the account, would have been more valuable to the general reader. And there is some slight addition of supplementary material with little relevance.

*The Shaping of a Battle: Gettysburg* is a superior centennial publication. The author and the publishers are to be congratulated. It is well worth the modest price indicated. The layman will find it interesting and informational.

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**Alfred P. James**


This attractive little book of 182 pages is made up of four lectures delivered by Professor Shryock in the Anson G. Phelps series in 1959 as an interpretation of medical developments in America during the two centuries of 1660 to 1860. Three of the four lectures are devoted to specific subjects that would ordinarily appeal to various types of audiences. The fourth lecture is the result of a convergence of the themes presented in the other three lectures. Lecture I is titled "Origins of a Medical Profession"; Lecture II, "Medical Thought and Practice: 1660-1820"; Lecture III, "Health and Disease: 1660-1820"; and Lecture IV, "Medicine and Society in Transition: 1820-1860." The facts as presented in each lecture follow generally a chronological sequence. In this respect the book differs from most histories of medicine in that other well-known writers usually begin with the genesis of medicine in Babylonia, Greece, Arabia and follow through the succeeding centuries in Europe and America to modern times. While some of these latter histories make up a chaplet of biographies, often with a maze of dates and events, Professor Shryock's lectures make up a consecutive narrative that depicts the progress preceding the last century.

In the first lecture the author deals with the part the various healing groups of medicine played in the development of medicine as we know it today; the function of the guilds and apprenticeships, and the standing of these various groups, especially before reputable physicians were certified by some recognized authority. Even though
“licensing regulations had some value in labeling qualified practitioners, their enforcement was never such as to exclude—quacks and charlatans.” Patent medicines, newspaper and magazine advertising, turned many people to quackery in desperation. A small number of the physicians held degrees from universities in Europe, especially London and Edinburgh. Others served as apprentices under older, experienced physicians, supplementing their training with a course of lectures at the few medical schools in the East. Still others combined the profession of medicine and the ministry or law. At the beginning of the Revolution there were about 3500 established practitioners in the colonies; not more than 400 of these had received formal medical training, and of these 400, only about half held degrees. This small number was due to the fact that the British-trained physicians usually belonged to the gentry and upper classes that did not tend to emigrate. It was not until medical colleges were established in such cities as Boston, New York and Philadelphia that native Americans began to show their abilities and licensing boards were established in attempts to control the character of the medical practice in the colonies. In the Revolutionary era the proportion of doctors to the total population was about 1:600, and 1:350 in New York City, a proportion that even today is considered high. Even women as midwives or “doctresses” (as the daughter of Cotton Mather) at first were accepted in the profession but dropped out during the 18th century, and were not returned to general practice as graduates of colleges until much later. By 1760 many young men were returning with foreign degrees and took the initiative in demanding firmer foundations for the profession.

Considerable attention is given to the founding of The Pennsylvania Hospital in Philadelphia in 1751 and the association of Drs. Thomas Bond, William Shippen, John Morgan, Benjamin Rush, and the cooperative Benjamin Franklin. King’s College Medical School was organized in New York in 1768, reorganized in 1792 as part of the later Columbia University. Through the influence of Dr. John Warren, a graduate of Edinburgh, in 1783 the Medical School of Harvard College was set up. Hence, by the end of the 1700’s the cities of Boston, New York and Philadelphia were capable of furnishing reputable medical graduates. Little more in the way of “Medical reform” was carried out in this country until the noted Johns Hopkins group inaugurated their program in 1889. Thereafter regulations were set up throughout the country, as to require-
ment for graduation and practice of the profession. Publication of medical textbooks and journals, too, was recognized even by the British Confreres. And yet, Medicine as a science was slow in developing in the colonies, and at first "was but a fragmentary projection of European Science to a distant shore," in the age of English scientists like Newton, Boyle, Harvey and Sydenham. In the colonies there developed a search for new kinds of drugs, and more than 50 items found their way into the Western pharmacopoeia from the American Indians, including such valuable ones as cinchona (quinine), curare and coca (coca). Attempts at classification of diseases, however, were then delayed for many years. The humoral diseases were treated by bleeding, purging, sweating or restoration through drugs and diet. Although theories of the 17th and 18th centuries showed progress, medical thought dealt with unverified doctrines and controversies. Few publications attained the degree of standard as those of Mather and Boylston on smallpox inoculation, scurvy and preventive medicine, nor of the invention of bifocal lenses and the use of electrical treatment of Franklin. Surgery was for the most part in the hands of general practitioners, and while generally crude, was much improved by the contact of the American practitioner with the French and British medical officers during the French and Indian War and the Revolution. The relation of pathology to clinical symptoms and signs, even in the late 18th century, did not create much interest in the physicians of that day, although access was had to Morgagni's classical work on the sites of disease (1761), perhaps in part due to the difficulties in obtaining autopsies. But the American physicians did give more attention to describing the various illnesses in bedside terms, although few steps were attempted in classifying disease entities; variations in symptoms were usually called species of a disease. Thus bleeding was practiced on many patients for many types of illness up to the time of the Paris School (after 1800) which identified diseases on a clinicoanatomic basis.

In the period of 1660-1820 relatively few infectious diseases were indigenous to America. American Indians, as a native population, were exposed to unfamiliar European plagues with serious results in that tribes were sometimes decimated by smallpox, measles, malaria, and venereal diseases. The colonists had great faith in their native herbs and drugs, but much less in hygiene, diet, ventilation, et cetera; and beer and wines became a prominent part of
the diet, while the lack of fresh meats and vegetables during the winter months tended to various forms of malnutrition. Water "cures" and spas became popular from the 1700's on. Hard cider, "apple jack," was especially popular in New England. (Recently a revival of cider vinegar and honey has become popular.)

Sewage and sanitation were relatively late in developing in the colonies. Most American towns and centers depended on dug wells for their water supply, and with few exceptions American cities did not develop filtration until well after the Civil War. Where epidemics developed, the poor and destitute were collected in almshouses (Boston 1680, Philadelphia 1730), and through development of the almshouses subsequent infirmaries developed into Municipal Hospitals. "Beneficial" Societies gradually developed to meet the cost of these public institutions, and there evolved health insurance systems and doctors on a contract basis that aided the poor and the indigent in times of illness. Thus health programs in the late 1800's helped in the extension of life expectancy which today has reached about 70 years. "Man was going forward to bigger and better things—in Medicine as in other human affairs."

Dr. Shryock's final lecture deals with the development of medical schools after the University of Pennsylvania, so that in the 1820-1830 period there were 30 or more medical colleges in the country with an enrollment of about 3000 students. Some of these early schools were proprietary and were operated for profit. These schools decreased the number of apprentices after 1820, and as examining boards were set up by the States, and the American Medical Association was established in 1847, general and more uniform standards for practitioners were generally adopted.

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At the end of each chapter the author adds many notes and references to writers and data that indicate he has gone far beyond the usual efforts to make his writing complete and authoritative.

Pittsburgh

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