LIFE OF DR. LYMAN SPALDING*

BY HENRY M. HURD, M. D.

Dr. Lyman Spalding was born at Cornish, N. H., in 1775. His early education was obtained at the Charlestown Academy, and later he was a student in the office of Dr. Nathan Smith, the eminent founder of medical schools, and the first of the name of the Smiths, who later became distinguished in New England and Maryland. He afterwards visited the Harvard Medical School in 1794 and attended two courses of lectures there, but did not receive his degree of M. D until 1797. He returned to Cornish, N. H., the residence of Dr. Smith, and took charge of his practice during the latter's absence in Europe. He subsequently taught chemistry and materia medica with Dr. Smith at the newly established medical school at Dartmouth College, N. H. He also became demonstrator of anatomy.

He soon removed to Walpole, N. H., where he practiced for a few months also. His residence there is mainly interesting because of the fact that he purchased a set of Perkins Tractors, then much used and highly praised for the treatment of diseases. These tractors were sold for \$20, with the exclusive right to use them in practice, both in this country and in Europe. It was one of the common medical frauds which are perpetrated on all nations about once in so often.*

Dr. Spalding removed to Portsmouth, N. H., in 1797, and there had a successful career. He became a contract army surgeon, and had so much to do that he relinquished his connection with Dartmouth College. He was a diligent student, and active in all matters connected with medical advancement. He established a medical society, an anatomical museum, and originated and distributed so-called "Bills of Mortality," giving the causes of death of persons who died in Portsmouth from the years 1800-1813. He also essayed the growing of opium and lettuce in his garden for medicinal purposes.

In the "Life of Dr. Lyman Spalding" several interesting chapters are given on the introduction of vaccination into this country. Dr. Spalding, who was living at Portsmouth, wrote to Dr. Waterhouse, of Cambridge, who had received the Kine Pox from Jenner

^{*}The material for this paper was obtained from "Life of Dr. Lyman Spalding," by Dr. James Alfred Spalding. Boston: W. M. Leonard, 1916.

^{*}I remember, thirty years ago, that many chronic cases of disease were cured, or thought they were, by a similar fraud known as the "Vibrator," which was supposed to have galvanic action when attached to the patient's arm or leg, and grounded by a wire attached to the metallic bulb which was placed in a pan of water under the bed.

in England and seems to have had the monopoly of the introduction of vaccination into this country. He was undoubtedly a man of ability and energy, but probably needed money and felt the need of exploiting the new discovery for his own benefit. He, accordingly, writes to Dr. Spalding, in reply to his letter, asking for onequarter of the amount received by Dr. Spalding for his vaccinations during the succeeding fourteen months, and insists that the sum of five dollars be charged for each vaccination, and guarantees that the exclusive privilege will be granted upon these terms. He also makes careful mention of the fact that he has Jenner's matter direct from England. A long correspondence took place between Spalding and Waterhouse. Both parties seem anxious to make money from the introduction of vaccination, but Waterhouse appears in the more unfavorable light. After acceding to Spalding's proposition that he have exclusive control of vaccination in Portsmouth, he shows great anxiety that he, Spalding, should associate with him a Dr. Cutter and later, Dr. Cutter's son, on the ground that the activity of these men would increase the number of vaccinations and thereby increase the profits to be derived from the exclusive privilege of managing vaccinations. In one letter, Spalding asks for the privilege for twelve months, and later suggests that he will pay ten per cent. of all the sums which he receives for vaccinations until such time as vaccination becomes public property. All that he received from Dr. Waterhouse seems to have been the exclusive privilege of vaccinating persons within the limits of Portsmouth, and a small piece of thread which had been dipped in the vaccine lymph. Later it seems that Spalding was to pay \$150.00 for this piece of thread, and a certain proportion of the money which he received for the vaccination. Owing to the fact that it soon became apparent that one patient could be vaccinated directly from the arm of another, the exclusive privilege of using the vaccine lymph was soon broken up.

This destruction of the monopoly was undoubtedly much hastened by the unsatisfactory character of the vaccination when the thread impregnated with lymph was used, and the great inferiority of this method to the method of vaccinating from arm to arm. The physicians had many failures. It is also interesting to note that Dr. Spalding, on two separate occasions, made observations upon patients who had been vaccinated and afterwards placed in smallpox hospitals, and freely exposed to the disease for a number of days without acquiring smallpox. Spalding also received a letter from Edward Jenner, the discoverer of vaccination, and subsequently a specimen of vaccine lymph directly from him.

Spalding issued at Portsmouth during the following twelve years Bills of Mortality—so-called—beginning in the year 1801. Copies of these bills were sent to John Adams, then President of the United States, and subsequently to Thomas Jefferson, Benja-

min Waterhouse and Benjamin Rush. Waterhouse, with his usual critical spirit, made reply in the following letter:

"Cambridge, March 18, 1802. Dear Sir: Your letter of the 11th inst. came duly to hand and I have endeavored to comply with your request, so far as to send you some matter on the point of a quill. As to the thread, it is full a month old, but was from a very perfect case and has been kept in a proper degree of temperature ever since. I am now so in the habit of taking the vaccine fluid from arm to arm, that I am not so constant in preserving it on the thread or otherwise. Considerable attention and patience are required in the first use of an old thread. It ought always to be moistened with the vapor of hot water.

"You mention my not having answered your last letter. I have received no letter from you since you wrote to me in answer to one of mine. I received a printed bill of mortality, 5 or 6 weeks ago, but no written line whatever with it and I have had no letter

from you for 4, 5 or perhaps 6 months past.

"I have just received 'Observations on the Cow Pox,' from Dr. Lettsom. I shall probably publish a second pamphlet in a month or so, being practical observations, etc. In the meantime I sent a few to the Medical 'Repository' for their next number.

"I am glad to find that you attend to the occurrences of Mortality. Excuse me for making a few remarks on the one you were

so obliging to send to me.

"1. Did APHTHÆ kill the infant, or was it a symptom of another disorder, or in other words: was it sympathetic or IDIOPATHIC?

"2dly. We very rarely see consumption in patients above 50 vears of age, more rarely above sixty and very rare indeed at 70. There is a chronic cough and emaciation, and great expectoration in old people, but it is not the true Phthisis Pulmonalis.

"3dly. Is not DEBAUCHERY rather a VAGUE term for a general Head? Does it mean Drunkenness exclusively?

"4thly. I never yet saw a very young child with Epilepsy. There is a wide space indeed, between the convulsions of infants, and that truly wonderful disease, EPILEPSY.

"5thly. Mortification: Was it in the bowels or the feet? As they are widely different in their cause. See Pott in the LATTER.

"6thly. Death from SCROFULA is very uncommon. It predisposes to fatal diseases.

"7thly. PAREGORIC: Does it mean that the Child was poisoned by that composition? If so, had it not better been by Opium as Paregoric means a Mitigator.

"You will excuse these hasty observations that occurred on the perusal. They have not originated from a disposition to criticise, but from a desire to have them free from every exception.

In 1802 Spalding invented a galvanic battery, which gave rise to considerable correspondence, and which unquestionably was used extensively among his brother physicians. He had letters asking how to make similar batteries and also their exact therapeutic uses. He further devised a process for manufacturing oxygen for inhalation, and later invented a soda water fountain, which seems to have been quite extensively used. As he neglected to protect his invention by patents, it appears in his biography, some years later, patents were secured by other persons, and he was forbidden to use it without paying a royalty for his own inven-He was an active writer, especially upon anatomical and surgical subjects. His practice also extended in surgical lines, and he performed operations for hernia, extracting of cataract and removal of necrosed bone. He continued his interest in vaccination, and received a second letter from Jenner, who acknowledged the reception of some interesting details concerning vaccination and the Bills of Mortality, for which he thanked him. In Jenner's letter an interesting detail is given concerning the good effect of vaccination in controlling cases of smallpox in Vienna. Prior to vaccination the annual average of such cases was eight hundred. Four years subsequent to the introduction of vaccination, but two cases of smallpox occurred in the city.

Dr. Spalding seems to have had a remarkable facility for friendship, and made warm friends in many parts of the country. One of his friends and subsequent correspondents was Bishop Philander Chase, a boyhood acquaintance, who subsequently became Bishop of Ohio, and later of Illinois and founder of Kenyon and Jubilee Colleges. Dr. Luther Jewett was another friend, a Vermont worthy who had excelled in the practice of medicine, the practice of law, the Gospel Ministry and the editorship of an influential newspaper; four distinct branches of effort, in each of which he achieved marked success. He was also a warm friend of Dr. John C. Warren of Boston, Dr. Alexander Ramsay, the famous anatomist from Scotland, and Dr. George Shattuck, of Boston. He wrote letters to John Bell, the distinguished Edinburgh surgeon, and also to Charles Bell, and as his thoughts turned very much to medicine abroad, he made every effort to get an opportunity to visit England and the Continent to better fit himself to teach medicine. He sent a petition to the Secretary of State of the United States Government. asking that he be made a special messenger to carry dispatches to France, and received a courteous message to the effect that the services of no such messengers were needed at that time. visited Philadelphia in order to fit himself better for his profession. and there saw the eminent Dr. Physick, and Drs. Wistar, Rush, Shippen and Barton. He writes that the School in Philadelphia had 350 medical students and later, when in New York, he contrasts the popularity of Philadelphia, and the large number of students with the fact that New York had only about 100 medical students.

There is an interesting chapter in Spalding's life, which has been detailed at considerable length by his biographer, which deserves mention. In 1809 he became connected with the Fairfield Academy, located at Fairfield, about ten miles from Little Falls, N. Y. Fairfield Academy was one of a chain of academies which had been established to promote education in the state under the charge of the Board of Regents. The great demand for medical men to provide for the needs of an ever increasing emigration to the West at this time gave rise to many medical schools. addition to the New England Schools founded by Dr. Nathan Smith, there were schools at Pittsfield, Mass., and Castleton, Vermont, in addition to Harvard and the schools in Philadelphia and He was appointed lecturer at Fairfield Academy in New York. 1809, and lectured there for several years. The journey to Fairfield from Boston was a matter of three days and nights. He was made lecturer on chemistry and surgery during his first appointment, while Dr. George C. Shattuck, of Harvard, was made lecturer on medicine. The courses seem to have been not simultaneous, but tandem, as it were, Dr. Spalding lecturing on chemistry and surgery for six weeks, and being followed by Dr. Shattuck, who lec tured for the same period on medicine, this making a term of three The success of the school was so great that it became necessary to erect a new building, and permission was asked of the Legislature to establish a lottery to raise \$5,000. Lotteries, it may be remarked, were at this time a popular method of raising money for educational and religious purposes. The Washington Monument in Baltimore was started by a lottery, as also the University of Maryland, the First Presbyterian Church and St. Paul's Church. Many details are given in the biography of Spalding in reference to the lottery plan, and new light is thrown upon it by the suggestion in one of the letters that, if the Legislature granted the authority, the privilege of the lottery might be disposed of to some other parties at a discount. The success of the School at Fairfield became so great as to excite the cupidity of persons who were interested in the development of Hamilton Academy, at Clinton, N. Y., into Hamilton College, and an effort to establish a similar medical school at Hamilton. The agitation finally brought an appropriation of \$100,000 to Hamilton Academy, and it became Hamilton College, while Fairfield was obliged to be satisfied by receiving \$10,000 for the construction of a building and a charter giving the privilege to grant degrees, and thus to become an established medical school.

The following letter was sent by Dr. Spalding to Dr. George Shattuck, of Boston, which gives a very interesting idea of his conception of the influence of medical teaching, and its benefit to the medical teacher.

"Dear Sir: I can only say that I regret exceedingly the opinion of yourself and friends, that your avocations will not suffer you to visit Fairfield once more. I acknowledge that, at present, the compensation is not adequate to the output and the loss of business, but, Sir, I do really believe that this school may be made second to none but Philadelphia. If not, I will join with you in What effect has the Professorship already had on resignation. you? It has compelled you to pay close attention to your profession, to pass the whole of Cullen's 'Nosology' in review, before you annually, and thereby qualifying you for the practice of your profession more than any other way in which you could have spent your time. It is the high road to fame and usefulness. I know that my sacrifices have been great. I know that yours must be. But, show me the man who has risen to be a Prince of Physicians, while slumbering on the couch of idleness.

"Soon after I came to Portsmouth I resigned my office of Professor of Chemistry in Dartmouth, no doubt from the same motives that now influence you, with this addition, that my lectures there had to continue three months. I soon found myself slumbering on my oars and relaxing my pursuits. In fact, so far from improving, I hardly kept pace with the others. A kind of indifference for science pervaded me; indignant I aroused, I went to Hanover to see Ramsay, I went to Philadelphia, and I planned a voyage to Europe. This change, Sir, I consider the most happy circumstance in my whole professional career.

"Admit that you resign your office. Man is an indolent animal. What inducement have you then, to labor incessantly? None! Your reputation is as high as that of your contemporaries. Then, wrapped in the lap of affluence and ease, you will slumber and sleep till old age creeps upon you, when you will find yourself outstripped in the race of usefulness and fame, your opinions so antiquated as to be regarded not, and yourself a mere old Granny!

"Look at the Princes, or rather, Fathers of Physic. Who have they been or who are they now? So far as my memory serves me: Teachers of Physic. Boerhaave, Cullen, Desault. Look at Rush, Warren and Smith. What has put them at the head of the profession? Nothing but their being compelled to labor, and annually to review their profession, and incorporate with their old stock all the new improvements. Show me a man in private practice who does this, annually. He is not to be found. But, your friends say that you can do this, yet stay at home. I acknowledge this, but tell me honorably, will you do it? No, Sir, you have no inducement. For a man to be pre-eminently great, there must be a great occasion. What made Washington Great? Opportunity. You are now on the same high road to reputation that every Prince of Physicians has travelled. If you turn aside, you are lost forever. These in conjunction with those in my last letter are the reasons

which ought to influence you. You can have no doubt of my wishes on the subject. The time for the commencement of the lectures is so near at hand, that no successor can be appointed in season for the next course. I therefore beseech you, on my account, if neither honor nor fame will move you, to deliver This One Course, and I will consent to any arrangement that you may then choose to make. If nothing farther, as a mere matter of policy, I wish you to withhold your resignation till the meeting of the Trustees of the New Medical College and let us see what they will do for us.

"Dr. Mann, I knew had been appointed a Hospital Surgeon, but I did not know that he had been made Surgeon General. He must be with the Army by this time, and cannot be prepared for the ensuing course. I have no objection to this man, but must for want of room decline saying anything about your successor until I hear from you again. Your friend, Lyman Spalding."

Shattuck, after serving two terms as Professor of Medicine, relinquished the position, but Spalding, in 1813, was made President of the Fairfield College, and filled most of the chairs in 1814-15 and 16. The number of students seems to have varied between fifty and seventy. Spalding seems to have done very faithful, conscientious work, for which he received somewhat irregular pay, and often more pay in promises than in actual money. The School remained in active operation until 1839, when it went to pieces in consequence of squabbles among the Faculty as to the division of fees from medical students. The fees seem to have been very small.

In 1814, Spalding went to New York to reside, and had an office on Broadway, for which he was to pay about \$200 per year. His fees from his patients during the first year amounted to a little more than \$1,000. At this time, Spalding seems to have attempted to write a book entitled "The Institutes of Medicine" which, as far as I can learn, was never published in book form, but was circulated in pamphlet form, each chapter furnishing a pamphlet. It was praised by Shattuck and Waterhouse, and the reception of a sample pamphlet was certainly acknowledged by Dr. Caldwell even, but the book seems to have made little impression.

The following letter is from Governor Plumer, of New Hamp-

shire, a friend of Spalding's.

"Epping, N. H., Oct. 24, 1818. Dear Sir: This week I received your letter with your 'Reflections on Fever,' and Report of the Trustees of the Free Schools, for which you will please accept my grateful acknowledgments. I have read your pamphlet with attention and pleasure, but it is on a subject with which I am not sufficiently acquainted to decide with precision. You know the low state of the Faculty in New Hampshire. We have scarcely any, who write on the subject of medicine, and of the great body of our country physicians but few who have any books to read, and what

is worse they have little inclination to purchase books, to read those few that they have, or to investigate the complex and intricate subjects of their profession. These facts have long induced me to believe that in many cases, the patient has more to apprehend from the ignorance of the physician, than from the disease, and that it is safer to trust to nature for a cure than to rely on the prescriptions of those whose knowledge is limited to a few hard technical terms. With us, the Gentlemen of the Faculty have made less progress than those of law and divinity; the latter, indeed, have much to do before they can attain real eminence.

"In your profession I have long considered it a desideratum to have an able but simple work, accurately describing the nature and functions of the several parts of man in a state of health, the effect or changes diseases produce on each of those parts and of the remedies for those diseases.

"I would purchase and read such a work with pleasure, and that pleasure would be enhanced if it was simple, plain and free, so far as the nature of the subject would admit, from abstruse technical terms, and of attachment to existing theories. Mystery is the enemy of improvement, and it is better suited to prolong the reign of ignorance and of error than to promote that of truth and science. And, the knowledge of things is vastly more important than that of words.

"I really wish we had an accurate journal kept in different sections of our Country of the actual state of the weather, the crops, the general diet and regimen of our citizens, the diseases most prevalent in each, their type, character and mode of treatment, etc., so as to exhibit the means by which health was preserved and lost and how far they depended on climate and modes of living. Such a Society, I think, might be formed of Gentlemen living in various parts of our Country, with little expense and from whose reports much information could be obtained which would be useful to all, and particularly to Medical Characters. I would freely contribute to such an establishment.

"But, I am wandering from the object of this letter, which was to thank you for your Pamphlets and to say, that if you or the Historical Society of N. Y., should need any of the few pamphlets we publish here, it will afford me pleasure to procure and transmit them. I remain with much esteem and respect, Yours, etc., William Plumer."

About 1817 he began to agitate the preparation of a National Pharmacopæia, notwithstanding the fact that several local pharmacopæias already existed, the most extensive and authoritative one being that of Massachusetts. His motive in urging a National Pharmacopæia was due to his desire to secure uniformity, and also to discard local remedies which seem to have been used in different parts of the United States without any sufficient scientific author-

ity. As an example of such local favorites may be mentioned scutellaria or skull cap as a remedy for hydrophobia. It was shown by Spalding that the authority for the use of this remedy was well night universal. Numerous cures through its employment were reported, and in the literature its claims were overwhelming. We now know that it was worthless, and its elimination from the Pharmacopæia was promptly made. The plan proposed by Spalding for the preparation of the Pharmacopæia was an excellent one, and has practically been followed for the last one hundred years.

The Pharmacopæia was originated by a paper by Dr. Spalding, read before the medical society in the City of New York, in which he pointed out the difficulties attendant upon the present lack of uniformity in the preparation of drugs in the different states. As a result of the discussion which followed the reading of his paper, a committee was appointed, of which Dr. Spalding was chairman, to suggest measures for the preparation of a National Pharmacopæia. The country was divided into four districts, known as the Northern, Middle, Southern and Western. Through the medical societies of these regions, delegates were chosen to meet at some central point in the district to discuss matters pertaining to the drugs to go into the Pharmacopæia, and to elect two delegates each to go to Washington later to prepare the book for publication. The only two district conventions were those of New England, at Boston, and of the Middle States at Philadelphia, which met on June 1, 1819. The meeting in Philadelphia, although attended only by delegates from the Middle District, had done valuable work in the discussion of remedies and methods.

The delegates chosen at the two district meetings met in a General Convention in Washington on January 1, 1820, Dr. Spalding being one of the delegates. The two rough drafts from the district meetings were examined and discussed, and the preparation of the Pharmacopæia was outlined and plans made for its completion and adoption. A Committee of Publication was chosen, with Dr. Spalding chairman, which met in New York in June, 1820. The Pharmacopæia was printed in English and Latin, and was immediately adopted as authoritative throughout the country.

About the same time Dr. Spalding also had, in addition to the Pharmacopæia, a plan for the establishment of what he termed a medical police to have charge of all sanitary matters. The latter

scheme, however, seems to have faded from public sight.

Dr. Spalding did not live long after the publication of the Pharmacopæia. In 1821, while walking in the City of New York, he was struck down by some building material which fell upon his head and rendered him unconscious. Although he recovered apparently, he never enjoyed good health, and gradually went into a state of physical and mental decline. He gave up practice, sent his family to New England, and later rejoined them there, and died on October 21, 1821, a few days after he reached them.

It is evident that he was a man of unusual ability, being industrious, efficient, and with large powers of initiative. Imperfectly educated as he was, he had made himself an excellent physician, a remarkable surgeon and anatomist, an interesting and inspiring medical teacher, and a member of the profession full of enthusiasm for its advancement and perfection. He was denied the great desire of his life, the privilege of studying abroad, and doubtless had he been able to do so, and had returned to America with the new ideas, his subsequent labors might have resulted in great additions to the medical knowledge and resources of the country. The story of his life is a most inspiring one.

USEFUL FAMILY BOOK

A book of the type referred to by Governor Plumer, of New Hampshire, in his recommendation for a National Journal, as noted in his letter to Dr. Spalding on page 36 of this issue, has recently been added to the Library of the Medical and Chirurgical Faculty. The running title of this is "The Useful Family Book" and subtitle "The Medical and Agricultural Register, for the years 1806 and 1807. Containing practical information on husbandry; cautions and directions for the preservation of health, management of the sick, etc.," edited by Daniel Adams, M. B., p. 378+, Boston (1808).

OUR NEXT MEETING

The cessation of war activities makes us look forward with pleasure to another meeting of the Association, which will be held this year at Atlantic City, June 9th. While last year it was necessary to postpone our meeting indefinitely I am sure all the members felt the loss of the stimulus which is obtained from these meetings, and it will be a great pleasure to meet again and review the events of the past two years. It is hoped that every member may be able to attend this meeting, and that all will take part in some way. Suggestions as to papers for the program; topics for discussion, etc., are asked for. This should be a banner meeting from every standpoint as we have to make up for last year's omission. Each member is appointed a committee of one to do his utmost to see that this is carried out, and, as the Association is entering on another decade, to induce new members to enter our ranks and infuse into the Association the vigor and health that should belong to it at the completion of its 21st year.