MEDICINE IN OLD PHILADELPHIA

BY HENRY BURNELL SHAFER, PH.D.
Haddon Heights, New Jersey

In the report of the Committee on Medical Costs, issued in 1933, Philadelphia is described as a city of unusually fine and diverse medical facilities. This description, if, at any given time in the past, we compare the city with other cities of the country, would still be true. In this paper, I shall survey medical Philadelphia between the years 1750 and 1850 and briefly sketch the beginnings of many of its medical institutions.

In 1750 the American colonies were without a medical college. There were, it is true, a few teachers of anatomy. As early as 1751, Thomas Cadwalader was giving such instruction in Philadelphia. At that time, becoming a doctor involved one of two procedures: apprenticeship to a practicing physician for an indefinite number of years, or study abroad. In 1766, the young Philadelphian could supplement his apprenticeship by attending the clinical lectures of Dr. Thomas Bond at the Pennsylvania Hospital, but up to that date he lacked even such instruction. During these years three capable young men, John Morgan, William Shippen, Jr., and Benjamin Rush, went to Edinburgh to study medicine. When Morgan returned, he proposed to the trustees a medical department in connection with the Philadelphia College. His plan was accepted, and by 1769 the three physicians composed the faculty of the first medical school in this country. When, in that year, the degrees of Bachelor of Medicine were conferred upon five young men, formal medical education in America was on its way.

The plan of study included medical courses to be taken by students over a period of two years. At the end of the first year the degree of Bachelor of Medicine was granted. An additional year of study and the presentation of a thesis were required for the doctorate. In 1780, this degree was conferred upon David

1 The Costs of Medical Care (Chicago, 1933), pp. 184-187.
2 John Morgan, A Discourse upon the Institution of Medical Schools in America; Delivered . . . 1765 (Philadelphia, 1765).
Ramsay, who was then a prisoner of the British. Seemingly the average student was interested only in minimum requirements and left college after obtaining the bachelor's degree. At all events, this reason was given for discontinuing that degree in 1789. As late as 1808, students were required to attend each professor's lectures only once during their two years' residence. According to Morgan's plan, students would study elementary subjects during the first year and advanced courses in the second. As facilities developed and the number of professors increased, a complete course of medical studies was available each year. By 1820, the students were, in the second year, merely repeating courses which they had studied in the first. This organization of American medical education was modified by the University of Michigan in 1850 and was drastically revised by Lynn University (later Northwestern University) in 1856.

Throughout the early years of our history, the standards of our medical schools were low. Yet the excellence and high personal standards of such men as Morgan, Shippen and Rush seem to justify the conclusion that they turned out physicians well-equipped with the medical knowledge then extant. In 1808, at least, the standards of the school led to the failure of "several" candidates for the degree on grounds of insufficient knowledge. After the vicissitudes of the Revolutionary War, the Medical Department of the College of Philadelphia finally merged with that of the University of Pennsylvania. This medical school drew the most cosmopolitan and the largest student body. In 1799, Virginia, Tortola, North Carolina, Pennsylvania and Maryland were represented by entries in the school "album" or registry. In 1800 the school was graduating three-fourths of the medical students in the country. Although the university did not maintain its proportion of the medical student body, it continued to grow rapidly. In 1825, when fourteen medical colleges existed in the United States, 480 students were attending Pennsylvania, 300 the University of Maryland,

---

8 Minutes of the Medical Faculty. University of Pennsylvania, 1767-1814.
5 Minutes of the Medical Faculty, pp. 67-70. Numbering is consecutive in the four volumes.
6 American Medical Repository III (New York, 1799), 65.
By 1825, regular medical education at the university was seconded by private instruction. These private schools did not compete with the university; in fact, they were often organized by the professors themselves for teaching during the summer months or in the evenings during the winter term. Since students did not attend lectures for over four months each year, these courses were invaluable in completing their medical background. One of them, organized by George McClellan, finally received a charter from the state and became the Jefferson Medical College. By 1830 its student body had increased in numbers and was rivalling that of the University of Pennsylvania.

Medical education in Philadelphia was the envy of other cities of the land. When a medical college could have two lecture rooms each having a capacity of 800 persons, others wished to know the cause of its success. In 1840, the Boston Medical and Surgical Journal explained:

In Philadelphia, there is a stability impressed upon the medical schools. Great industry is appreciated, and talents essential to their increasing reputation are liberally sustained. A dunce is not stereotyped in office, but those who are qualified to conduct a department never lose their hold upon the public confidence. This is the secret of the great power of the Philadelphia schools of medicine and surgery. The more closely we have examined them and the facilities they offer, and that, too, in connection with the public sentiment through two-thirds of the States of the Union, the more we are led to believe that the period is coming when a majority of the practitioners of this country will be educated at Philadelphia.

At times all was not serene. Professors quarrelled among themselves; Jefferson Medical College was often reorganized; and at the University of Pennsylvania the resignation of John Redman Coxe was forced by a student demonstration. This was the same Coxe, who, in 1813, complained to Anthony Morris that the lecturer in the university building was inconvenienced by boys who,

---

7 New York Medical and Physical Journal, IV (New York, 1825), 140-141.
8 American Medical Recorder, I (Philadelphia, 1818, 3.
9 Boston Medical and Surgical Journal, XXII (Boston, 1840), 320-321.
depending upon the season, threw stones or snowballs through the windows. Several times, he averred, valuable apparatus was jeopardized.  

Whatever the shortcomings of this school may have been, it stood out among its contemporaries. The Committee on Resolves, as it was called, of the Alabama Medical Convention of 1847, had to resort to hyperbole to express its admiration, when it said:

Your committee most especially beg leave to recommend to this Convention that it unite in one voice in the most unqualified praise for the high-toned, independent and self-sacrificing magnanimity by which the Medical Department of the University of Pennsylvania has distinguished itself in becoming the pioneer, to place the first foot upon the threshold of the usages in this country, regardless of all consequences to themselves, and governed alone by an eye single to the general good of the profession they so honorably represent.

Educational facilities were not the only outlet for philanthropic Philadelphians. Dr. Thomas Bond began agitation in 1750 for the Pennsylvania Hospital. Blockley had been founded as an "Alms-House" in 1730, but it was not used as a hospital until 1769. Aided by Benjamin Franklin, Bond in 1751 received a charter for the hospital. The colonial assembly was loath to support so parochial an institution as a hospital for Philadelphia. When the question of funds arose, the assemblymen were still more careful. The ingenious Franklin silenced their suspicions by suggesting that the colony give £2000 on the condition that the people of the city raise a like sum. The challenge worked both ways and the hospital was begun. When it was opened, the first physicians and surgeons were: Drs. Lloyd Zachary, Thomas and Phineas Bond, Thomas Cadwalader, Samuel Preston Moore and John Redman, the latter the preceptor of Morgan, Rush and Shippen. Many means were used to raise funds to keep the project going. The anatomical plates, which Dr. John Fothergill had sent with William Shippen, Jr., were placed on display at

31 Proceedings of the Medical Convention of the State of Alabama, held in Mobile, December, 1847, p. 5.
one dollar per visitor. Later, Benjamin West’s painting of “Christ Healing the Sick” was exhibited at an admission fee of twenty-five cents, and yielded $15,000 between 1817 and 1850.\textsuperscript{13}

The growth of this hospital was uninterrupted until the Revolution. The losses sustained during those years brought about a decline which reached its lowest level in 1788 and 1789 when only seventy-seven patients were admitted. Thereafter it developed rapidly, changed its location as it outgrew successive sites and finally sent its insane patients to Mantua, which was built especially for them. There, under the care of Thomas Kirkbride, a name famous in the annals of American psychiatry, they received the best attention available.

Some time after the Pennsylvania Hospital was founded, the Christ Church Hospital was built in 1789 with the funds left twenty years earlier by John Kearsley.\textsuperscript{14} In 1834, the Wills Hospital for indigent blind and lame was built at a cost of over $57,000; in addition, it had an endowment of $63,000. Under the direction of Dr. Joseph Parrish, a prominent Quaker physician, it excellently fulfilled its purposes.\textsuperscript{15}

It is noteworthy that the Pennsylvania Hospital was the first hospital to have a ward for insane patients. At that time it was customary to confine maniacs to jails or outhouses where they were chained. Demented persons who showed no dangerous characteristics were left at large. Even when they were later confined to hospitals their treatment was horrible. It consisted of exposure to the elements, cold water baths, Rush’s tranquilizing chair, and bleeding and physicking to crush whatever spirit might remain. Rush was one of the first physicians to recognize the physical causes of mental disorder. It was in Europe, however, after Pinel’s famous visit to the dungeons of Paris in 1793, that a new treatment developed. This treatment, commonly called moral treatment, included giving patients interesting work to do, confining them to asylums with pleasant surroundings and in general treating them with sympathy and understanding. This method was introduced into America in 1819 at the Friends Retreat at

\textsuperscript{13} Ibid., pp. 16-17 and 34-35.
\textsuperscript{14} Christ Church Hospital, Report for 1845 (Philadelphia, 1845), p. 7.
Frankford, Pennsylvania. With the exception of a few years, the Retreat was limited to members of the Society of Friends. Since it did not continue to improve, the Pennsylvania Hospital for the Insane at Mantua soon surpassed it.

We might pause a moment to examine these hospitals. Never were they examples of sanitation or careful nursing. Regularly, or nearly so, epidemics of "hospital gangrene" broke out. Erysipelas was not uncommon. During epidemics, even less desirable nurses were employed. As a result of the debauchery of the nurses in Blockley Hospital during the yellow fever epidemic of 1793, an investigation was held. It might be reasonably asked how good nurses could be obtained when women nurses were paid $2.50 a month and male nurses $3.00. In this connection, Dr. Charles Meigs explained that hospitals were cut off from the world and little control was possible. Meigs, however able an obstetrician he may have been, was seldom willing to foster changes either of practice or of theory; this attitude alone explains his long refusal to accept the fact that puerperal fever was contagious and not, as he said, "Justification of Providence, a judgment instituted to remind us of the sin committed by the mother of the race." Evidence that his point of view on nursing was wrong did exist. When the cholera epidemic broke out in 1832, the Sisters of Charity of Emmitsburg, Maryland were called in; they thoroughly reformed Blockley but refused to stay and superintend the hospital. In 1839, Joseph Warrington attempted to raise nursing standards by organizing the Nurse Society of Philadelphia.

Sidelights on the attitude of the trustees of the Pennsylvania Hospital are contained in two rules for 1837: The hospital refused to admit women to the lying-in ward unless they presented a marriage certificate. At the same time, drunkards were barred from the pauper sections of the insane wards and admitted to the pay wards, only at a higher rate. The hospital was open to students

30 Goodnow, op. cit., pp. 126-127.
for clinical study. After 1763 the student fees were used to buy books. The library thus accumulated was the most important in the country.23

Besides these hospital facilities, the Philadelphia Dispensary was founded. Established in 1786, it was the first of its kind in America. By 1815, it was caring for over 3,000 patients at a cost of over $2,000 a year.24 In 1802 the lying-in ward of the hospital was founded. Finally in 1825, the Pennsylvania Infirmary for Diseases of the Eye and Ear was established under the aegis of such men as James Gibson and George Bacon Wood.

The background of Philadelphia’s preëminence in medical science is here well-illustrated. By the first quarter of the nineteenth century, it had a general hospital, a public dispensary, an insane hospital, and a lying-in ward. Soon after 1825, it had a large and influential insane asylum and special facilities to care for the blind and the lame. Despite the fact that sanitation was rare and that nursing was poor, the physical equipment with which to care for the sick was in existence.

These facilities were built by able physicians. In turn, they increased the number of skilled doctors. Medical practices in those days are familiar to us. Bleeding, blistering, physicking, sweating and vomiting were used to deplete the body and then tonics were given to build it up. Such drugs as ipecac, calomel and opium were in constant use. Members of the Philadelphia profession, however, made certain definite and individual contributions. William Shippen returned from England interested in anatomy and midwifery. Riots against his school of anatomy broke out in 1765. He defended himself by saying that the bodies used were those of suicides or murderers or occasionally from Potter’s Field, but never from church graveyards. His pioneer work in midwifery is equally important. For the first time, physicians took an interest in normal as well as abnormal obstetrical cases. For the first time, the place of the midwife was challenged. Shippen’s action offended the modesty of many, but it paved the way for a more scientific attitude. His efforts were later carried on by such Philadelphians of national reputation as William P. Dewees and Charles D. Meigs.

23 N. S. Davis, Contributions to the History Medical Education and Medical Institutions in the United States, 1776-1876 (Washington, 1877), p. 11.
Morgan's contribution was in the planning and founding of the medical school. His erudition aroused a spirit of emulation in his students. Rush worked in so many fields that his various activities cannot all be summarized in a short space. He made a positive contribution in his recognition of the curability of insanity. He profoundly influenced American practice when he cured yellow fever, in the epidemic of 1793, by letting copious amounts of blood and physicking with large doses of calomel. His greatest contribution, however, was the scientific spirit with which he imbued his students. In one of his last lectures at the medical school, he expressed his attitude:

If I have not removed any part of the rubbish which surrounded the fabric of our science, nor suggested anything better in its place, I feel a consolation in believing, that I have taught your predecessors to do both, by exciting in them a spirit of inquiry, and a disposition to controvert old and doubtful opinions, by the test of experiments. I have only to request you to imitate their example. Think, read, and observe. Observe, read, and think for yourselves.  

And that, we must all agree, is the basis of scientific investigation.

Somewhat later Caspar Wistar published the first American textbook on anatomy. William Horner carried on this work. Many other Philadelphian physicians wrote on medical topics. Dorsey and Physick wrote on surgery. Chapman, Eberle, George Bacon Wood and Robley Dunglison, a Scotsman teaching in Philadelphia, continued the tradition of Philadelphia as the national center of medical publication.

In the field of magazines, the profession was well equipped. The outstanding medical journal, The American Journal of the Medical Sciences, was published in Philadelphia under the able editorship of such men as Isaac Hayes and Nathaniel Chapman. Like its forerunner, the Philadelphia Journal of Medical Science, it ran on its cover part of Sydney Smith's famous taunt in the Edinburgh Review. The section selected was: "'In the four quarters of the globe, who reads an American book? Or goes to an American play? Or looks at an American picture or statue? What does the world yet owe to American Physicians and Sur-

---

geons?" Justified as the taunt may have been, the *American Journal of the Medical Sciences* was soon making worthy contributions to the study of medicine. Articles from its pages were copied by various European publications. Contributions came from regular contributors in all sections of the country; and its articles exhibited a scientific spirit, still rare in those days.

It was during these years that the practitioners of Philadelphia formed the College of Physicians, a medical society which still commands great respect. Organized in 1787, it was chartered in 1789 with such incorporators as John Redman, William Shippen, Jr., Adam Kuhn, John Morgan, Benjamin Rush and Caspar Wistar, Jr. Its members, the prominent physicians of the city, did not have to concern themselves with higher fees or better conditions. Consequently they could devote themselves to scientific improvements. As early as 1793 they were agitating for the formation of an American pharmacopoeia, a work which was not produced until 1820 and then under the auspices of the Medical Society of New York.\(^27\)

Even prior to the founding of various institutions, efforts were made to safeguard the public health. Pennsylvania was the first state to inspect individuals and ships coming to the colony. While William Penn was visiting in Philadelphia in 1699, an epidemic of yellow fever broke out. As a result, the law of 1700 regulating trade and commerce in this respect was passed, but was not enforced by Patrick Baird, the physician in charge, or by the colony. A second law, in 1720, led to the first case of detention of an infected ship. The ship *Dorothy*, was required to land its bedding at a distance from the city and to air it; the ship was fumigated with tobacco smoke and washed with vinegar. The bales of wool were also exposed to the air. Gradually, the regulations were extended, a lazaretto was provided in 1743; and after a quarrel in 1740 between the members of the profession and the authorities over the payment of fees, the colony enforced its quarantine laws.\(^28\)

The law of 1794 to regulate the "importation of Germans," codified and clarified the quarantine laws. It provided that: (1) State-

\(^{26}\) *Philadelphia Journal of Medical Sciences* (Philadelphia, 1820), cover.


Island and its hospital, a lazaretto, should become a health-office with a staff appointed by the governor; (2) the resident physician should inspect all ships and detain those which were not "wholesome"; (3) a consulting physician should be called in cases of infection; (4) the health officer should keep an office in Philadelphia to receive bills of health from the ships' masters and receive reports from the inspectors; and (5) twenty-four inspectors should be appointed by the mayor or other city officials for one year to inspect the hospital and report to the governor on conditions.

After providing for the organization of the health office, the law detailed regulations for vessels. Section seven required all vessels from beyond the seas to remain at the health office until they were examined. After inspection of the ship and questioning of the captain, all infected clothing or cargo was to be destroyed. Pilots were required to direct ships from infected districts to the health office. No person outside the health office could board a ship before its inspection. Travelers or members of the crew with contagious diseases were confined in the hospital. All goods landed had to be "effectively smoaked, cleaned and purified" at the expense of the master. Elaborate regulations were set for the sleeping quarters of the immigrants who flocked to Philadelphia at that time. In order to preserve the health of the passengers at sea, tar was to be burned between decks twice a week and the ship washed the same number of times with vinegar. As a last item of importance, passengers were held responsible for the goods in their possession. The fines for violations of these regulations were very high, ranging from $100 to $500. The cost of carrying out this law was borne by the masters of the vessels in the various fees which they paid. Evidently there was a surplus in the funds so gained for a certain percentage was also paid to the Pennsylvania Hospital. This law, though subsequently modified, formed the basis of public regulation of health in the port of Philadelphia. Other laws regulated city health conditions, but these rules were the most elaborate and stringent. Following the yellow fever epidemic of 1793, the law of 1794 reflects the fear of the state and city of infection.

Philadelphia, then, at an early period had a medical background unsurpassed in the country. There were doctors who were the

products of the best medical schools in this country or Europe. They were the authors of a majority of textbooks of American origin. Finally they were the practitioners in hospitals, excellent for those times. At the same time, a body of laws was being assembled to protect the public from contagious diseases from outside sources. It is worth our while before closing this paper to cite a few of the charges for medical services. For an ordinary visit, a rate of one to one and a half dollars was charged. A night visit cost from five to ten dollars. The vaccination fee was five dollars. Midwifery cases ranged from eight to twenty dollars, depending upon the difficulty. Operations were as follows: Setting a fracture, five to ten dollars; amputation of leg or arm, from fifty to one hundred dollars; and operations for cataract, about the same as for amputations. These fees, it is interesting to note, were less than those charged in either New York or Boston.

From this brief survey, it will be seen that Philadelphia from 1750 to 1850 was equipped or in the process of equipping itself with an excellent medical organization. The state, philanthropic individuals and societies contributed to this development. Undoubtedly the wealth and size of Philadelphia, as compared with other American cities during these years, help explain its preeminence. Yet we cannot overlook the spirit of Morgan in founding the first medical school, or the efforts of Rush in fostering the skeptical attitude of science. We cannot underestimate the work of such benevolent individuals as Benjamin Franklin or such benevolent organizations as the Society of Friends with its humanitarian point of view and its many socially-minded physicians. All of these factors—wealth, intelligence and philanthropy—joined together to provide Philadelphia with medical facilities at reasonable rates which won for the city the title, the medical center of the United States.