

## Book Reviews

the city to mark the sesquicentennial anniversary of its inception as the Medical College of Louisiana in 1834, Professor Duffy was the obvious choice as its author.

A history of any American medical school with old roots can be useful as a case study of how nineteenth-century proprietary schools with tiny, part-time faculties were transformed into massive, university-based centres for medical research and teaching. But even for the historian who does not particularly care about Tulane, that medical school holds special interest. In the mid-nineteenth century, for example, its flourishing condition was bound in part to the aggressive demands of southern nationalists for a distinctively southern medicine. The shaping of medical education by politics was also stark after the Civil War during Reconstruction, and during the reign of the demagogue Huey Long in the 1920s and 1930s. Further, from its start, the school had a symbiotic relationship with the Charity Hospital, one of the country's largest, and was a centre for studying tropical diseases on American soil. Tulane was also among the few schools in the South that Abraham Flexner deemed in his 1910 report to be worth salvaging, and is now one of the region's leading schools. Yet those directing the medical centre's course have persistently been troubled by the difficulties involved in reconciling its national reputation and regional identification.

The author mentions all these topics. But, by and large, he declines to explore any of them in depth, and thereby to give broader import to what remains a study of substantially parochial interest. Determined to give a balanced account of the institution – the banal along with the extraordinary – too often he fails to exploit its singularities. Racial integration at Tulane's medical school (the first black student was admitted in 1963), for example, receives scarcely more than twice the space allotted to medical students' participation in college football. Indeed, the relationship of the school to New Orleans's large population of Blacks is scarcely mentioned for the period before the 1950s. Perhaps, though, a photograph the author uses to illustrate an anatomy class at the school in 1890s makes up for the relative neglect in the text. In the photograph, fourteen white dissectors crowd around tables occupied by two black corpses. Notwithstanding its limitations, the book Duffy has produced is an able narrative history, solidly grounded in archival records, of one institution.

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EVERETT MENDELSON (editor), *Transformation and tradition in the sciences. Essays in honor of I. Bernard Cohen*, Cambridge University Press, 1985, 8vo, pp. xiv, 578, £40.00.

Professor I. Bernard Cohen of Harvard University is one of the last living of the veteran historians of science whose professional career began before the second world war. An associate of George Sarton, his successor in the editorial chair of *Isis*, and a distinguished historian of physics, Cohen has been most notable during the last thirty years for many important contributions to Newtonian studies, a line of work started in collaboration with Alexandre Koyré. Naturally, the majority of the papers here presented to Bernard Cohen by former pupils and Harvard colleagues in the history of science reflect Cohen's own preoccupation with physical science; readers of *Medical History* may, no doubt, be familiar with the names of John Murdoch, A.I. Sabra, Gerald Holton, Arnold Thackray, and others but will not expect any particular notice of their contributions here. They have appeared in time for Cohen's seventieth birthday but some, it seems, intended for his sixty-fifth, have already been printed elsewhere.

There are, however, a number of papers by historians of chemistry, biology, and medicine, among them Allen Debus, Shirley Roe, Frederic (Larry) Holmes, and the editor of this *Festschrift*, all or most of them well-known figures in the library of the Wellcome Institute. In fact, all the discussions of eighteenth-century topics have at least a loose relation to the history of medicine, from Debus on eighteenth-century Paracelsians (truly, it seems, backward-looking figures in the "Age of the Enlightenment" [*sic*]) to Robert Schofield's useful essay on the origins of Coleridge's idealism in the Cambridge Platonists and Joseph Priestley. Victor Hilts discovers enlightenment precursors of eugenics, while Dr Roe offers a

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review of Haller's work set in a Newtonian context: an invaluable *aperçu*. William Coleman considers the early French demographer Auget de Montyon; his *étatist* programme for population expansion involved a strong preference for the rural life (1778):

In the cities man produces less, he is more inclined to debauchery, he is more exposed to luxury, and consequently he fears having a large family. Experience has shown that the focus of these vices which destroy a population is located in the great cities and that from the cities they expand into the countryside.

An unusual paper, far more interesting than its title promises, is by Stanley Joel Reiser: 'Creating form out of mass: the development of the medical record' [in the USA]. In question are hospital records, the period is c.1900–25. At stake is the sincerity and efficacy of treatment. Everett Mendelsohn comes within the present decade in his account of the public politics of recombinant DNA research, an account necessarily inconclusive, deliberately parochial, and pervasively depressing. The high-minded appear not very sensible and the sensible not very high-minded. Finally, I would draw attention to the very last essay in the volume, by Nathan Sivin, on the non-occurrence of the Scientific Revolution in China – an essay possessing real interest, historiographical depth, and not a little wit. These qualities are not evenly distributed throughout the book. Sivin's piece even has some relation to the history of medicine: it points to the significance of Japanese medical men in the westernization of their country, absent in China. With astronomy the case was reversed.

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ARNDT FLEISCHER, *Patentgesetzgebung und Chemisch-Pharmazeutische Industrie im Deutschen Kaiserreich (1871–1918)*, Stuttgart, Deutscher Apotheker Verlag, 1984, 8vo, pp.xix, 440, illus., DM.46.00.

The German pharmaceutical industry was central to the development of the new therapeutics that dramatically changed public health practices and the use of drugs generally around the turn of the century. The factors which came into play to stimulate an upsurge in pharmacology and experimental therapeutics in and around the German industry are being studied from a number of different angles. Arndt Fleischer provides a most careful and broadminded analysis of what has been suggested as one key factor, the use of patents. Patents stimulated the industry in a number of ways in the period when research and development were being looked to for the first time systematically to provide profitable new products. By monopolizing the processes by which new drugs were made, and deftly using foreign patents to protect product markets elsewhere, the German industry was able to charge to the forefront of the world medical market in new therapeutics and, by the 1890s, dominate a number of key markets.

This is a published doctoral thesis in which the medical history of the drugs industry is only half of the intended story. Much emphasis is placed on the history of German patenting and on the formation of an industrial policy in which patents were to play a central role. Fleischer divides his account into a large number of short sections, making for impressively broad coverage at the expense of a smooth argument. This we can forgive, since the range of important issues considered is most valuable. He is sensitive to the influences of lobbying and interest groups and uses the debates surrounding the early legislation to raise questions about the politics of industrial innovation. He is particularly good at looking at key cases in pharmaceuticals and organic drug development, taking first aniline red, alizarin, and salicylic acid. With synthetic organic chemicals increasingly important to the industry, the debates leading up to the patent reforms of 1891 reveal especially interesting material about attitudes towards patenting and the use of patents in building a business strategy. Historians of medicine will be particularly interested in the short reviews of developments leading to the patenting and marketing of antipyretics, analgesics, antiseptics, and the new galenicals. Other sections deal briefly with vaccines and sera, hormones and natural extracts, and chemo-therapeutics.

Although there is a distinct thesis-like tone to the book, it is well researched and documented, using archival company sources from at least three companies, as well as