

firms, then of equal or greater importance, have vanished, usually by merger or assimilation into competitors. Science, in one sense or another, was becoming appreciated by doctors and even by the public, and incorporated into the activities of the firms in different ways. For some, the reputation of being a “scientific” business was enough to increase status and sales. Others took science more seriously. They improved their methods of production by introducing machinery, and the quality of their products by recruiting chemists and establishing analytical laboratories, some of which later extended their activities to more innovatory research.

Many factors influenced the development of pharmaceutical businesses in this period. One was the successful treatment by Behring of diphtheria, which led to widespread demand for the antitoxin in a world with no experience of industrial-scale production of such “biological” remedies. Another was the growth of legal requirements for reliable and safe medicines, expressed in the Biologicals Control Act of 1902, and the Food and Drugs Act of 1906. A third was the combined effect of Ehrlich’s discovery of the anti-syphilitic drug “Salvarsan” (arsphenamine), its manufacture by Hoechst with heavy patent protection and the problems of supply during the early part of the 1914–18 war. The demand for the only effective remedy and the difficulties, both legal and technical, of providing it was a major stimulus to the American pharmaceutical industry to extend its innovatory activities to meet national needs.

Liebenau deals with these subjects in valuable detail, concluding his account with the developments of the 1920s. Thus he leaves a great deal of modern history untouched, perhaps justifiably since the research activities of many firms were miniscule until the 1940s (according to J. F. Marion, Smith Kline had a Research and Development Staff of eight persons in 1936). It would be instructive if more information had been included about developments elsewhere; the industry’s evolution in Germany, Switzerland, France and England followed courses which deserve comparison with the United States.

The book is very nicely presented, but the combination of references grouped by chapter at the end of the book with the absence of chapter numbers on each page of the text is exasperating.

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PHINIZY SPALDING, *The history of the Medical College of Georgia*, Athens GA, University of Georgia Press, and London, Eurospan, 1987, 8vo, pp. xiv, 290, illus., \$35.00.

This is a brief and informative institutional history of one of the earliest medical schools in the American South. Phinzy Spalding traces the rise of the Medical College of Georgia from its tenuous beginnings in 1829, with three faculty and seven students, through its prominence in the 1850s as one of the South’s major regional medical schools, to its present status as a modern medical centre. Located in Augusta, an antebellum focus of up-country economic and political life, the college initially prospered for reasons that also contributed to the success of other American medical schools in the early nineteenth century. It possessed a well-trained faculty noted for local leadership in politics as well as medicine; it rewarded the faculty’s unabashed drive to make the school a successful business; and it established itself as a regional presence in medicine, in MCG’s case through the respected *Southern medical and surgical Journal*.

But the history of MCG also was shaped by circumstances peculiarly southern. Despite attracting many able men to its faculty—Alexander Means and Joseph Jones both taught there—MCG was tied to an agricultural economy and a dispersed, rural society that inevitably diminished the authority of town-centred, academic professionals. The destruction and dislocation which followed the Civil War not only reduced the college from a regional centre to a small, struggling enterprise relying on Georgia students alone, but also exacerbated tensions between the state legislature dominated by rural interests and the decidedly more cosmopolitan outlook of academic physicians. Particularly telling in this regard is Spalding’s account of the sporadic attempts by MCG and the University of Georgia to join forces. Four times between 1873 and 1931 an arrangement between these two institutions fell apart largely because MCG was unable to bring its professional aspirations into harmony with its dependence on the legislature for funds, and on local government for hospitals.

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Although Spalding is incisive about such institutional developments and clear about the college's response to such major national changes in medical education as the impact of the 1910 Flexner report, he often overlooks opportunities to underscore the distinctively southern character of the education at MCG. For example, although he remarks upon the many kinship ties that joined generations of faculty at the college, he tends to dismiss these as mere nepotism. Yet such ties in the family-conscious South were an important (and seldom studied) feature of medical training and institutional life. Similarly, Spalding notes the admission of the first two Black students to MCG in 1967, but offers little perspective on the college's particular contribution to the 150 years of race relations bridged by this study. Readers are left to wonder about the extent to which Black people—as patients, experimental subjects, or alternative healers—were involved in the development of MCG. Finally, this is not a study that has much to say about a medical college as a place of learning and healing. For all of his attention to changes in deans and struggles for money and image, Spalding does not concern himself with what went on in the lectures and laboratories, nor does he characterize how students and faculty brought their medicine to the sick people who called upon them.

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F. L. M. PATTISON, *Granville Sharp Pattison: anatomist and antagonist 1791–1851*, Edinburgh, Canongate, 1987, 8vo, pp. xiv, 284, illus., £12.95.

The “antagonist” of the subtitle says it all. For Granville Pattison, the anatomist who kept a pair of pistols displayed on his desk, seems to have lived a life (in his great-great-nephew's telling) of duels, dissolution, and perennial exile. The author bases his tragicomic story on the pamphlet wars Pattison engaged in wherever he went. And he went almost everywhere, a kind of anatomical Cain, “with a curse upon his forehead”, wandering in self-imposed exile from city to city. As a young anatomy lecturer in his native Glasgow, he was indicted for body snatching at twenty-three, accused of malpractice at twenty-six, and hounded from the city after his affair with Andrew Ure's wife. He moved to Philadelphia, where he made more enemies; Baltimore was no better, for he ended up duelling and brawling. And so to London University in 1827, where student accusations of incompetence led to such scenes of riot that he was sacked. From there it was off to Jefferson Medical College in Philadelphia in 1831 (where he generously gave himself an MD) and finally to New York University and another chair a decade later, trailing bad feelings and bankruptcy, waiting for the wagging finger of Presbyterian censure.

Dr Pattison's account of his distant relative is certainly not marred by the usual filial devotion. It is a history of sharp practice and short friendships, with adultery scenes as gory as the attempts to disguise resurrected bodies. Not so much warts and all; it is almost all warts, necessarily so when little else survives but the newspaper headlines. Yet Pattison's achievements do come through: he helped to found the Glasgow Medical Society and to establish the Baltimore Infirmary, and his stature in America as a lecturer grew in his later years. He was unquestionably a pedestrian anatomist and pugnacious man, yet some of his difficulties—of obtaining cadavers, obeying medical etiquette, and satisfying honour—were symptomatic of the age. Dr Pattison's biography is, if anything, kept at too personal a level. For example, we get barely a glimpse of the substantive issue behind the London University fracas: Pattison's hatred of the Parisian theoretical anatomy which his rivals were teaching, and which the tricolour-waving students preferred. The radical Thomas Wakley called Pattison “a bad anatomist and a still worse man”. But given the context at the time of the July Revolution, we can understand Wakley's, and the students', French preferences. Pattison's predicament in 1830, at least, was due as much to circumstances as crankiness.

By concentrating on the mechanics of the disputes, however, Dr Pattison has been able to draw a vivid picture of personal honour and misplaced conduct, of pistols for two and coffee for one. In short he has produced a no-holds-barred biography of a difficult man in a difficult age.

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