## **Book Reviews**

## **American Medicine**

The Healers. The Rise of the Medical Establishment. JOHN DUFFY. McGraw-Hill, New York, 1976. x, 386 pp. \$12.50.

If case history be indispensable to the diagnosis of a patient's condition, so should the history of a profession be essential to the evaluation of its status. John Duffy serves well the needs of our generation with his straightforward, factual, readable account of the healing profession in America, from the Indian shaman the European explorers encountered to today's highly trained physician specialist beset by ethical dilemmas.

Duffy, who teaches history at the University of Maryland, now holds the presidency of the American Association of the History of Medicine. His prolific scholarship includes a study of colonial epidemics and histories of medicine in Louisiana and of public health in New York City. His new summary relies on his own researches and on recent scholarship in what is a lively field, contributed to by social historians concerned with health (like Duffy himself) and by physicians concerned with history.

The adventures of the medical profession in America are set in a rich context of broader trends relating to disease and destiny, both American and European: epidemics; wars; attitudes toward class and race, toward sex and section; changes in education, urbanization, and philanthropy; innovations in theoretical and applied science. Duffy strives to explain causes for the major changes in the developments he chronicles, and he clarifies and enlivens his broad patterns with accounts of specific incidents, quotations, and biographical vignettes. While taking no doctrinaire stance, Duffy does not eschew judgment.

Probably believing that the more remote the events, the greater the emphasis needed to bring enlightenment to the reader, Duffy devotes more space to earlier than to recent times. Two-thirds of his pages go into describing events up to the end of the Civil War. Thus the degree of compression must be greater in telling of the significant developments, begin-

ning in the 1890's, that ushered in modern medicine and of its flowering and its problems in the 20th century. Despite these space strictures, which Duffy acknowledges occasionally, the key patterns of our century emerge clearly.

And it is in the third of the book concerned with the last century that Duffy's most novel interpretations are to be found. From the pages of medical journals Duffy makes it clear that the elimination of the shoddy proprietary schools that had burgeoned in the late 19th century, even after the bacteriological revolution, and the tightening of licensure procedures owed as much to economic and class motivations as to advancing science: "Virtue and self-interest went hand in hand" (p. 299). Reducing competition as well as raising standards helped along the campaign that cut the 151 medical schools of 1900 to 66 in 1930. Physicians of the latter date were much better trained than was the average doctor at the turn of the century. They were also soon to be much wealthier-the M.D. affluence boom, Duffy says, began in the late '30's. Already physicians were more conservative, less willing to undertake the kind of innovative leadership roles in the interest of the public health that their 19th-century predecessors had played.

The medical profession, as of 1930, enhanced in prestige and shrunken in numbers, contained fewer women doctors than in earlier days. Reflecting recent societal concerns, Duffy places emphasis on the theme of minorities in medicine. "The United States has the distinction of giving the first medical degree to a woman, yet, far more than most countries, it has continually discriminated against females in medicine" (p. 270). In 1850 Harvard accepted a woman, who, confronted by a student protest riot, withdrew her application; the Harvard Medical School next opened its doors to women in 1945. Sectarian schools gave women their first opportunity to enter the profession. With the reduction of schools, women's chances declined, a trend significantly reversed only within the last decade.

Duffy also provides a sobering account

of discrimination against Jews and blacks. The account of black physicians meshes with Duffy's consideration of Southern medicine as a special and different historical case within the national picture.

Another major theme in the last part of the book is the rising presence of the federal government in health research, education, and care, a trend supported in some ways but bitterly fought in others by the organized medical profession. This and many other complexities of the current health scene are illumined by the historical perspective provided in Duffy's commendable account.

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## Last Years at Cambridge

The Mathematical Papers of Isaac Newton. Vol. 7, 1691–1695. D. T. WHITESIDE, Ed. Cambridge University Press, New York, 1976. xlviii, 706 pp., illus. \$95.

The seventh and penultimate volume of Whiteside's magnificent editionwhat more can one add to its praise? covers Newton's last four years at Cambridge, ending with his appointment in April 1696 as Warden of the Mint. The papers presented, together with Whiteside's enlightening introductions to them, reveal a man casting about in the shadow of his incomparable Principia (1687) for a worthy sequel but unable to bring any of his mathematical efforts to fruition, or at least to what he considered fruition. Neither the imagination nor the stimulus was lacking. Although much of the material is elaboration of fundamental results achieved earlier, here and there brilliant originality flashes forth and testifies to Newton's continued creativity. Moreover, Newton knew of investigations along similar lines going on in Europe; what he did not read himself of Leibniz, the Bernoullis, and others he heard about from friends. Closer to home, David Gregory had already published as his own a method of quadrature taken from Newton via John Craige. Recognition and priority were slipping away, and only resolute steps toward publication might save them.

Yet, although Newton wrote, indeed wrote extensively, he did not publish. Bold in thought, he remained hesitant in act. Even if still unexplained, the hesitation comes as no surprise to those who know from I. B. Cohen's *Introduction to Newton's 'Principia'* (Harvard Universi-