Stanley Joel Reiser, *Technological medicine:* the changing world of doctors and patients, Cambridge University Press, 2009, pp. 229, £20.00, \$30.00 (hardback 978-0-521-83569-5).

It seems almost unfair to review Technological medicine in Medical History. despite Stanley Reiser's impressive track record in the history of medicine. The author's preface makes it clear that the book has been written. not for a scholarly audience, but for a "public, health professional . . . readership". It is intended to show how knowledge of the historical background can shed light on pressing, contemporary issues in medicine and health care. Technological medicine is thus an exercise in what in Britain would be called "public engagement". But these activities are, of course, very important for all historians nowadays. So, to what extent does the book succeed in its chosen task?

In a discussion that will be familiar to those who have read Reiser's earlier monograph, Medicine and the reign of technology, the invention of the stethoscope is identified as a key event in the process whereby the doctor's understanding of disease became independent of the subjective experience of the patient. Reiser argues persuasively that this epistemological separation between the worlds of practitioner and sufferer was not an act of bad faith on the part of the medical profession but was regarded by doctors, paradoxically, as improving their ability to understand and help their patients. On the other hand, he provides interesting examples of eighteenth- and early-nineteenth-century practitioners expressing impatience with the limitations of diagnoses based upon the patient's verbal testimony. William Cullen advised his fellow practitioners not to wholly disregard laypeople's accounts, "however fallacious" they might be, whereas Laennec, thirty years later, urged the complete dismissal of reports made by the patients themselves, "as we are almost always sure of being misled by their prejudice

and ignorance". Thus a tension was set up between the sufferer's experience and the attendant's analysis that, Reiser asserts, has not yet been resolved, and indeed may be getting worse. Hence the urgent need for a historical understanding of the factors which determine the character of the consultative encounter.

Reiser explores the degrees of separation between doctor and patient in a number of well-crafted case studies. A broad definition of technology is employed—one of the fullest and most interesting chapters is on medical record keeping. The keeping of accurate records is clearly centrally important to the efficient delivery of modern medicine, yet many commentators have serious and legitimate concerns about privacy, surveillance and personal agency. Other chapters focus on the impact of X-ray imaging, the artificial respirator, antibiotic treatment, and reproductive technologies. All are clear and authoritative. Perhaps the most intriguing essay explores the history of the kidney dialysis machine, which is taken as an exemplar of the impact, positive and negative, of the technological revolution in medicine. The invention of the artificial kidney is a fascinating story of brilliant technical innovation, of lives being saved, but also of the creation of major ethical and funding dilemmas. Dialysis therapy turned out to be very resource intensive. Access to the machines had to be rationed, which led to selection of patients by committee, and eventually to kidney failure becoming the first illness the diagnosis of which triggered federal entitlement to health care in the United States.

Reiser's account of the longer-term impact of the kidney machine evinces the extent to which *Technological medicine* reflects upon the American experience of health care. This, to some extent, limits the general relevance of the book to a British popular audience. It would seem, for instance, that the problems surrounding the adequate maintenance of an

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individual's medical record are less complex within the United Kingdom's more or less unitary, state-funded system as compared with the more diverse private/public hybrid of the United States. But, on the other hand, it is always instructive for a British reader to learn more about the health-care systems of other countries, particularly that of the USA. It was a revelation to me, for instance, that such a florid tension existed between clinical medicine and public health medicine in the United States.

If Technological medicine is not of central interest to the readership of Medical History for its original scholarship, it should, however, be of interest to us as teachers. Many of the topics that regularly crop up in undergraduate courses in the history and sociology of medicine are here effectively explored. Reiser investigates, for instance, the difficulty in defining health, noting that persons with significant biological impairment can often be as productive, if not more so, than their able-bodied counterparts. The role of the Internet and the creation of the expert patient is another theme. It is clear that how to bring the technological and humanistic features of medicine into a relationship that best serves the effective and satisfactory delivery of health care is as much a problem for Britain as it is for America. Reiser has provided an accessible and sympathetic exploration of this issue. I certainly intend to try out his chapter on kidney dialysis, and the rationing of health-care resources, on my undergraduate class.

One reason that it is important to bear the author's intention in mind is to excuse the text's lack of engagement with the secondary literature, even when, as in the case of the assessment of Joseph Lister's achievement. recent scholarship has been determinedly revisionist. Such issues are not relevant to the task that the author has set himself. Nor would it be fair to quibble over the odd technical detail-thus when Reiser describes the X-ray image as a "photograph", he does so to make the point that the interpretations of such images in the years immediately following the invention of the modality were structured by Victorian conventions as to how to read photographs. However, despite my no-quibble resolution, I cannot refrain from remarking that, contra Reiser, neither James Young Simpson nor James Young, distinguished obstetricians both, was English.

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