being: aspiration of the pericardium for *hydrops pericardii;* external esophagotomy for impacted foreign body low down in esophagus; amputation of thigh in its upper third for gangrene of leg caused by traumatic femoral aneurysm; tracheotomy for foreign body in bronchus.

In 1850 he married Lucy A. Williams, daughter of Mr. Alfred Williams. He died on January 18, 1894 in the house in which he was born. He was survived by one daughter and six sons. One son, Hubert, became a doctor.

H. A. R.

Hazlett, Robert W. (1828–1899).

Robert W. Hazlett was born in Washington, Pennsylvania, April 16, 1828, his parents being Samuel and Sarah Johns Hazlett. His paternal grandparents, Robert Hazlett from Edinburgh, and Mary Caldwell Hazlett, daughter of Katherine Caldwell (nee René) a Huguenot came to America in 1785.

He had his college course at Washington, now Washington and Jefferson College, some years later receiving her A. M.

He early evinced an interest in medicine and showed it by preparation of many specimens for the college lectures on anatomy and physiology by Dr. James King, a work for which he possessed natural artistic talent.

He began to study medicine in Wheeling, Virginia, with his cousin, Dr. R. H. Cummins, receiving his M. D. in 1851 from Jefferson Medical College, and taking a post-graduate course in Philadelphia, soon after settling in South Wheeling. In 1857 for recuperation he went into the mountains, and, always fond of geology, became interested in searching for coal and oil, and located and supervised the boring of the state's first productive oil well.

In June, 1861 Hazlett again left practice, this time to enter the Union Army as surgeon of the second West Virginia Volunteer Infantry. In the autumn of 1862 he was appointed brigade-surgeon of Lathanis Independent Brigade and in 1863 surgeon of the United States General Hospital at Grafton.

The war over, Dr. Hazlett resumed practice in Wheeling, was very successful and ranked high among his fellows.

He was president of Ohio County Medical Society and president in 1893 of the State Medical Association. From its origin he was consulting physician to the City Hospital.

Dr. Hazlett married Mary Elizabeth Hobbs, October 7, 1852, and had four sons and one daughter—Howard, Samuel, Edward, Robert, and Katherine.

Dr. Hazlett died at his home in Wheeling, West Virginia, on September 2, 1899, after a year's illness of pernicious anemia.

The following papers, all in the "Transactions of the West Virginia State Medical Association," are the only printed productions from his pen:

"Biographical Sketch of Dr. R. H. Cummins," 1873.

"Biographical Sketch of Dr. H. J. Wiesel," 1874.

"Diagnostic Value of the Urine," 1874.

"Causes of Water Contamination," 1893.

"Address as President of the West Virginia State Medical Association," 1894.

"Positivism in Medicine," 1896.

"The Case of Theodore Durrant Psychologically Considered," 1898.

S. L. J.

In the Transactions of the W. Va. State Medical Asso., for 1900, is a fuller sketch, with half-tone portrait.

Heister, John P. (1803–1854).

John P. Heister was born July 3, 1803, in the city of Reading, Pennsylvania. He died September 15, 1854. When but a youth he showed a great interest in study and eagerly read all books that came within his reach. After receiving his M. D. he practised in his native place. Shortly after in order to satisfy his thirst for knowledge and at the same time benefit failing health, he determined to take a journey to Europe, so on the sixteenth day of April, 1841, he set sail and visited England, France, Germany, Italy and Switzerland, and, after spending a year in Europe returned to resume practise. He had kept notes on his journey abroad, which were printed under the title of "Notes of Travel" wherein he described the different places visited, especially the different botanical gardens, and in an enthusiastic sketch described his visit to the Jardin des Plantes in Paris.

Botany was his favorite study, although he was also more or less attached to the science of geology. He had a fine collection of specimens of the different woods of Berks County, well arranged in library form; a part of the limb or branch formed the back of the book to which was attached a tin box to hold the seed vessels, flowers, etc.

From a sketch by Dr. W. Herbst in the Botanists of Philadelphia by John W. Harshberger, 1899.

Heitzman, Carl (1836–1896).

Carl Heitzman was born in Hungary in 1836 and died in Rome, Italy, December, 1896.

He was one of the founders of the American Dermatological Association and an active member of the New York Dermatological Society, while his name appears as a contributor to or speaker at nearly all of the earlier meetings of both organizations.

He also wrote a great many articles on skin diseases for both American and German journals, his writings demonstrating considerable clinical ability as he was an expert microscopist and an exact writer on the anatomy and histopathology of the skin.

Perhaps his most important paper was the one entitled "Microscopic Studies of Inflammations of the Skin," published in "Archives of Dermatology," Philadelphia, 1879.

His writings included:

Chief Writings.

"Chirurgische Pathologie und Therapie," two volumes (1864–8).

"Untersuchungen über das Protoplasma." I. "Bau des Protoplasmas," 1873.

"The Minute Anatomy of the Teeth in the Light of the Bioplasson Theory, and the Minute Anatomy, Physiology, Pathology, and Therapeutics of the Dental Pulp," by C. F. W. Bödecker, Philadelphia, 1882.

"The Intimate Nature of Tuberculosis; Its Transmissibility and Its Parasitic Origin," 1883.

"Der descriptiven und topographischen Anatomie des Menschen," 1870.

With Frank Abbott, "Contributions to the Knowledge of Tumors of the Jaws," Philadelphia, 1888.

With Frank Abbott, "Senile Atrophy of the Upper Jaw," 11 pp., 8°. Philadelphia, 1882.

With C. F. W. Bödecker, "Contributions to the History of Development of the Teeth," New York, 1888.

J. M. W.

Dental Cosmos, Phila., 1897, xxxix.
N. Y. med. Monatschr., 1897, ix (L. Weber).

Helmuth, William Tod (1833–1902).

William Tod Helmuth, surgeon and dean of the New York Homeopathic Col-

lege and Hospital, was born in Philadelphia October 30, 1833. He was the great-grandson of the Rev. Justus Helmuth who came over from Brunswick about 1750 to take charge of the first German Lutheran church in America.

In 1850 William Helmuth began to study medicine with his uncle Dr. W. Helmuth, graduating three years later and beginning practice in Philadelphia. When twenty-two he became professor of anatomy in the college of which he was afterwards dean and in that same year published his "Surgery and its Adaptation to Homeopathic Practice." 1858 saw him at St. Louis where he was a founder of the Homeopathic College of Missouri and its professor of anatomy, and in 1869 he organized the St. Louis College of Homeopathic Physicians and Surgeons, being its dean and professor of surgery.

He went from St. Louis to New York to be surgeon of the Hahnemann Hospital and the New York Surgical Hospital, and became one of the most prominent surgeons of the homeopathic school. In 1877 the regents of the university of the state of New York gave him their M. D., and Yale, in 1888, her LL. D.

His "System of Surgery" went through five editions and his articles included:

"An Essay on Cleft Palate," 1867.

"Nerve Stretching," 1879.

"Suprapubic Lithotomy," 1882.

"Ovarian Tumors and Ovariotomy," 1885.

"A contribution to the Study of Renal Surgery," 1892.

As co-editor of the "North American Journal of Homeopathy," "New England Medical Gazette," "New York Journal of Homeopathy," "New York Homeopathic Times," and editor of the "Western Homeopathic Observer" he did good journalistic service and his pen was never idle. He wrote also a good deal on lay topics.

On May 15, 1902, he died suddenly of angina pectoris after an illness of only three days. His wife was Miss Pritchard of St. Louis and they had two children.

From data supplied by Dr. T. L. Bradford, who has several portraits in his possession.

Henderson, Andrew Augustus (1816-1875).

Andrew Augustus Henderson, medical director of the United States Navy, received his education at the Huntingdon Academy, studied medicine under his father, and obtained the degree of M. D. from Jefferson Medical College in 1838. He entered the navy as assistant surgeon in 1841. During the Mexican war he served on the Pacific coast and in 1856 made a cruise to the Orient. During the Civil War he was present in many engagements on the lower Mississippi. Henderson was commissioned medical director of the navy in 1871. He died in Brooklyn, New York, in 1875. He was a man of extensive attainments, possessing a wide knowledge of botany, ornithology, and ethnology and was well versed in English, French, German, and Spanish literature. A. A.

Tr. Am. M. Ass., Chicago, 1882, xxxiii.

Hendricks, George A. (1852–1899).

George A. Hendricks was born on the sixteenth of July, 1852, at Shippensburg, Pennsylvania, his early professional life being spent in Michigan, where he studied and afterwards taught anatomy under Dr. C. P. Ford. While teaching in the University of Michigan Dr. Hendricks edited the "Physician and Surgeon," a well-known and widely read medical journal.

Dr. Hendricks came to Minneapolis in 1898 to accept the position of demonstrator of anatomy in the University of Minnesota. He was better known as a teacher than as a practitioner, although an expert operator and a skillful surgical diagnostician. He was universally beloved by his students.

Dr. Hendricks died in Minneapolis, September 24, 1899. B. F.

Henrotin, Fernand (1847–1906).

Fernand Henrotin, son of Dr Joseph F. Henrotin, was born December, 1847,

in Brussels, Belgium, and died in Chicago, Sunday, December 9, 1906. At the age of ten he came to Chicago with his parents, and received a high school education here, graduating from Rush Medical College with the class of 1869.

As his father was a physician of note, he imbibed a taste for the medical profession from early childhood, which only increased with his entrance into active practice. Even as a tender youth, he assisted his father, which was undoubtedly the means of creating in him a predilection for the art of surgery. Endowed with a splendid physique, a fertile, well-balanced brain—the greatest of all inheritances—and in possession of a reading and speaking knowledge of the three most important modern languages —English, French, and German—he at once began his post-graduate education by the study of home and foreign medical literature, and thus kept pace with the wonderful advancements which have characterized the last three decenniums of the history of medicine. His desire for additional knowledge increased with the new discoveries and progress of the science and art of medicine and surgery.

Dr. Henrotin began his professional career under the most favorable auspices. Chicago, in population, did not then exceed three hundred and fifty thousand inhabitants. His father enjoyed a lucrative practice, and after his death, young Henrotin became his natural successor.

During the last few weeks of his life he repeatedly came to St. Joseph's Hospital at midnight, spent the remainder of the night sitting in a chair, as he could neither lie down nor sleep, operated early in the morning, and then resumed his daily arduous routine work. About two weeks before his death, he came to the hospital late in the night, never closed his eyes, was panting for breath, and, early in the morning, performed three laparotomies. This was his last operative work, as next day he called, visited his patients, and bade the Sisters goodbye and returned to his home with the conviction that his mission on earth was ended.

Among other appointments: From 1868 to 1870 he was prosector at Rush Medical College, surgeon of the Police Department fifteen years, and during this time edited and published a booklet on "First Aid," and for twenty-one years was the physician of the Fire Department. He was one of the founders of the Association of the Military Surgeons of Illinois, and never lost sight of the interests of military medical affairs in this state. He served for many years on the medical staff of Cook County Hospital, and at the time of his death was president of the Medical Board. He was senior surgeon of the Alexian Brothers Hospital and consulting gynecologist of St. Joseph's and German Hospitals, also one of the founders of the Chicago Policlinic, and served from its beginning to the time of his death as its professor of gynecology. He was a member of the State Medical Society, Chicago Gynecological Society, American Gynecological Society, and president of the Chicago Medical Society.

His special leaning was to operative gynecology, and all of his scientific literary productions pertain to this branch of surgery.

He was the first in America to perform vaginal hysterectomy for suppurative pelvic disease. If he had any hobbies, they were vaginal drainage and vaginal hysterectomy for malignant and myomatous disease of the uterus. In this department of pelvic surgery he was a master. His literary work was hampered by a very large and exacting practice. He contributed to medical literature many valuable and practical monographs on pelvic drainage and vaginal operations. Many of these articles were written in the dead of night, when less enthusiastic colleagues were asleep. His chapter on ectopic gestion in "Practice of Obstetrics" by American authors, and his article on gynecology in the "International Textbook of Surgery," deserve special attention, while on his deathbed he practically completed the chapter on vaginal hysterectomy for Kelly and Noble's "Gynecology and Abdominal Surgery."

Dr. Henrotin was an ardent advocate of higher standards of medical education. He published a booklet, "Democracy of Education in Medicine," which is replete with many practical suggestions on this important subject.

His wife survived him. The universal esteem in which the deceased was held became apparent at the funeral services, which were held in the Holy Name Cathedral and were attended by nearly two thousand mourners, among them several hundred physicians.

To Henrotin death came prematurely, and his most bitter regret was that he had to leave so much undone. His intention was to retire to his beautiful country home in the course of years, and devote the remainder of his life to the enjoyments of simple nature, to the writing of a novel of social life, of which he had seen so much, good and bad, and to write a work on pelvic surgery. N. S.

Surgery, Gyne. and Obstet., Jan., 1907.
Jour. Am. Med. Ass., Dec., 1906, vol. xlvii.

Henry, Morris Henry (1835–1895).

Morris Henry Henry was born in London in 1835 and came to the United States in 1852. His father was a celebrated Oriental scholar. Dr. Henry was educated at the Polytechnic in Brussels and at the Government School, Somerset House, London, graduating in medicine from the University of Vermont, 1860, and taking his M. A. there in 1876, and his LL. D. from the University of North Carolina, 1885.

After graduating in medicine he joined the United States Navy, serving under Admiral Farragut during the Civil War, then settling in New York City, he engaged in general practice and was for many years surgeon-in-chief to the department of venereal and skin disease, New York Dispensary.

He was the organizer of the Ambulance Service of New York City; a member of the University of Athens, and had been decorated by the King of Greece and the Sultan of Turkey for services.

In 1870 he edited the "American Journal of Syphilography and Dermatology," the first American journal on these subjects.

He died in New York, May 17, 1895.

J. M. W.

Med. Rec. N. Y., 1895, xlvi.

Herdman, William James (1848–1896).

William James Herdman, alienist, was born September 7, 1848, at Concord, Muskingum County, Ohio, of Scotch-Irish ancestors and had a general education in the common schools, and Michigan University, whence, in 1872, he received the degree of Ph. B. and in 1875 his M. D. and was successively there in 1875–90, demonstrator of anatomy; 1879–80, lecturer on pathological anatomy; 1880, 82, assistant professor of pathological anatomy; 1882–88, professor of practical and pathological anatomy; 1888–90, professor of practical anatomy and diseases of the nervous system; 1890–98, professor of nervous diseases and electrotherapeutics; 1898–1906, professor of diseases of the mind and nervous system and of electrotherapeutics. For many years he gave special lectures to the law department classes. From 1882–1887, professor of orthopedic surgery in the Northwestern (Ohio) Medical College. During the same period he was consulting surgeon to St. Vincent's Hospital in Toledo, Ohio; member of the American Electro-therapeutic Association, president in 1894; member of the Michigan State Medical Society and the Zanesville Academy of Medicine; fellow of the American Academy of Medicine. In 1897 the University of Nashville gave him the degree of LL. D. He was very active in promoting the Young Men's Christian Association in the university, and a strong worker in the Presbyterian Church in Ann Arbor. He was active in securing rational anatomical laws regulating the dissection of human bodies and also, with Dr. Langley, in establishing the electrotherapeutic laboratory in the University of Michigan, one of the first in the country. He was the founder of the department of nervous diseases in the university. The Psycho-

pathic Hospital was largely the result of his thought and fine work—preeminently his monument for all time. Dr. Herdman enlisted in United States military service April 5, 1865, as private, Company F, 198th regiment, Ohio Infantry; discharged May 8, 1865, by general orders. Member Welch Post G. A. R. 1886. Herdman was about six feet high, perfectly proportioned with a large head covered with luxuriant brown hair, high forehead, brown, bushy eyebrows shielding the deep set eyes, long curly mustache, keen glance, kindly manner and of remarkable dignity. On September 15, 1873, Dr. Herdman married Nancy Bradley Thomas, who with three children survived him; the son, Elliot Kent, became a practising physician.

Dr. W. J. Herdman died December 14, 1906, in Johns Hopkins Hospital, Baltimore, following operation for malignant disease of the abdomen.

Papers:

"Burgeon's Method of Treating Chronic Diseases of the Lungs by Medicated Gaseous Enemata." ("Transactions Michigan State Medical Society," 1887.)

"Clinical Observations on the Functions of the Right Temporosphenoidal Lobe." ("Journal of Nervous and Mental Diseases," New York, 1893, vol. xx.)

"Best Methods of Counteracting Psychoses, due to the Strain and Stress Incident to our Public School System." ("Journal American Medical Association," vol. xli.)

"Ascending Neuritis." ("The Physician and Surgeon," vol. xxvii.)

"Primary Lateral Sclerosis." ("Transactions Michigan State Medical Society," 1889.)

"Some Forms of Trophoneurosis," with illustrations. (Ibid., 1894.)

"Dupuytren's Finger Contraction." (Ibid., 1886.)

"Vascular Disease as a Factor in the Etiology of Epilepsy." ("Journal Michigan State Medical Society," vol. iii.)

L. C.

History Univ. of Mich., The University Press, 1906.

Hering, Constantine (1800–1880).

A scientist and a pioneer in homeopathy both in Europe and in the States, Constantine Hering was born in Oschatz, Saxony, on January 1, 1800. As a lad he went to school in Zittau, and in his playtime followed his natural bent and roamed the country gathering specimens, the nucleus of a collection of minerals, plants and skulls. His medical studies were made in the Surgical Academy of Dresden and the University of Leipzig, where he was assistant to Dr. J. Henry Robbi; his M. D. was from Wurzburg. Soon after, Robbi was asked by a publishing house to prepare a work demolishing homeopathy and he referred them to young Hering who, in two years, had nearly completed the book but was struck by some statements in Hahnemann's book and resolved to test their truth. The result was he became a convert and openly avowed his belief. Ostracism, persecution and poverty followed. In his surgical practice he received a wound which apparently necessitated amputation. Hering went to a homeopathist and promised to devote his life to homeopathy if the hand was saved, which being done, he kept his promise.

Soon after graduation, while teaching in a college for young noblemen, he was appointed to go to Surinam to make zoological researches under royal patronage. His old friend Christophe Weigel went with him as botanist and the reports were satisfactory but some articles on homeopathy contributed to "Stapf's Homeopathic Archives" gave offense to the royal physician and Hering was told to attend more exclusively to his researches. Result: Hering greatly indignant and a sending in of his resignation, continuing his investigation privately by taking up practice in Paramaribo. His fine collection went as a gift to the Academy of Natural Sciences in Philadelphia.

While in Surinam he was a visitor to the leper colony, seeking to alleviate the terrible suffering and enriching

the therapeutics of leprosy. He studied the habits and customs of the different peoples, specially the Arrowwackian Indians, penetrating deep into the trackless forests to meet them and it was there he found the lachesis trigonacephalus whose attenuated vemon has since healed so many. He and his wife were living in 1828 in a little camp on the Amazon and the natives had told him of a deadly serpent living there, so he offered a reward for a live one. One day they brought in a bamboo box, and then fled from the place. He and his wife were alone. As the box was opened he struck the snake a blow on the head, pinned the head with a forked stick and pressed out the poison on sugar of milk. This was all the supply for many years in making the preparation of lachesis. The snake is now in the Academy of Natural Sciences in Philadelphia.

A few years later he sailed from South America to return to Saxony, but was shipwrecked and stayed a while in Philadelphia, finally settling there to practise and founding the School of Homeopathy in Allentown and the Hahnemann Medical College in Philadelphia in which he became a physician. He also edited "The American Journal of Materia Medica." His "Domestic Physician" went through six editions here and ten in Germany and was translated into seven languages. The "Effects of Snake Poison" appeared in 1837, the "Suggestions for the Proving of Drugs" in 1853. In 1866 he translated Gross' "Comparative Materia Medica," and nine years later published his own "Analytical Therapeutics." Of his largest work, "Guiding Symptoms," for which he gathered an enormous amount of material, the third volume was completed just before his death, which occurred at half past ten on the evening of July 23, 1880. He had suffered for some time from severe attacks of asthma, but the night of his death seemed cheery and better. Severe dyspnea set in rather suddenly and he was gone before his medical friends had come to his aid.

From data supplied by Dr. Thomas Lindsley Bradford, who has several portraits in his possession.

Hist. of Homeopathy, vol. i., N. Y., 1905.
Amer. Institute Trans., 1881.
The Hahnemannian, 1880, vol. ii.

Herrick, Henry Justus (1833–1901).

Henry Justus Herrick, a prominent physician of Cleveland, Ohio, of New England descent, was born in Aurora, Portage County, Ohio, January 20, 1833. While yet a lad, his father removed to Twinsburg, Summit County, Ohio, where the boy divided his time between labor upon the farm or in a sawmill and attendance during the winter at the ordinary district school, in 1854 entering Williams College, supporting himself by teaching school during the vacations, and graduating there in 1858. On his return to Ohio in 1858, he studied under Dr. Martin L. Brooks, of Cleveland, Ohio, and in 1860 went to Chicago and continued with Dr. Brainard, matriculating in the Rush Medical College and graduating there in 1861. After a tour of service in the United States Marine Hospital at Chicago, Dr. Herrick returned to Cleveland and became assistant to Dr. Brooks, his old preceptor, in the charge of the United States Marine Hospital. In 1862, however, he was commissioned assistant surgeon of the seventeenth regiment of Ohio infantry; promoted to surgeon in the same year; captured at the battle of Chickamauga, spent two months in the Libby Prison and was exchanged and followed General Sherman in his famous march to the sea. During a short furlough in 1863 he married Mary Brooks, the daughter of his former preceptor. Two of his sons also became doctors. At the close of the war Dr. Herrick spent several months in New York City to refresh his medical knowledge, then returned to Cleveland and continued

to practise there until his death from uremia, January 28, 1901.

In 1866 Dr. Herrick was elected to the chair of obstetrics and the diseases of children in the Charity Hospital Medical College of Cleveland, and four years later was transferred to the chair of the principles of surgery in the same institution, then known, however, as the medical department of the University of Wooster. On the reorganization of this college in 1881, Dr. Herrick resigned his position and accepted the chair of pathology and hygiene in the medical department of the Western Reserve University. Subsequently he was transferred to the chair of gynecology and hygiene there and, on his retirement, was honored with the title of professor emeritus.

He was president of the Ohio State Medical Society in 1873–4 and of the Ohio State Sanitary Association, the Northeastern Ohio Medical Society and the Cuyahoga County Medical Society.

He was also a frequent contributor to the medical journals and to the transactions of the various societies of which he was a member. Among the more important contributions from his pen were:

"Carcinoma: a Form of Perverted Nutrition." ("Transactions of Ohio State Medical Society," 1891.)

"The Radical Cure of Hernia." ("Columbus Medical Journal," vol. vi, 1887.)

"Dietetics in Idiopathic Fevers." ("Columbus Medical Journal," vol. v, 1887.)

"Hypnotism." ("Cleveland Medical Gazette," vol. xii, 1896–7).

No portrait of Dr. Herrick, except a crayon sketch in the office of his son, and a very imperfect likeness, is known to the writer. H. E. H.

Cleveland Med. Gaz., vol. xvi. 1900–1.
Mag. of Western Hist., vol. iv, (port.).

Herter, Christian (1865–1910).

Christian Archibald Herter was born in Glenville, Connecticut, September 3, 1865, and died at his home in New York City, December 5, 1910, in the forty-sixth year of his age. His early education, partly by private teachers and at the Columbia Grammar School, was largely influenced and directed by his father, a man of wide culture and scholarly attainments. He graduated M. D. at the College of Physicians and Surgeons (Columbia University) in 1885, and pursued graduate professional studies at the Johns Hopkins University, and later in Germany and France. He was visiting physician to the New York City Hospital from 1894 to 1904, professor of pathological chemistry at the University and Bellevue Hospital Medical College from 1898 to 1903, and since 1903 professor of pharmacology and therapeutics at the College of Physicians and Surgeons. He was a member of the Board of Referees appointed by the president of the United States to act as advisers to the Department of Agriculture in the enforcement of the National Food and Drugs Act.

With the incorporation of the Rockefeller Institute for Medical Research in June, 1901, Dr. Herter, who had been active and influential in the preliminary conferences, became a member of the board of directors, and served for a number of years as its treasurer.

From the date of his graduation in medicine, Dr. Herter's life was one of singular devotion to the pursuit and advancement of scientific medicine—a devotion ever increasing and burning never more brightly than during the last years of a progressive and wasting nervous affection. To this life-work he brought the intellectual qualifications of the successful investigator of nature, good training, industry and enthusiasm. With the scientific temperament was joined, in unusual degree, the imaginative and artistic, in music especially, his accomplishments being those of a virtuoso.

Opportunities for scientific research Dr. Herter created largely for himself, by constructing on the top floor of his house a well-equipped laboratory for

experimental, pathological, bacteriological and chemical investigations, and by securing the services and co-operation of able assistants and collaborators. From this private laboratory have issued during the last fifteen year numerous and valuable contributions.

Dr. Herter was a prolific contributor to medical science, his published articles and books numbering not less than seventy, and covering a wide range of activity. His earliest scientific interest related to diseases of the nervous system, his first publications in this field appearing in 1888, followed in 1889 by his valuable study of experimental myelitis, and later by several articles of pathological and clinical interest, and by the publication in 1892 of the first edition of his text-book on "The Diagnosis of Diseases of the Nervous System." After this period his work lay more and more in the domains of experimental pathology, and especially of pathological chemistry, being concerned with problems of metabolism, of the formation of gall-stones, of glycosuria, of anemia and toxemia and of infantilism; and in the later years particularly with the study of the intestinal bacterial flora and intestinal putrefaction. His lectures on "Chemical Pathology in its Relation to Practical Medicine," published in 1902, met a most favorable reception. He approached pathological problems with broad biological, and even philosophical interest.

Dr. Herter's services to American medicine are not to be measured solely by his published contributions, valuable as these are. The example and influence of his personality and of the ideals which he represented made strongly for higher professional standards and for the wider recognition and cultivation of medical science. The lectureships which Dr. Herter, in association with Mrs. Herter, established upon wise and generous foundations at the Johns Hopkins Medical School and the University of Bellevue Hospital Medical College serve a most useful purpose in the promotion of scientific medicine.

It was mainly through Dr. Herter's instrumentality and generous support that the "Journal of Biological Chemistry" was established in 1905, and he was also active in the organization, in 1908, of the American Society of Biological Chemists. Biological chemistry in this country owes a large debt to him.

His services were of great help in the planning and development of the Rockefeller Institute. After the opening last September of the hospital of the Institute, to which he had been appointed physician, and which owes much in its conception and general character as a research hospital to the time and thought devoted to it by him, Dr. Herter began to make use of the opportunities there offered, which seemed to be the fulfilment of his dreams for study of the problems of disease as presented by the living patient. The zeal and ardor with which he entered upon this work seemed to his colleagues wonderful, and indeed heroic, in view of the increasing and distressing physical infirmities of the last weeks of his life.

W. H. W

Johns Hopkins Hosp. Bull., May, 1911. Science, June, 1911. (Graham Lusk.)

Hewson, Addinell (1820–1889).

A great many medical men get their names associated with methods and cures they have advocated and Addinell Hewson, in addition to his predilection for therapeutic electricity, "took up the earth treatment for wounds, contusions, inflammations, tumors and surgical dressings" so that his name became connected with his "earth treatment" about 1853, some twenty-five years after his birth on November 22, as the eighth son of Prof. Thomas T. Hewson of Philadelphia.

The grammar school of the University of Pennsylvania received him as a boy and from the university he graduated in Arts in 1848, taking his M. D. from Jefferson Medical College in 1850.

As surgeon on a sailing vessel he went to Ireland and became a student under Sir William Wilde at St. Mark's

Hospital in Dublin and also attended the lectures at the Rotunda Hospital. He seems to have been liked there, for Sir William asked him to edit a work of his on "Aural Surgery," and in London also, Sir William Lawrence offered a partnership if he would remain in England. He gave him, too, an old engraving, very precious to Hewson, of William Hewson gathered with other students around John Hunter. But 1851 saw Addinell settled in Philadelphia as a practitioner, first serving as one of the resident doctors at Pennsylvania Hospital. Three years later he married Rachel Macomb Wetherill, daughter of Dr. William Wetherill of Philadelphia and had three sons and three daughters.

In 1872 he again went to Europe to recuperate, and was summoned to Mentone to treat Dr. H. R. Storer of Newport, Rhode Island, suffering from tibial abscess. The "earth" treatment, to which Hewson had added sulphuretted hydrogen gas, was certainly successful in this case. Dr. Hewson was himself suffering, occasionally, from the effects of being thrown from his gig in 1868, but for a long time his slight seizures were known only to the few, but finally a severe attack came on September 11, 1889, as he was going to his room. He fell on the stairs and in about an hour the end came. So passed away a cultured Christian gentleman and a scientist of no small rank, one so anxious to do his best even in delivering lectures that he first wrote then practised their delivery with one Wood, an actor.

Among his appointments: Surgeon to the Wills' Hospital for Eye Disease; surgeon from 1861–7 to the Pennsylvania Hospital; lecturer at the summer school of Jefferson Medical College and contract surgeon during the Civil War.

His many papers to the various medical journals numbered:

"On the Prominence of the Eyeball with Sinking of the Caruncle and Semilunar Folds following the Ordinary Operations for Strabismus." ("North American Surgical Review," Philadelphia, 1858.)

"On Localized Galvanism as a Remedy for Photophobia of Strumous Ophthalmia." ("American Journal of Medical Sciences," Philadelphia, 1860, vol. xxxix.)

"Earth as a Topical Application in Surgery," Philadelphia, 1872.

"On the Treatment of Fibroids of the Uterus by Means of Dry Earth." ("Transactions of the American Medical Association," 1880, vol. xxi.)

"Immense Abdominal Tumors." ("Medical and Surgical Reporter," Philadelphia, vol. xl, 1889.)

"Cervical Lymphadenoma treated by the Application of Earth." ("Medical News," Philadelphia, 1882, vol. xli.)

Med. and Surg. Reporter, Phila., 1889, lxi.
Tr. Coll. Phys., Phila., 1890, 3 s., vol. xii.
(J. C. Morris.)

Hewson, Thomas Tickell (1773–1848).

Thomas Tickell Hewson, professor of comparative anatomy in the University of Pennsylvania, seemed to have inherited a fair share of skill from his father, the celebrated London surgeon and anatomist, William Hewson.

How it came to pass that the son settled in America and became president of the College of Physicians, Philadelphia, may be explained by the fact that when his mother, Mary Stevenson, was young, Franklin lodged with the family and helped the girl with her studies. In 1774 William Hewson wounded himself while dissecting and in a few days was dead, leaving his young widow with two little children and another expected. Thomas, the second boy, when eight, went to a school kept by William Gilpin at Cheam, Surrey, and stayed there five years, five months of this time being passed with Franklin at Passy, by whose advice the mother came to America and Thomas entered the College of Philadelphia and took

his A. B. there in 1789. After studying medicine with Dr. John Foulke he went back to England and became a house surgeon at St. Bartholomew's Hospital, afterwards spending two years in Edinburgh and eventually settling down to practice in Philadelphia in 1800. Twelve years later he married Emily Banks of Washington, District of Columbia, and his son, Addinell, became one of Philadelphia's best surgeons.

Hewson in 1822 established a private Medical School with himself as teacher of anatomy; Thomas Harris, of surgery; Meigs, of physiology and midwifery, while Franklin Bache took the materia medica and chemistry. He contributed largely also to the formation and revision of the National Pharmacopœia.

During the twelve years of his attendance as physician to the Walnut Street Prison, Hewson did good work in coping with typhus fever; in 1820 he helped fight the epidemic of yellow fever, and when cholera came in 1834 he was again actively helpful.

Before his death on February 17, 1848, at the ripe age of seventy-five, Hewson had held many appointments in Philadelphia. In addition to those given he was surgeon to the Philadelphia Hospital; physician to the Pennsylvania Hospital; censor and secretary to the College of Physicians, and he held the honorary M. D. from Harvard.

D. W.

Dict. of National Biog.
Hist. of Penn. Hosp., Drs. Morton and Woodbury.
Universities and Their Sons (Penn.), Boston, 1902.
N. Jersey Med. Reporter, 1848, vol. i, Burlington.
Franklin Bache, Obit. Gedder, Phila., 1850.

Hickey, Amanda Sanford (1838–1894).

She was born of New England ancestry in New Bedford, August 28, 1838, and after graduating from the Friend's Academy in Union Springs, New York, in order to study medicine, she started a market garden, sold the produce and entered the Womans' Medical College, Philadelphia, and was eventually able to graduate in 1870, afterwards becoming interne at the New England Hospital in Boston.

Entering Ann Arbor, Michigan, in the autumn of 1870, she graduated the following spring of 1871, second in rank in a class of ninety man, the only woman and the first to graduate from Ann Arbor.

In 1872 she settled in Auburn, and her success was nothing short of phenomenal in gaining the confidence and respect of her colleagues.

The year 1879 was spent in study in Paris and London.

She was a member of the original staff of the Auburn City Hospital and continued an active member until her death, and a member of the Medical Society of the State of New York.

Dr. Sanford possessed unusual surgical skill, operating with success in the days when intra-abdominal surgery had poor records.

A maternity hospital in Auburn, given in her honor, bears her name.

She married Patrick Hickey in 1884 and died October 17, 1894, from pneumonia contracted by exposure after performing a tedious operation in an overheated room.

A. B. W.

Letters of personal friends and colleagues, N. Y., Medical Record, Nov. 17, 1894, vol. xlvi.

Hildreth, Samuel Prescott (1783–1863),

Samuel Prescott Hildreth, one of the earliest and best of the pioneer physicians of Ohio, was born in the town of Methuen, Essex County, Massachusetts, September 30, 1783, the son of Dr. Samuel Hildreth. His early life was passed upon a farm, but eventually he decided to study medicine, and studied under Dr. Thomas Kittredge of Andover. In 1805 he received a diploma from the Medical Society of Massachusetts, and

settled down to practise in Hempstead, New Hampshire. In September, 1806, he mounted his horse, carrying with him all his possessions, and directed his course towards Marietta, Ohio. On reaching the town, October 4, 1806, he began practice at once, but the inhabitants of a flourishing town called Belprie (Belpre), some fourteen miles further down the river, appealed to him to come to them, because they had no physician among them, and Dr. Hildreth went at once, reaching there December 10, 1806, the very night on which the unfortunate Blennerhassett abandoned forever his fairy isle, which lay just off Belprie in the river. In the following summer an extensive epidemic of malarial fever prevailed along the course of the Ohio river, and Dr. Hildreth found his hands full. However, in August he managed to snatch sufficient time from the pressing duties of his profession to marry Rhoda Cook, an immigrant from New Bedford, Massachusetts. An attack of lameness in one of his hips, due it was believed to excessive riding on horseback, induced Dr. Hildreth to return to Marietta in March, 1808, and there he remained until his death on July 24, 1863.

Dr. Hildreth was always interested in the advancement of the medical profession, and in 1811 drafted and secured the passage of a bill for the regulation of the practice of medicine and for the organization of medical societies in Ohio. This bill became law.

As a medical writer Dr. Hildreth was one of the best known of his day, and his papers were received with pleasure by the few journals then existing. As early as 1808 he contributed to the "New York Medical Repository" (volume x) a very full account of the epidemic of malarial fever which had prevailed in the Ohio valley during the preceding year. In 1812 he contributed to the same journal (volume xv) a description of the American colombo, with a drawing of the plant, and in 1822 (volume xxii) articles on hydrophobia and a curious case of Siamese twins occurring in his own practice. In 1822–23 a widespread epidemic of malarial fever again prevailed throughout the Ohio valley, and was described in the following year (1824) by Dr. Hildreth who had himself suffered from the disease and recovered under the treatment of "Jesuits' bark in quarter ounce doses every two hours, alternated with a solution of arsenic." This description was in the "Philadelphia Journal of the Medical and Physical Sciences," and followed by an article on the sequelæ of the epidemic, which appeared in the "Western Journal of Medicine" at Cincinnati in 1825.

Dr. Hildreth was president of the Ohio Medical Convention of 1839, and on retiring from office delivered a valedictory address on the diseases and the climatology of southeastern Ohio, most interesting and valuable in character. ("Journal of Proceedings of Medical Convention," Ohio, 1839.)

But, in addition to these strictly medical subjects, Dr. Hildreth was an earnest and enthusiastic student of natural history, geology and climatology, on all of which subjects he wrote papers of value, and at his Marietta home he collected and preserved an extensive cabinet of natural history. A journal of diseases observed by the doctor in his long practice, a bill of mortality in Marietta since 1824, with thermometric and barometric records for a long term of years, complete the catalogue of the useful results of the busy life of this pioneer physician of Ohio in the first half of the nineteenth century.

Some of the conditions of medical practice in Ohio at this period may be learned from the following extract from an address by Dr. Hildreth before the Medical Convention of Ohio in 1839.

"I well remember that one of the first calls I had after coming to Ohio was to visit a patient in Virginia, thirty-two miles from Marietta. The journey was performed chiefly in the night, by the assistance of a guide, through a dense forest. We passed but one or two clearings after leaving the Ohio river. The patient was very ill with an ascites and an anasarca. His friends had started to bring him to Marietta for medical aid, but his strength failed on the way. I reached the miserable cabin in which he lay about midnight, and found him *in articulo mortis*. He died in a few minutes after. There being no chance for sleep, and as it was a clear night the last of October, I mounted my horse and commenced my solitary ride home. It being the season for wild game, many deer had recently been killed by the hunters near the side of the path. This had enticed an unusual number of wolves into that vicinity to feed upon the offal, and my ears were every few moments assailed by the the howl of the wolf or the sharp yell of the panther within a short distance of the road. For defense I had nothing with me but a stout riding-whip with a long lash, which was occasionally cracked to enliven my weary horse and to keep up the excitement of my own weary spirits. No violenee, however, was offered by the wolves, and by daylight I had reached the first cabin, a distance of sixteen miles, with a fine appetite for breakfast on venison steak, a common dish at that day in every log hut. The remaining portion of the ride was performed by the light of the sun and without further adventure."

H. E. H.

Boston Med. and Surg. Jour., 1849, vol. xli.

Hill, Edward Henry (1844–1904).

This man, whom we may call the founder of the Central Maine Hospital, was born in Harrison, Maine, in 1844. He was educated at Bridgton Academy, at Bates College, in the class of 1863, and graduated at the Harvard Medical School in 1867. He began practice at Durham, Maine, but soon moved to Lewiston, where he entered into partnership with the well known Dr. Garcelon, later on governor of Maine, who left the medical cases to his partner, foreseeing the wonderful part which surgery was soon to play.

No life of Dr. Hill would be complete without proper mention of his energetic force in hospital work in the Central Maine Hospital. The Maine General Hospital, at Portland, had a field of its own, but there was imperative need of an emergency hospital in the cities of Auburn and Lewiston. For years the subject was agitated, a small one was established, but it soon degenerated into a mere pest house. One plan after another fell through, but Dr. Hill in 1871 printed an article on this topic which at once attracted great attention. His suggestion was to tax every person five cents a week to care for a hospital. This scheme fell through, but the frequency of accidents without any place for emergencies became more acutely felt as time went on. Thus, at the State Fair, near Lewiston, a woman had to be delivered of a child in a horse stall on the straw; a man picked up in the streets died on a table in the City Hall. Dr. Hill kept the agitation going for seven years, yet there was no hospital. Finally he made up his mind that if there was to be no public hospital he would have one of his own; he therefore bought a house with land around it, paying down, personally, what he could. Public sentiment was at last aroused. With the house and land to show, the Legislature at last helped, and the Central Maine Hospital was a reality.

He also participated actively in the discussions of the Maine Medical Society, for which it has become so well known throughout the United States. His remarks, being generally off hand, for in those days no abstracts were

studied before hand, were always to the point, and instructive; he told what he had seen personally at the bedside and never echoed the books. One of his best papers was on "Perineal Urethrotomy," read before the society in 1885.

As surgeon he was an excellent operator and performed most of the capital operations of the day. In 1872 Dr. Hill married Miss Charlotte C. Thompson by whom he had two children.

In 1895 he made an interesting visit to Europe. Some delay and exposure at the custom house in returning brought about a relapse of his old arthritis, contracted ten years before from exposure while out driving to see a patient. He suffered terribly until death at last released him on Sunday, July 17, 1904. J. A. S.

Trans. Maine Med. Assoc., 1904.

Hill, Hampton Eugene (1850–1894).

Of an investigating nature in childhood, and valuable as a surgeon in his medical life, Hampton Eugene Hill was born in Mount Vernon, Maine, April, 1850, the eldest son of John and Doreas Hill, both of whom possessed originality of character.

He early developed a curious fondness for studying animals, alive or dead. When he was ten years old his parents moved to Biddeford, Maine, where he studied in the High School, then worked in a drug store and finally obtained a similar position in Portland. While here he began to study medicine at the Portland School for Medical Instruction, then at the Medical School of Maine, finally graduating at Ann Arbor in 1871.

At the urgent request of his uncle, Dr. Hiram Hovey Hill, of Augusta, Maine, he settled there as his assistant, but possibly the death of his wife, Lizzie Homan, three months after their marriage, saddened his life and he was glad to return to Biddeford where his parents lived. While at Augusta, it may be added, he served as demonstrator of anatomy at the Medical School of Maine. He was soon in active practice at Biddeford, and had all that he could attend to. He married a second wife, Mrs. Myra Manseur, of Corrinna, Maine, whose death, after a surgical operation performed by his skillful hands, occurred a few years later on.

This severe trial, and the unusual sadness of this unique ease, combined to hasten Dr. Hill's death. His actual working life lasted hardly twenty years, for at one time he had to pass more than a year in Dakota on account of his health, but in that period he did great things.

He was a member of the Maine Medical Association, and read before it two remarkable papers, one in 1871 on "Popliteal Aneurysm" and the other in 1884 on "Six Unusual Ovariotomies." Among his surgical feats were thirty-four laparotomies with but four deaths, and twenty-four consecutive ovariotomies without the loss of a patient.

He onee removed a uterine fibroid weighing forty-seven pounds. He was not a dashing operator, but very exaet, and earried everything through successfully. He took infinite pains in every operation, prepared every bandage, disinfected every instrument, threaded every needle, and in his urgent eases remained with the patient until the danger was passed.

As physieian and surgeon he was one of the elect. His last days were darkened with sorrow from which we hesitate to lift the veil. His work was done; he gradually passed away, leaving among the medical men of Maine a memory of his remarkable work. On Tuesday, January 9, 1894, he ceased to live. J. A. S.

Buffalo, M. & S. J. 1894, xxxiii.
Trans. Maine Med. Assoc. 1892-4, xi.

Hill, Hiram Hovey (1810–1889),

This genius in medicine was born in Turner, Maine, April 30, 1810, and

here he passed his youth, manifesting unusual fondness for investigations in natural history. His powers of observation were early developed, and he was soon recognized as a boy bound to get at the bottom of everything, his anatomical studies, even at the age of twelve, being suggestive of the future.

He had an ordinary school education, and at seventeen went to Augusta as clerk to his grandfather, register of deeds. In that office he had access to books, and devoted his spare time to Latin, natural history and the construction of apparatus. He lived at one time with Dr. Dexter Baldwin, of Mount Vernon, and from seeing him ride about, he got the desire of being a doctor. At the age of twenty-one he studied with Dr. Gage, of Augusta, Dr. Amos Nourse of Bath, and Dr. John Hubbard, of Hallowell, who was destined to be governor of Maine. After attending two courses of lectures at the Medical School of Maine he graduated at the University of Pennsylvania Medical School in 1836 and, returning to Augusta, opened an office in which he practised for fifty-three years.

A mechanical genius, he turned early to surgery, and did many successful operations at a time when such were regarded as nothing short of miraculous. He invented surgical instruments which proved of great utility and value. He was a member of all the old Maine Medical Societies, and later on one of the founders of the Maine Medical Association, one of its early presidents, and aided largely in building up the Medical School of Maine and the Maine General Hospital. Among his papers read before the Maine Medical Association was one on "Cystitis" in 1875. Perhaps his best paper was on "A Case of Popliteal Aneurysm cured by Pressure."

Soon after beginning practice he married Sarah Ann Carpenter, of Augusta, and she dying in 1874, he married in 1880 Clara Lothrop Dalton, of Norridgwock, but he had no children.

Personally I recall Dr. Hill as tall and slim, with a long face, clean shaved upper lip, long beard, a keen aspect, and a man full of talk. As Carlyle says, he was a loose talker, meaning that his words flowed long and even, yet always full of sense.

Hill was honored with the A. M. from Colby in 1883. Although apparently as well as he had been for some time, in October, 1889, when making a call in consultation he fell on a dark stairway and injured his right hip.

From this injury he was not to recover, but, confined first to his house and then to bed, he gradually failed and died December 2, 1889, conscious to the last, at 2.30 in the afternoon.

Hill was a remarkably interesting man, and it is to be regretted that more intimate details of his life are not at hand.

J. A. S.

Trans. Maine Med. Assoc., 1890, vol. x.

Hill, William Nevin (1857–1908).

William Nevin Hill was born December 30, 1856, and died December 25, 1908. He practised medicine in Baltimore continuously for thirty-three years, but during the years of small-pox epidemic became a specialist in the treatment of that disease, and devoted himself heroically to the suffering poor among whom it was raging, taking the disease himself as an incident to his work. Hill graduated at the Washington University in 1874 and afterwards at the College of Physicians and Surgeons, being then only eighteen years of age. He was an enthusiast in matters of civic duty, taking special interest in political reforms. He was a prolific letter writer on such questions, his articles being marked by originality and force. He was a member of the Medical and Chirurgical Society of Maryland.

In the last two years of his life he was appointed by the health commissioner of Baltimore City to have charge of the work of exterminating mosquitoes.

This he undertook with his usual conscientious and original effort, devoting himself, literally, day and night, for he prepared a series of stereopticon lectures, of which he gave over sixty at night, in the first winter of his work, after toiling strenuously in the field with his force during the day, directing the draining of pools and the inspection of premises throughout the entire city. The relief from the pests the first summer was enjoyed by the people, who attributed to Dr. Hill full credit for his labors. While engaged in his work he was stricken and shortly afterwards died (some brain trouble, a tumor I think), at the Enoch Pratt and Sheppard Hospital. He was the son of the late William Hill and Jane Woodside of County Antrim, Ireland. In 1896 the doctor married Madeline Scott, who died before him, leaving one child, Dorothy M. Hill, who survived him. Hill was an omnivorous reader with an ineffaceable memory which made him the living encyclopedia of a large circle of devoted friends. His influence in the community was wonderful, and the force of his personality far-reaching in its effects. Through his suggestions and plan of organization the city of Baltimore secured the National Drainage Congress of 1907. Though often worried by opposition he seemed unable to understand any one thinking of personal risk or reputation when the civic good was at stake.

W. J. O.

Himes, Isaac Newton (1834–1895).

Isaac Newton Himes, a prominent physician of Cleveland, Ohio, was born at Shippensburg, Pennsylvania, December 4, 1834. He was educated in the University of Pennsylvania and in Jefferson College, at Canonsburg, Pennsylvania, from which latter institution he received in 1853 the degree of A. B. and in 1856 that of M. A. His medical education was acquired in the University of Pennsylvania and in the College of Physicians and Surgeons, New York City, whence he graduated in 1856. In 1861 Dr. Himes began the practice of medicine in Chilicothe, Ohio, but the outbreak of the Civil War attracted him to military service, and he filled the position of an assistant surgeon until about the close of the war. Two years were then spent in study and travel in Europe, and on his return the United States private business claimed his time for several years and one year was spent in San Francisco. But in 1871 he settled in Cleveland and resumed the practice of medicine, being at once elected to the chair of physiology and pathology in the Cleveland Medical College, which position he served for ten years. On the reorganization of this college in 1881, when it became the medical department of the Western Reserve University, Dr. Himes was elected to the chairs of morbid anatomy and orthopedic surgery. The following year he was again transferred to the chair of pathology, in which position he continued in active service until his death. He was also for many years visiting physician to the City Hospital (now Lakeside Hospital) of Cleveland.

Dr. Himes was a member of the Ohio State Medical Society and was at the time of his death president of the Cleveland Society of Medical Sciences.

He married, in 1878, Mrs. Mary Vincent Reid, daughter of John A. Vincent, of Cleveland.

A man of exceptional education and attainments, Dr. Himes made but few communications to the medical journals of his day. Among these we may refer only to a "Report of Progress in Physiology and Pathology" "Columbus Medical Journal," vol. xv, 1885) and "Remarks and Cases Connected with Medical Examinations for Life Insurance."

He died of cardiac disease in Cleveland, April 1, 1895.

An excellent portrait of Dr. Himes was presented by his widow to the Cleveland Medical Library Association, of which he was an original and zealous member.

H. E. H.

Transactions of the Ohio State Medical Society, 1895.

Hingston, William Hales (1829–1907).

Dr. Hingston was the first son of Samuel James Hingston and his second wife, Eleanor McGrath, of Montreal. He was born June 29, 1829, at Hinchinbrook, near Huntingdon. His father was lieutenant-colonel of militia and a native of Ireland. The boy was educated at the local grammar school, conducted by John—afterwards Sir John—Rose, and at thirteen went to the College of the Sulpicians in Montreal. He was obliged to leave school to seek employment and was apprenticed to a druggist.

In 1847 he entered McGill University and graduated in 1851, afterwards going to Edinburgh and studying under Simpson and Syme; to London where he entered at St. Bartholomew's Hospital, and to Dublin where he worked with Stokes, Corrigan and Graves. A visit to Paris, Berlin, Heidelberg, and Vienna completed his travels, and he returned to Montreal in 1853. The following year there was an outbreak of cholera, and it was during that epidemic Dr. Hingston laid the foundation of a practice which he preserved and developed until the day of his death.

In 1860 he was appointed to the staff of the Hôtel Dieu. His first operation was a resection of the elbow-joint, which was new in Europe at the time, and had not been done previously in Canada. In 1872 he was the first to remove at one operation the tongue and lower jaw. He was a great surgeon when greatness in surgery consisted in courage, decision, and rapidity in operation, but no surgeon trained in that hard school has ever been able to master the meticulous routine of modern asepsis. Dr. Hingston never entirely acquired the technic; indeed he was never fully convinced of its importance.

Sir William was a Roman Catholic in religion, an Irishman by birth, a gentleman by nature, and spoke French as well as English. Consequently he was high in the councils of the church and an important person in the various medical interests which that body controls in Quebec. In 1882 he became professor of clinical surgery in Victoria University where he had been giving clinical lectures without an appointment since 1860. Five years later he became dean, and occupied the chair till the union of Victoria and Laval in 1891. From that time till his death he occupied the chair of clinical surgery in Laval.

He was three times president of the Montreal Medico-Chirurgical Society, and in 1892 delivered the address in surgery before the British Medical Association; in 1900 he was made honorary fellow of the Royal College of Surgeons, (London).

Sir William Hingston had also a public career. He was mayor of Montreal in 1875, and was appointed to the Senate in 1896. The previous year he had been created knight bachelor. In addition he had large financial interests and acquired a considerable fortune. He was well known outside of Canada, and moved with freedom in the larger world, always impressing by-standers with a sense of ease, dignity and kindliness.

Sir William married Margaret Josephine, daughter of the late Hon. D. A. Macdonald, lieutenant-governor of Ontario, and had four sons and a daughter. The eldest son studied for the priesthood in the Society of Jesus; the second son, Donald, became a doctor on the Hôtel Dieu Staff.

The father died in Montreal, Feb. 19, 1907, in the seventy-ninth year of his age, the immediate cause of his death

a gastro-enteritis induced probably by ptomaine poisoning. A. M.

Hitchcock, Homer O. (1827–1888).

Homer O. Hitchcock, surgeon and gynecologist, was born in Westminster, Vermont, January 28, 1827, and had his general education in common schools and Dartmouth College (A. B., 1851) (A. M., 1854). After serving as principal of Axford Academy, New Hampshire (during 1852–3), he took one course at Dartmouth Medical College and one at the College of Physicians and Surgeons, New York, receiving his M. D. from the latter in 1855. He then served as house surgeon in Bellevue Hospital for fifteen months, and began practice in Kalamazoo, Michigan. In 1873 he was president of the Kalamazoo Academy of Medicine; in 1872 president of the Michigan State Medical Society; 1873–78 president of the Michigan State Board of Health.

Hitchcock had a distinguished appearance, about six feet tall, large head, fine blue eyes, strong face, a powerful voice, made more emphatic by a partially controlled habit of stuttering. His early training made him able to think on his feet and speak with convincing power and also made him a writer of unusual ability. He will probably be longest remembered for his earnest efforts in the behalf of the establishment and maintenance of the Michigan State Board of Health. On September 16, 1856, he married Fidelia Wellman, of Cornish, New Hampshire, who died in 1874 and by whom he had three children, one became Dr. C. W. Hitchcock. In 1875 he married Kate B. Wilcox, by whom he had one son. Homer O. Hitchcock died in Kalamazoo, Michigan, December 7, 1888, from organic brain disease.

Papers:

"Death from Air in the Circulation." ("Transactions American Medical Association," vol. xv.)

"Embolism of Cerebral Arteries." ("Detroit Review of Medicine and Pharmacy, vol. ii.)

"Ulcerating Epithelioma of the Uterus." (Ibid., vol. vii.)

"Removal by Ecraseur of the Body of the Uterus for Three Years Inverted by Submucous Fibroid Tumor." ("Detroit Lancet," vol. i.)

"Case of Sarcoma of the Ovary; Removal; Death on the Fourth Day (From Tetanus)." ("American Lancet," vol. xi.)

"Hernia Complicated with Hydrocele and Hematocele; all Cured by Operation." ("Medical Independent," vol. iii.)

"The Fertility of the Native American of the Present Generation." ("Michigan University Medical Journal," vol. ii.)

"Criminal Abortion." ("Transactions Michigan State Board of Health," 1876.)

"Heredity." (Ibid., 1877.)

L. C.

Representative Men in Mich., West. Biographical Co., 1878, vol. xiv,

Hobbins, Joseph (1816–1894).

Joseph Hobbins was born in Wednesbury, Staffordshire, England. His father served in the English navy and was dispatch bearer to Lord Nelson at the battle of Trafalgar.

Hobbins gained his early education at Colton Hall under the direction of one Daniel Sheridan, a relative of Richard Brinsley Sheridan, and graduated at Queen's College, Birmingham, where he distinguished himself by winning a gold medal in 1838. Later he entered Guy's Hospital in London and received there his college diploma permitting him as a licensed physician to study in the hospitals of Edinburgh, Dublin, Brussels and Paris. It was to fit himself for his life-work that he came to America to travel and study. On the way over he met Sarah Badger Griffin Jackson of Newton, Massachusetts, and was married to her in England October 11, 1841. In 1854 the doctor, with his wife, children and servants, again sailed for America and came direct to Madison, Wisconsin.

As a general practitioner, Dr. Hobbins worked in Wednesbury, England, Brookline, Massachusetts, and in Madison, where he soon attained his chief reputation. He not only loved his profession and stood stoutly on its old-time code of ethics, but also had a keen appreciation for the best in art, literature and science. Of old English authors he was especially fond and also sang the old English and Scotch ballads with power and sweetness. Many of his addresses on horticultural and medical topics reach a high degree of literary style.

As a practical horticulturist he did much to encourage the planting of trees and shrubbery to beautify the city streets, and in the Northwest he was known as the "Father of Horticulture."

When the War of Secession broke out, he was prominent as a supporter of the Union and organized the medical corps at Camp Randall, where he had charge of 3,000 sick Confederate prisoners.

He had the old-time hospitable habit of the English, loving to see his friends around him. He died at Madison January 24, 1894, at the age of seventy-eight.

The first wife of Dr. Hobbins died at Madison December 13, 1870. On April 16, 1872 he married Mary McLane, daughter of Louis McLane of Delaware.

Three of the six children of the first marriage survived him. Louis McLane Hobbins of Madison was the only child of the second marriage.

Memberships, titles and degrees:

Member, Royal College of Surgeons, London; Royal Geographical Society, London.

Gold medalist, Royal School of Medicine and Surgery, Queen's College, Birmingham, England. Doctor of medicine, Columbia College, Washington, District of Columbia. Fellow of the Massachusetts Medical Society; Member of Wisconsin State Medical Society. B. J.

Madison Literary Club Tribute to its Founder, February, 1894

Madison Literary Club's Anniversary Book, 1904.

Portrait in State Historical Museum

Hodge, Hugh Lenox (1796–1873).

The name of Hugh Lenox Hodge, the obstetrician, has become indissolubly connected with a pessary, and how the man came to invent the pessary, and what the instrument meant is a pleasant bit of biography. Hugh Hodge was the son of Dr. Hugh and Mary Blanchard Hodge. His father, after heroic efforts to help, fell a victim in the yellow fever epidemic of 1797 and died in 1798 leaving his wife with one boy, Charles, besides Hugh. She used fine self-denial to educate them and at fourteen Hugh entered Nassau Hall, Princeton, and studied medicine afterwards with Dr. Caspar Wistar, matriculating at the University of Pennsylvania, taking his M. D. there in 1818. Very anxious to go to Europe, he tried to get the money by taking a surgeoncy on a ship going to India but returned in two years minus the money but richer in experience through work in the cholera hospitals and studying tropical diseases. For one year he was exclusively physician to the Southern Dispensary and the Philadelphia Dispensary, then he took Dr. Horner's anatomical class while the latter was in Europe, and was later a lecturer on the principles of surgery at the Medical Institute. Three years after, being well established in practice, he married Margaret E., daughter of John Aspinwall, a New York merchant, and had seven sons.

When Dr. Dewees resigned the chair of obstetrics in the Medical Institute, Dr. Hodge was elected and also held a physicianship to the lying-in department of the Pennsylvania Hospital. Year by year his private practice increased and he began to relinquish obstetrics and devote himself almost exclusively to treating female diseases and, following up Dewees' work in inventing and using pessaries for uterine displacement, devoted himself for years to the discovery of the proper materials and shapes, having hundreds made of various kinds. The case which first attracted his attention to the value of mechanical support was that of a woman who in 1830 came to the hospital ward

with a diagnosis of hepatic disease. The usual treatment, including a course of mercury, left her worse. The resident physician on making an examination found decided retroversion of the uterus. Hodge introdueed one of the then new Dewees pessaries and to his astonishment the liver complaint was eured and the woman speedily restored to health. Sitting one evening in the university "his eyes rested on the upright steel support designed to hold the shovel and tongs which were kept in position by a steel hook and as he studied its supporting eurve the longed-for illumination eame and the lever pessary was the result." Afterwards he perfected his discovery by giving the instrument its double eurve and making it closed. He also modified the eclectic forceps and Baudeloeque's cephalotribe and his craniotomy scissors. Some thirty years' experience of hospital and private practice made his book on "Diseases Peculiar to Women" (1860) particularly valuable. On the resignation of his professorship, he devoted himself to his great work, "Principles and Practice of Obstetries" (1864), which he dedieated to the memory of James and Dewees and which fulfilled its promise of being "in opposition to the most admired authors." From its philosophical character as well as its original teachings and illustrations it ranked among the first of its kind both in Amerieа and abroad.

He was led to resign his professorship on account of failing eyesight, a weakness in the optie nerve which could not be relieved by surgical skill. At last he was unable to read and write, but his will was indomitable. For his great obstetrical work he had to rely on an amanuensis and such help as his medical confrères gladly rendered. Sixty-seven years old, yet with perfect faculties, he did all the professional work which could be done without eyes, and the poor, the hard-up people, the students could still count upon finding him in serene mind, tender and sympathetic and with loyal unswerving trust in God. He generously at this time presented the college with his valuable museum together with his collection of material used in making the one hundred and fifty-nine illustrations in his book It is kept separate and under the curatorship of the professor of obstetries.

The day before his last illness he seemed in his usual health and was working till late afternoon with professional engagements and preparing an article on "Cephalotripsy." He went to bed perfectly well but near midnight was seized with nausea, faintness and heart failure and died twenty-six hours later, on February 26, 1873.

Among his interesting articles and books were:

"Aneurysm." ("American Cyclopedia of Practical Medicine and Surgery.")

"Puerperal Fever in the Pennsylvania Hospital," 1883.

"Pathology and Therapeutics of Cholera Maligna," 1833.

"Diseases Peculiar to Women," 1860.

"The Principles and Practice of Obstetries," 1864.

"Feticide," 1869.

"Memoirs on Prof. Dewees and on Prof. James," and two articles on "Syndactilism of the Fetal Head," 1870–1.

He was a fellow of the College of Physicians, Philadelphia; professor of obstetries, University of Pennsylvania; emeritus professor in 1863; LL. D., New Jersey; lecturer on the principles of surgery in the Philadelphia Medical Institute.

D. W.

Hist. of the Penna. Hospital. Norton and Woodbury, 1895.
Standard Hist. of the Med. Profession in Phila. F. P. Henry, 1807.

Hodgen, John Thompson (1826–1882).

John Thompson Hodgen, surgeon, was born at Hodgenville, La Rue County, Kentucky, on the nineteenth of January, 1826. His father was Jacob Hodgen; his mother, Frances Park Brown.

His early years were spent in the common schools of Pittsfield, Pike County, Illinois, and his collegiate course at Beth-

any College, West Virginia. In his twentieth year he entered the medical department of the University of the State of Missouri.

He graduated in March, 1818; was assistant resident physician of the St. Louis City Hospital from April, 1848, to June, 1849, and demonstrator of anatomy in his alma mater from 1849 to 1853. He was appointed to the chair of anatomy by Joseph Nash McDowell, which position he occupied from 1854 to 1858. From 1858 to 1864 he filled both chairs of anatomy and physiology.

In 1864, the Missouri College building having been seized by the government, and Dr. McDowell, its head, having gone south, Dr. Hodgen transferred his allegiance to the St. Louis Medical College, where he filled respectively the chairs of physiology and of anatomy, and in 1875 assumed the chair of surgical anatomy, of fractures and dislocations, and was created dean of the faculty, which position he held at the time of his death. From 1864 to 1882 he taught clinical surgery at the City Hospital.

During the Civil War he served in the capacity of surgeon-general of the Western Sanitary Commission, 1861; surgeon, United States Volunteers, 1861 to 1864; and surgeon-general, State of Missouri, 1862 to 1864. He served as consulting surgeon to the City Hospital from 1862 to 1882; was president of the St. Louis Medical Society in 1872, president of the State Medical Association in 1876, and president of the American Medical Association in 1880.

Quick and clear in apprehension, terse and forcible in expression, he was a powerful debator whom no sophistry confused, and one who never lost sight of controlling principles, or confounded ideas with facts. In the International Medical Congress in 1876, at Philadelphia, he won substantial honors, and made a record that stamped him as a great man.

He possessed decided mechanical genius, his inventions most worthy of note being a wire splint for fracture of the thigh; suspension cord and pulleys permitting flexion, extension and rotation in fracture of the leg; forceps dilator for removal of foreign bodies from the air passages without tracheotomy; cradle-splint for treatment of compound fracture of the thigh; wire suspension splint for injury of the arm; double action syringe and stomach pump; hair-pin dilator for separating lips of the opening in the trachea and as a guide to the tracheal tube.

His chief contributions to medical literature were: "Wiring the Clavicle and Acromion for Dislocation of the Scapular End of the Clavicle;" "Modification of Operation for Lacerated Perineum;" "Dislocation of Both Hips;" "Use of Atropia in Collapse of Cholera;" "Three Cases of Extra-Uterine Fetation;" "Skin Grafting;" "Nerve Section for Neuralgia;" "Report on Antiseptic Surgery;" "Shock, and Effects of Compressed Air, as Observed in the Building of the St. Louis and Illinois Bridge."

He died in his fifty-seventh year, April 28, 1882, of acute peritonitis, caused by ulceration of the gall-bladder, after a short and painful illness.

He married a Miss Mudd, of Pittsfield, Illinois, who survived him.

A. J. S.

Med. News, Phila., 1882, vol. xi.
Med. Rec., N. Y., 1882, vol. xxi.
Tr. Am. Med. Assoc., Phila., 1882, vol. xxxiii.
The St. Louis Med. Review, May 11, 1907 (Supplement) (portrait).
Med. Mirror, St. Louis, 1890, vol. i (port.).

Holbrook, John Edwards (1794–1871).

Both anatomist and naturalist, he was born at Beaumont, South Carolina, December 30, 1794, the son of Silas Holbrook, a native of Massachusetts, through whom he was descended from old New England stock. His mother was Mary Edwards of South Carolina.

His early education was received at Wrentham, Massachusetts, and at Providence, Rhode Island. In 1815 he graduated from Brown College with the degree of A. B., and in 1818 he took his M. D. at the University of Pennsylvania.

He was a member of the Royal Medical

Society of Edinburgh; of the Royal Society of Northern Antiquarians, Copenhagen; of the Society of Naturforschende Freunde, Berlin; and the Academy of Natural Sciences, Philadelphia.

In 1824 he was elected to the chair of anatomy in the Medical College of South Carolina.

Dr. Holbrook began to practise in Boston, Massachusetts. After a brief stay in this city he went to Europe and spent two years at Edinburgh and about two more in England, France and Germany. While in Paris he spent several months studying in the Jardin des Plantes where he become acquainted with Cuvier and formed intimacies with such men as Valenciennes, Duméril and Bibron, from whom he imbibed the inspiration of his life.

He returned to America in 1822 and settling at Charleston, South Carolina, practised there. Here his ability and his irresistible personal charm soon won for him a full measure of success. So delicate and sympathetic was his nature that he never attended an obstetric case nor performed an surgical operation if it was possible to avoid it because of the pain it caused him to witness the sufferings of others.

In 1824 he was active in the establishment of the Medical College of South Carolina, in which institution he lectured for thirty years. Unsurpassed as a lecturer, possessing in an eminent degree the faculty of uniting accurate description with a rare grace of expression he made the dull details of anatomy glow with an unsuspected beauty. But his real life work was his "Monograph upon the Reptiles of the United States." This work was completed in 1842 and embraced descriptions and illustrations of one hundred and forty-seven nominal species, few of which "have proved to be other than real species in the present sense of the figure." Dr. Holbrook named twenty-nine new species most of which are still retained with his specific names.

He subsequently devoted his attention to a companion work on fishes. His original plan comprehended a description of the fishes of South Carolina, Georgia and Florida, but later was narrowed down to the fishes of South Carolina. After the publication of this work was begun, a fire in the "Artists' Building" in Philadelphia interrupted its progress. A new edition was then undertaken with finer and more accurate illustrations, but only a portion was completed when the outbreak of the Civil War terminated his scientific labors.

He married Miss Harriott Pinckney Rutledge in 1827. He had no children. He died in his sister's home at Norfolk, Massachusetts, in 1871.

His chief works were "American Ichthyology," part ii, New York and London, 1847; "Ichthyology of South Carolina," Charleston, South Carolina, 1855; "Ichthyology of South Carolina," vol. i, Charleston, South Carolina, 1860;

R. W., Jr.

An excellent biographical sketch by Theodore Gill was published by the National Academy of Science in vol. v., Biographical Memoirs.

Holder, Joseph Bassett (1824–1888).

Joseph Bassett Holder was perhaps the best known naturalist of his time in New England. A son of Aaron L. and Rachel Bassett Holder, he was born at Lynn, Massachusetts, October 26, 1824, a descendant of Christopher Holder, who, in 1656, introduced the first Society of Friends into America. He studied medicine at Harvard, was the founder of the Lynn Natural History Society, and early made collections and lists of the fauna of Massachusetts. A voluminous writer, he was the author of a number of important books, and brought his ripe experience into play at the American Museum of Natural History, New York City, entering into the work with all the ardor of his chief, Prof. A. S. Brickmore, and continuing there until his death in New York in 1888. He devoted the best years of his life to the arduous work of upbuilding and caring for the big collections which soon came to hand.

He was serving as an army surgeon at

Fort Monroe, when asked to join Brickmore, and became assistant superintendent, and later curator of zoology. Dr. Holder was a friend of Professor Agassiz and Spencer A. Baird, and in 1859 went to Florida at the request of these naturalists to make a zoological survey of the outer reef. He lived at Fort Jefferson, or Tortugas, where he made many interesting discoveries regarding the growth of corals, and sent collections to various educational institutions.

His best known writings are "History of the North American Fauna" (1882); "History of the Atlantic Right Whales" (1883), and "The Living World" (1884).

During the first few years Bickmore and Holder, with the assistance of Dr. Holder's son, Charles Frederick, carried on the entire work of the institution.

From the New York Even. Post, April 29, 1911.

Hole, John (1754–1813).

John Hole was born in Virginia and read medicine with Dr. Fullerton. Responding to the first call for troops in the Revolutionary War he went with the Virginia militia to the general camp near Boston, was commissioned surgeon's mate in the Continental Army, and continued in active service until the close of the war. He fought at Bunker Hill, and was present when Washington assumed command of the army. Dr. Hole was on the medical staff of Gen. Montgomery when the General fell mortally wounded at the storming of Quebec in 1775.

After the war he was settled in New Jersey, where he had married in 1778.

In 1790 he went to Cincinnati and began practice there in the winter of 1792–3, inoculating for small-pox, the practice having been introduced into Cincinnati and vicinity for the first time. In the spring of 1797, he purchased a tract of land in Washington Township, Montgomery County, Ohio, paying for it with Revolutionary land warrants, built a cabin and removed his family to the new home. In those days anything was more plentiful than money, and produce of all kinds accepted in payment for service as shown by the following bill: "I owe Dr. John Hole one pair of leather shoes for a boy child.

Benj. Robbins."

At the onset of the War of 1812 he was tendered a position on the medical staff of the army, which failing health compelled him to decline. He died January 6, 1813.

"The Pioneer Doctor.," By W. J. Conklin, M. A., M. D.
Drake's "Discourses."

Holloway, James M. (1834–1905).

Born in Lexington, Kentucky, July 14, 1834, he went with his father, William P. Holloway, at the age of twelve, to Grand Gulf, Mississippi. His medical studies were completed in the University of Louisiana, now Tulane University. After graduating there in 1858 he spent one year as interne at Touro Infirmary and later became a private student with Dr. Warren Stone at the New Orleans Charity Hospital. Dr. Holloway began practice in Madison County, Mississippi, but at the beginning of the Civil War entered the Confederate service as a private, soon after becoming a surgeon with the rank of major. After serving with distinction in this capacity for one year in the field he was placed in control of the hospital service at Richmond, Virginia, where he remained until the close of the war. He then came to Louisville and was appointed professor of anatomy in the University of Louisville, at the end of one year being transferred to the chair of physiology and medical jurisprudence which he resigned in 1867. Among other appointments he had the professorship of clinical and operative surgery in the Kentucky School of Medicine and also in the Louisville Medical College; the chair of surgery in the latter institution for eight years, resigning to accept the same chair in the Louisville Medical College and the Kentucky School of Medicine; in 1898 professor of surgery in the Kentucky University, medical department, which position he held until

his death, and in 1885 Centre College conferred upon him the M. A. degree. His most noted writing was a contribution to "Surgery by American Authors," edited by Roswell Park, upon "Diseases of the Veins."

Dr. Holloway gave his practice the closest attention and was renowned for his promptness in meeting all engagements; although a great sufferer from gout, rarely did it keep him from work and it was no unusual sight to see him visiting patients with his foot swathed in flannels. He was very much beloved by his clientèle and generally well liked by the profession. It is claimed that Dr. Holloway was the physician who suggested to the late Emil Scheffer, the pioneer manufacturer of pepsin, the substitution of the pepsin from the hog's stomach instead of that of the calf as an aid to digestion. In 1858 Holloway married Annie Warren and had five children. One of whom, Samuel Warren, also became a doctor.

J. G. S.

Holmes, Andrew Fernando (1797–1860).

Andrew Fernando Holmes was born in Cadiz, a contingency which arose from the capture by a French frigate of the ship in which his parents were sailing for Canada. Four years later he arrived in Montreal, and at fifteen began his medical studies under Arnold *père*. In 1819 he graduated at Edinburgh, then went to Paris for further study and returned to Canada where he was appointed physician to the Montreal General Hospital in 1821, the year of its foundation. From 1824 in the Medical Institution, and from 1829 in McGill medical faculty till his death in 1860, he was actively engaged in teaching. Dr. Holmes appears to have been a man of many accomplishments. He was professor of chemistry from 1824 till 1844; of botany during the same period; of the theory and practice of medicine from 1844 till the end. During the last eight years of his life he was dean of the Medical Faculty of McGill, and died suddenly on October 9, 1860.

Many of Dr. Holmes' writings are yet extant. Among them are his graduating thesis, "*De Tetano;*" papers upon "Intrauterine Crying of the Child;" "Fleshy Tubercle of the Uterus;" "Asiatic Cholera in Montreal;" "A Case of the Employment of Chloroform." ("British Medical Journal," vol. iii.)

Dr. Holmes was one of the founders of the Montreal Medical Institution, the earliest medical school in Canada, and which afterwards became McGill University. A. M.

Holmes, Edward Lorenzo (1828–1900).

Edward Lorenzo Holmes, born January 28, 1828, at Dedham, Massachusetts, graduated from Harvard College at the age of twenty-one and then taught in the Latin School of Roxbury, Massachusetts. He graduated in medicine at Harvard in 1854, later serving as interne in the Massachusetts General Hospital. After spending two years in Vienna he took up the practice of ophthalmology and otology in Chicago. He was a founder of the Illinois Charitable Eye and Ear Infirmary, and the head of its surgical staff until his death. He was also a founder of the Presbyterian Hospital and later one of its surgeons.

In 1860 he became lecturer on ophthalmology and otology in Rush Medical College, and was elected to a full professorship in 1867, in 1890 being elected president of the college, retaining this position until he resigned from the faculty on his seventieth birthday. He was a member of the American Ophthalmological Society for many years.

One of the pioneers of ophthalmology in the West, he exerted a powerful influence there.

He died of pneumonia, February 12, 1900, in Chicago. H. F.

Trans. Am. Ophth. Soc., vol. ix.
Journal Am. Med. Assoc., 1900, vol. xxxiv.
Ophth. Record, 1898, vol. vii.
Trans. Am. Ophth. Soc., vol. ix, (port.).

Holmes, Horatio Reese (1856–1896).

Horatio Reese Holmes, a man who bade fair to be the leading pioneer gyn-

ecologist of the northwestern States, was born in Polk County, Oregon, July 30, 1856, the son of Horatio Nelson Viscount and Nancy Porter Holmes, and was the youngest of five brothers. His ancestors came from the north of Ireland. He graduated from the medical side of Williamette University, 1877; from the Long Island Medical College in 1880, and afterwards attended post-graduate schools in New York City and Harvard University. He held the membership of the American Gynecological Society, British Gynecological Society, British Medical Association, and Oregon State Medical Society of which he was also president. His practice was exclusively gynecology and obstetrics, and from 1894 till death he was professor of gynecology in the Williamette University and to the Portland Hospital.

His chief characteristic was his earnest interest in his work and his putting aside all other business to equip himself for it.

His wife was Olivia Ernestine Swegle of Salem, Oregon, whom he married in 1877 and had one son, Guy Paul.

In the autumn of 1895 Holmes and his associates felt compelled to resign from the Portland Hospital Staff; a heated discussion followed and Holmes was attacked and shot in three places by a physician who sustained the management. It was probably in consequence of injuries received at this time that intestinal complications arose necessitating celiotomy in a bad state of health. He never rallied, and died from the operation on October 21, 1896.

He was the author of various gynecological articles in the "Transactions of the Oregon State Medical Society," 1892–3; "Ventral Fixation in Displacements of the Uterus," "Pacific Medical Record," February, 1893; "First Symphysiotomy on the Pacific Coast," "New York Journal of Gynecology and Obstetrics," July, 1893; "A Year's Work in Surgical Gynecology including Thirty-one Celiotomies without a Death or Stitch-hole Abscess," "Medical Sentinel," January, 1894; "A New Pelvic Drainage Tube," "Medical Record," March, 1893; "Ventro-fixation in Extreme Anterior Displacement of the Uterus," "Journal of American Medical Association," August 11, 1894; "Viburnum Prunifolium," idem, October 27; "Gonorrhea as an Etiological Factor in Diseases of Women," address before the Oregon State Medical Society, June 12, 1895.

H. A. K.

Trans. Am. Gyn. Soc., vol. xxii, 1897.
Med. Sentinel, Portland, Oregon, Nov., 1896.

Holmes, Oliver Wendell (1809–1894).

Oliver Wendell Holmes was born in Boston, August 29, 1809, and died there, October 7, 1894, the son of Abial Holmes, pastor of the first church in Cambridge. The geneology of the Holmes family dates from Thomas Holmes, a lawyer of Gray's Inn, London, in the sixteenth century, and the first Holmes who came to this country was John, one of the first settlers of Woodstock, Connecticut, in 1686. The mother of Oliver Wendell Holmes was Sarah Wendell, a descendant of Thomas Dudley, governor of Massachusetts Bay from 1634–40, and from 1645–50.

When Oliver was fifteen he was sent to Philip's Academy in Andover and afterwards entered Harvard College, from which he graduated with the famous class of 1829. Throughout his course he held a good record in scholarship and was also socially popular. After graduation he spent one year in the law school, and then turned to medicine, studying in the Harvard Medical School under Dr. James Jackson and his associates for two and a half years, and before taking his medical degree spending three years in Europe in the hospitals and lecture-rooms of Paris and Edinburgh. He took his medical degree, joined the Massachusetts Medical Society, and began to practise in Boston in 1836. In

the same year he won the Boylston Prize Essay for a dissertation on "Intermittent Fever in New England," and in the following year, two prizes for dissertations on the "Nature and Treatment of Neuralgia" and the "Utility and Importance of Direct Exploration in Medical Practice." In spite of these prize essays he built up only a fair practice. His literary talents kept him from devoting himself as completely as he might to the practical side of his profession, while his boyish spirit, his jokes and his verses tended to make patients turn to more serious, if less gifted, practitioners.

At a later period he forewarned his students: "'Medicine is the most difficult of sciences and the most laborious of arts. It will task all your powers of body and mind if you are faithful to it. Do not dabble in the muddy sewer of politics, nor linger by the enchanted streams of literature, nor dig in far-off fields for the hidden waters of alien sciences. The great practitioners are generally those who concentrate all their powers on their business." He had learned the truth of these rules not by the practise of them, but by suffering from the breach of them. When he said that the smallest fevers were thankfully received, the people who had no fevers laughed, but the people who had them preferred some one who would take the matter more seriously than they thought this lively young joker was likely to do. In this they were in error; for a more anxious, painstaking, conscientious physician never counted pulse nor wrote the mystic R. (Morse, vol. i, p. 159.)

For three years he was one of the physicians at the Massachusetts General Hospital. In 1838 he was appointed professor of anatomy at Dartmouth College and held this chair in 1839 and 1840. It obliged him to be there August, September and October. In 1842 he published two essays on "Homeopathy" which still rank as the most brilliant exposition given by an opponent of homeopathy. In 1843 he published his essay on the "Contagiousness of Puerperal Fever." This essay may justly be rated as a truly great contribution to medical science. Upon it rests Holmes's chief claim to a permanent reputation in medicine. In it he pointed out puerperal fever as frequently due to contagion conveyed by the hands of the physician from one mother to another, or from a case of erysipelas to the child-bed. His views were opposed by the leading obstetricians of his day, but have since come to be generally recognized. The essay was published several years before the extended researches of Semmelweiss on the same subject, who likewise met with opposition in Europe before his views were adopted. The rules for physicians engaged in obstetrics devised by Holmes are still eminently practical and valuable.

In 1840 Holmes married Amelia Lee Jackson, a daughter of Charles Jackson, formerly judge of the Supreme Court. Soon after he resigned his professorship at Dartmouth College in order to devote himself more strictly to practice. During the summer months, however, he continued its deliver lectures before the Berkshire Medical Institute at Pittsfield, Massachusetts, and lived there. He also engaged in teaching at the Tremont Street Medical School, where courses supplementary to those of Harvard Medical School were given. About this time he edited, in conjunction with Dr. Bigelow, an American edition of Marshall Hall's text-book on the "Theory and Art of Medicine."

In 1847, when thirty-eight, Holmes was elected to the newly established Parkman professorship of anatomy and physiology at the Harvard Medical School. The Hersey professorship, which had previously been held by John Warren and John Collins Warren, was transferred to Cambridge, and Jeffries Wyman was elected to fill the

chair. Holmes held the Parkman professorship for thirty-five years, until 1882, when he resigned. In 1871 a new professorship of physiology was created and the Parkman professorship became limited to anatomy. Holmes was dean of the Medical School from 1847–53, and as such was always accessible to students, ever ready with kindly counsel and disposed to be lenient.

He became very popular as a lecturer on anatomy, and noted for the witty allusions with which he enlivened his five weekly lectures delivered at one o'clock, an hour assigned him because it was the last of the five or six continuous hours of lectures which the student had to attend, and he alone of the lecturers could hold their attention at this time. Both Dr. D. W. Cheever and Prof. T. Dwight have given entertaining accounts of Holmes as a teacher of anatomy: "It is near one o'clock," says Dr. Cheever "and the close work in the demonstrator's room in the Old Medical School in North Grove Street becomes even more hurried and eager as the lecture hour in anatomy approaches. Four hours of busy dissection have unveiled a portion of the human frame, insensate and stark, on the demonstrating-table. Muscles, nerves and blood-vessels unfold themselves in unvarying harmony, if seeming disorder, and the 'subject' is nearly ready to illustrate the lecture. . . . The room is thick with tobacco smoke. The winter light, snowy and dull, enters through one tall window, bare of curtain, and falls upon a lead floor. The surroundings are singularly bare of ornament or beauty, and there is naught to inspire the intellect or the imagination, except the marvellous mechanism of the poor dead body, which lies dissected before us like some complex and delicate machinery whose uses we seek to know."

To such a scene enters the poet, the writer, the wit, Oliver Wendell Holmes. Few readers of his prose or poetry could dream of him as here in this charnel-house, in the presence of death. The very long, steep, and single flight of stairs leading up from the street below resounds with a double and labored tread, the door opens, and a small, gentle, smiling man appears, supported by the janitor who often has been called on to help him up the stairs. Entering, and giving a breathless greeting, he sinks upon a stool and strives to recover his asthmatic breath. . . .

Anon recovering, he brightens up and asks, "What have you for me today?" and plunges, knife in hand, into the "depths of his subject"—a joke he might have uttered. Time flies, and a crowd of turbulent Bob Sawyers pours through the hall to his lecture-room, and begins a rhythmical stamping, one, two, three, and a shout, and pounding on his lecture-room doors. A rush takes place; some collapse, some are thrown headlong, and three hundred raw students precipitate themselves into a bare and comfortless amphitheatre. Meanwhile the professor has been running about, now as nimble as a cat, selecting plates, rummaging the dusty museum for specimens, arranging microscopes, and displaying bones. The subject is carried in on a board; no automatic appliances, no wheels with pneumatic tires, no elevators, no dumb-waiters in those days. The cadaver is decorously disposed on a revolving table in the small arena, and is always covered, at first, from curious eyes, by a clean white sheet. Respect for poor humanity and admiration for God's divinest work is the first lesson and the uppermost in the poet-lecturer's mind. He enters, and is greeted with a mighty shout and stamp of applause. Then silence, and there begins a charming hour of description, analysis, simile, anecdote, harmless pun, which clothes the dry bones with poetic imagery, enlivens a hard and fatiguing day with humor, and brightens to the tired listener

the details of a difficult though interesting study.

And how he loved anatomy! as a mother her child. He was never tired, always fresh, always eager in learning and teaching it. In earnest himself, enthusiastic, and of a happy temperament, he shed the glow of his ardent spirit over his followers, and gave to me, his demonstrator and assistant for eight years, some of the most attractive and happy hours of my life.

During that autumn, writes Prof. Dwight, I frequently recited to Dr. Holmes, and saw the great patience and interest with which he demonstrated the more difficult parts of the skeleton. In November began the dreary season of perpetual lectures, from morning till night, to large classes of more or less turbulent students.

To make head against these odds he did his utmost to adopt a sprightly manner, and let no opportunity for a jest escape him. These would be received with quiet appreciation by the lower benches, and with uproarious demonstrations from the 'mountain,' where, as in the French Assembly of the Revolution, the noisiest spirits congregated. He gave his imagination full play in comparisons often charming and always quaint. None but Holmes could have compared the microscopical coiled tube of a sweat-gland to a fairy's intestine. Medical readers will appreciate the aptness of likening the mesentery to the shirt ruffles of a preceding generation, which from a short line of attachment expanded into yards of complicated folds. He has compared the fibers connecting the two symmetrical halves of the brain to the band uniting the Siamese twins.

One would think, from Dr. Holmes's wonderful facility of expression, that lecturing year after year on the same subject, the lectures would have been as child's play. But I am convinced that this was not so. "You will find," said he to me at the time that I succeeded him, "that the day that you have lectured something has gone out from you." To his sensitive organization I imagine that the trials incident to the tired, and in early years more or less unruly, class were greater than his friends suspected. I remember once his telling Dr. Cheever and myself how exceedingly annoying it is to the lecturer to have any one leave the room before the close. I often marvelled at the patience he displayed.

Holmes at an early period took an interest in the microscope. He was one of the early microscopists, and was a very good one. The instrument was not among the tools of the instructing physicians when he was studying in Paris, but soon afterwards it came into general use. He brought one home with him from Europe. It fascinated him, as indeed it did many another. He had a great taste for everything ingenious, and playing with this new machine devoured many an hour. He was forever taking his own to pieces and putting it together, and trying all sorts of experiments with it, both as to the mechanism itself, and as to the subjects of examination. How well I recollect the intense absorption with which he would thus pass long hours—hours which were not wasted, for "he was no mean authority on this subject in his day," says Dr. Cheever.

While a popular teacher, Holmes can scarcely be designated a scientific anatomist, since no discoveries, either in the field of microscopic or in that of macroscopic anatomy, are to be attributed to him. The nearest approach to a contribution to histology was a paper which he read at a meeting of a medical society in 1851, in which he described some cells at the ends of long bones. He was, however, always ready to give lessons in the use of the microscope before its value was generally appreciated. The mechanical skill which he showed in this aided him in inventing a stereoscope for hand use, which was much esteemed.

When reforms were inaugurated in the Harvard Medical School, after Pres. Eliot entered upon office, Holmes, although he believed in them at heart, was timid about radical changes, submitting to, rather than actively supporting them. While he was connected with the Medical School the question of admitting women came up. The suggestion met with much opposition and was finally abandoned. Prof. Dwight thus describes Holmes's attitude towards the subject:

"On this occasion" (exercises at the opening of the new building of the Harvard Medical School in 1883), after speaking in his most perfect style on woman as a nurse, with a pathos free from mawkishness which Dickens rarely reached, he concluded: "I have always felt that this was rather the vocation of woman than general medical, and especially surgical, practice." This was the signal for loud applause from the conservative side. When he could resume he went on: "Yet I myself followed the course of lectures given by the young Madame Lachapelle in Paris, and if here and there an intrepid woman insists on taking by storm the fortress of medical education, I would have the gate flung open to her as if it were that of the citadel of Orleans and she were Joan of Arc returning from the field of victory." The enthusiasm which this sentiment called forth was so overwhelming that those of us who had led the first applause felt, perhaps looked, rather foolish. I have since suspected that Dr. Holmes, who always knew his audience, had kept back the real climax to lure us to our destruction."

Holmes was well versed in standard historical medical works. He presented his private medical library, a collection of 1,000 volumes, to the Boston Medical Library, of which he was president for thirteen years. He describes these books as so dear to him that "a twig from some one of my nerves ran to every one." In 1860 he published an address on "Currents and countercurrents in medical science," and in 1861 incorporated with this his papers on "Homeopathy and Puerperal Fever," and several addresses to medical students, and in 1882, a volume of "Medical Essays," containing a few of those published in "Currents and Counter-currents" and some others. In 1874 appeared a sketch of the "Life of Jeffries Wyman," and in 1891 a "Tribute to Henry J. Bigelow, M. D."

As a practitioner, Holmes was opposed to overdosing. He believed in the self-limitation of disease. "From the time of Hippocrates," he states, "to that of our own medical patriarch, there has been an apostolic succession of wise and good practitioners, who place before all remedies the proper conduct of the patient." The misuse of drugs he expressed well by saying that if all the drugs in the Pharmacopœia, with a very few exceptions, were thrown into the sea, it would be all the better for mankind and the worse for the fishes.

Holmes began writing graceful verse and prose when in college, and continued actively productive till the close of his life. To his wit and skill as a writer is due his chief reputation, but this side of his life cannot be adequately entered on here.

After his resignation from the Harvard Medical School in 1882, he devoted himself to literary pursuits. In 1886, in company with his daughter, he made a trip to Europe, where he received much attention, and was given honorary degrees at Oxford, Cambridge, and Edinburgh. On his return to America he lived quietly in Boston and at his summer home at Beverly Farm until the end came.

In the "Boston Medical and Surgical Journal," 1894, October 11, vol. cxxxi, and in the catalogue of the Surgeon-General, Wash. D. C., will be found a list of his writings.

C. R. B.

The best biography of Holmes is that by Morse: Oliver Wendell Holmes, Life and Letters, 1886.
On Holmes as an anatomist, see:
D. W. Cheever's Oliver Wendell Holmes, the Anatomist, Harvard Graduates Magazine, December, 1894, vol. iii.
T. Dwight, Reminiscences of Dr. Holmes as Professor of Anatomy, Scribner's Magazine, January, 1895, vol. xvii.
On Holmes as a physician:
Oliver Wendell Holmes, Johns Hopkins Bulletin, Oct., 1894, W. Osler.
J. H. Mason Knox, Jr., M. D., The Medical Life of Oliver Wendell Holmes, Johns Hopkins Bulletin, February, 1897, vol. xviii.
The best bibliography of the works of Holmes is that of George B. Ives, 1897.

Holston, John G. F. (1809–1874).

He was born in Hamburg, Germany, and his father was also a physician, but the opposition of John's family to his desire to follow the same calling caused him to leave home at an early age. As a cabin-boy he visited England, the East Indies, China, and other Asiatic countries, finally landing in Philadelphia. The cholera was then raging there and he volunteered as nurse in a cholera hospital, thus obtaining a first introduction to his profession.

After the epidemic he started on foot to the West, with a companion who robbed and deserted him in the vicinity of Canonsburg, Pennsylvania. Penniless and friendless, he found employment in a brick-yard near Washington college, where his knowledge of Latin and Greek attracted the attention of the students, and finally reached the ears of the president, who sent for the needy scholar, and eventually made it possible for him to enter the college, from which he was graduated with high honors, and from which later he received the degree of A. M. for his scientific achievements.

He graduated in medicine from Cleveland College, Ohio, and practised for some years in that State, being called to the chair of surgery in the National Medical College at Washington.

When the Civil War began Dr. Holston entered the Federal Army as surgeon of volunteers, and was soon promoted to the position of medical director on Grant's staff.

At the close of the war he resumed practice in Zanesville, Ohio, but on the election of Gen. Grant to the presidency, was induced to return to Washington where he was appointed professor of anatomy in Georgetown Medical School, and acted as family physician to the president. Here he died May 1, 1874, after a long and painful illness following a stroke of paralysis, aged sixty-five.

He married Mary Ann Campbell, by whom he had eight children, the eldest of whom, John G. F. Holston II, and his son, John G. F. Holston III, became doctors also.

Dr. Holston was a man of varied and profound learning, not only in his chosen profession, but in languages, mathematics, astronomy, and the physical sciences. He read and spoke fluently German, French, and Spanish, and had a scholarly acquaintance with Latin, Greek, and Hebrew.

One of his biographers has said: "... He labored for the good of others to his personal disadvantage and to the prostration of his body. In the army he rode over the battlefield in person in search of missing men who might have been overlooked by others. This he did at the midnight hour, after toiling to exhaustion in relieving the suffering of men in the hospital. ... His house was often a hospital for the poor, the homeless, the unfortunate. He fed them from his own table, clothed them at his own expense, he cured them, and sent them forth from his door with the money to start them homewards—if home they had. All this he did without hope of reward—with no other motive than his ever yearning wish to help the needy and distressed."

J. G. F. H.