Book Reviews

with these subjects developed two goals representing two separate strategies: forbidding only harmful ingredients and additions, on the one hand, and, on the other, demanding labelling of ingredients to inform the consumer. Milk was often the focus of independent campaigns.

Protecting the public from impure ingestions also became an important element in the public health movement as it developed in the late nineteenth century. Moreover, the rise of national marketing made it increasingly necessary that regulation of the businesses in which adulteration occurred should be federal.

Still more complications appeared when commercial interest appeared nakedly in controversies set off by technology, when merchandisers could offer tinned foods instead of fresh, glucose instead of sugar, oleomargarine instead of butter, blended instead of aged whiskey. All became deeply entangled in the larger pure food and drugs debate, and at the same time both public health advocates and a reformed medical profession weighed in against proprietary medicines, such as babies' soothing syrups that contained opiates. Finally, in 1890, European embargoes forced a federal meat-inspection act—for exported, not domestic, goods, however. This was followed by the Biologics Control Act of 1902 to make vaccines safe—another sign of medical as well as legal change.

Young's climax is an account of the actual legislative struggles that followed these preliminaries; of the political manoeuvering of Harvey W. Wiley, who ultimately moved drugs as well as foods into the concerns of the Division of Chemistry in the US Department of Agriculture; and of the muckrakers both before and after Upton Sinclair's exposé of meat packing in *The jungle* (1906). Young's account is in turn inspiring, discouraging, and amusing.

Young enriches his narrative with asides not only on American politics, demography, and business but the history of American science, professions, and education. In view of the breadth of his research, it is unlikely anyone will soon again attempt a comprehensive narrative of the development of American Pure Food and Drug Acts—even to answer Young's teasing but unanswered query as to the ultimate meaning of "pure".

John C. Burnham, Ohio State University

NEIL WEIR, Otolaryngology: an illustrated history, London, Butterworth, 1990, 8vo, pp. 290, illus., £39.50.

This detailed history of the formation and development of ear, nose, and throat surgery reflects intensive endeavour by the author, himself an active surgeon in this field. Basing the work on R. Scott Stevenson and Douglas Guthrie's A history of otolaryngology of 1938, he dwarfs their modest volume to provide a mine of information profusely illustrated with not only photographs of physicians and scientists who contributed to the art but also drawings of diagnostic equipment, operative instrumentation, and techniques responsible for illuminating these mysterious recesses and cavities of the body, so long inaccessible to vision and treatment.

Mr Weir's enthusiasm to name and date every conceivable contributor has deflected him, perhaps, from arranging the work more usefully. Thus the contents page is spartan and could helpfully include the sub-headings found within each chapter; the illustrations are not numbered and although most are located next to appropriate text, there are irritating exceptions. In the absence of numbered references, the bibliographies at the end of chapters are impressive yet remain difficult to relate to the text. Omissions of detail are inevitable and one looks in vain for the aural syringe, J. Hippolyte Belloc's sound, and acknowledgement of William Morton's association with ether anaesthesia.

Nonetheless, I commend this book to otolaryngologists, maxillo-facial, plastic and general surgeons, anaesthetists, neurologists, pathologists, historians, and others who will be fascinated by many intriguing events such as Joseph Toynbee's dissection of over 2,000 temporal bones to elucidate the pathology of the inner ear—and his extraordinary death—and the Professor of Singing Manuel Garcia's brilliant ingenuity in visualizing the vocal cords in action for the first time.

John Kirkup, Bath Medical History Group