appears in the index. Yet the transformation of American medicine in the Progressive era was, in part, the outcome of philanthropic funding. What, too, if the perceptions of late nineteenth-century American surgeons were in some sense correct? What built America, they said, was rugged masculine individualism and it was this same force, they claimed, that built American surgery. There is much to be said for this theory suitably shaped. Frontiersmen and late nineteenth-century American surgeons had much in common. Both were engaged in exploration, entering the unknown, colonizing, bringing back specimens. High profile, high technology, adventurous surgery is in many ways an embodiment of the American dream. *American* surgery is a creation of the American people, not surgeons in America. One of the most famous photographs of surgery this century is Edward Steichen's 'Death takes a holiday' (not reproduced or mentioned here) from a play of the same name. Surgery is the stuff of awesome drama in America. The origins of the M.A.S.H. units are carefully described here but the film and the television series of the same name get no mention. Yet, in a sense, these latter address the serious issues of the making of American surgery head on. What is the relation of war and surgery in a country able to engage in the two at a virtually unrivalled level? (For that matter "silicone implant" does not occur in the index either.)

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James M Edmonson, *American surgical instruments: an illustrated history of their manufacture and a directory of instrument makers to 1900*, San Francisco, Norman Publishing, 1997, pp. xi, 352, illus., $150.00 (0-930405-70-6). Orders to Norman Publishing, 720 Market Street, San Francisco, CA 94102-2502, USA. Tel: (415) 781-6402; Fax: (415) 781-5507; e-mail: orders@jnorman.com

There is an irony, James Edmonson observes at the start of this book, in the fact that instruments of war, guns and swords, have long been objects of loving care in the hands of collectors, curators and historians while instruments of healing have languished in relative neglect. It is not irony without reason and Edmonson's book will go a long way to effecting its disappearance. This is a major study of American surgical instruments and their manufacturers and it is hard to see how it will not remain authoritative for a very long time. Edmonson starts with a lengthy introductory essay interweaving the history of surgery and the manufacture of its instruments in America (excluding Canada). He begins in the colonial period when most doctors were all-rounders, performing minor operations as well as prescribing.

The first generation of instruments were, of course, brought by their owners from their native lands. Later, apothecaries set themselves up as importers, in the main buying from England, and, in the eighteenth century, advertisements of instruments for sale jostled alongside those for drugs in the burgeoning press. Philadelphia in particular was prominent in the instrument trade. Edmonson illustrates these developments with a wealth of choice quotes. By mid-century a few cutlers were branching out and making the occasional surgical instrument, many advertising their connections with London, Sheffield and Birmingham. By the late eighteenth century, America had its own manufacturers specializing in surgical tools. The centres for manufacture, not surprisingly, were the great east coast cities. By the mid-nineteenth century, when so-called conservative surgery was becoming a treatment of choice, the number and diversity of instruments had multiplied. Anaesthesia in particular seems to have promoted proliferation, noticeably permitting lightness and delicacy of form. Antisepsis and asepsis perhaps did more than anything to change instrument design. Multiple materials and filigree became an anathema. With them, probably, went the instrument as status symbol, an intriguing subject about which virtually nothing is written and for the understanding of which Edmonson's book will

be invaluable. By this period, too, mass production was beginning to shape the face of instruments (are there deep historical relations between mass production and asepsis?).

Edmonson takes his story up to 1900 when radical surgery for conservative ends was introduced. By now mass marketing accompanied mass production and the American domestic industry felt the heat of competition, notably from Germany. Edmonson fills out this tale with references to a huge number and variety of instrument makers, detailing their methods and styles and relations with the medical profession, if that is what it can be called before 1900. Apart from a reference to the impossible fact of a London medical degree in the eighteenth century (p. 15) this is an expertly written piece that anyone who needs to command a knowledge of the instrument-making trade (and historians certainly should) must read.

The second half of Edmonson's book contains a massive directory of surgical and dental instrument makers in America between 1785 and 1900. Following this are appendices dealing with instrument manufacture (a most useful section) and other aspects of the trade. This second part of the volume is clearly the fruit of time-consuming archival trawling and Edmonson himself admits it is bound to contain oversights. For those who need such a directory this is a splendid achievement. No doubt this section will be most useful to the specialist collector and curator, although I confess myself often puzzled as to why collectors find it valuable to know that a particular instrument was made by, say, Ottomar Carliczek of Chicago. I do not doubt the use such a piece of information might have in a study of manufacturing and trade in Illinois but this is to promote text over object, which is often not the goal of collecting. The key word, to address Edmonson's irony, is presumably, valuable. Historic instruments have an importance far beyond that of historical evidence (as of course do rare books). Guns and swords have long been items of display and conspicuous consumption. They were collectibles long before the modern era of collecting. As such their acquisition has generated a literature of origin and provenance. Surgical instruments were tools of a *trade*. There are very few representations of surgeons holding instruments as opposed to the squirearchy with guns or, indeed anatomists with microscopes. Today, however, any old thing is a collector's item. Edmonson's book will become part of the world of historical scholarship but also of the market that obliquely helped to generate it. The high quality illustrations will no doubt foster this circulation. Edmonson recognizes this to be one of the certain fates of his book. The phrase "Not found in Edmonson", he observes with modest intent, may soon creep into dealer's catalogues (p. 172).

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N H Naqvi and **M D Blaufox,** *Blood pressure measurement: an illustrated history*, New York and London, Parthenon Publishing, 1998, pp. xiii, 156, illus., £38.00, $65.00 (1-85070-013-3).

This book is based on Dr Donald Blaufox's personal collection of sphygmographs and sphygmomanometers dating from the fifty years up to about 1925. The lengthy appendix in which the many instruments are illustrated and described is the most valuable part of this work. Similar information and illustrations are scattered about the literature but I know of nowhere else where so many instruments are illustrated.

The remainder of the book consists of a, not very detailed, account of the history of the palpation and recording of the arterial pulse, and of sphygmomanometry. Naturally, bearing in mind the title of the book, the sphygmograph is dealt with largely as a device for measuring the blood pressure. Frederick Mahomed's useful work in this area is discussed but it is disappointing to find almost no reference to sphygmography in the analysis of dysrhythmias. James Mackenzie's use of his polygraph is certainly mentioned but it is