philosophies to discern how the belief in this effect was achieved. To tell more, however, would be to spoil a good story. The chapters on the other machines are equally well done if having slightly less of the flavour of the detective story. In two chapters the authors desert their genre and pursue the precursors of modern devices: graphs and photographic depictions. Both of these chapters are informative and theoretically interesting, especially the latter, which includes a useful discussion of how photographic (and other) images in the past were regarded as either natural (realist) or conventional representations. According to which approach was adopted unusual images could be designated as either unnatural distortions of nature or extensions of vision. Such a decision has had important consequences in the history of science as in the debate over Galileo's telescope. Let this volume be a lesson to historians of medicine and let us see contextual studies not just of odd ideas but of odd machines: Perkin's tractors or the Pulvermacher Belt, for instance.

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Lance Day and Ian McNeil (eds), Biographical dictionary of the history of technology, London and New York, Routledge, 1996, pp. xiii, 844, £85.00 (0-415-06042-7).

This dictionary includes nearly 1,300 entries covering those who have contributed to "the advance of technology" from antiquity. They are, the editors state, largely male white Europeans and North Americans, but Day and McNeil have, it seems, done their best to assess the contribution of women and non-white people. The justification, and the unitary theme for the volume, is that contributors to technological innovation are what count. This is not a dictionary of technologists, but of inventors. However, the editors are not consistent: my eye fell on the entry for Sir James Lithgow, an important British shipbuilder who, on the evidence of the entry, was not

responsible for a single innovation. The entries are short: just over half a page on average. There are more entries for aerospace than for agriculture and food; more on railways than on weapons. But medicine is well represented with eighty-four entries. One wonders what judgements were made about what is important.

The quality of the volume is, to be frank, low. One very noticeable feature is how out-ofdate the suggestions for further reading are. The most recent bibliographic reference for Joseph Lister dates from 1948; Howard Florey's entry has no secondary literature. The entry on Henry Ford does not include any reference to the literature produced by professional historians of technology. This is by no means unusual: the contributors to the volume seem unaware of most of the professional history of technology over the last twenty or so years. The entry on Edison, for example, has no reference to the work of TP Hughes. The entry on Sir Alaistair Pilkington does not refer to the well-known history of the Pilkington firm. And so on. It is thus not surprising to find very few professional historians of technology among the contributors. The book is thus neither a guide to recent knowledge, nor does it give any access to it. Its only use for the historian of technology is as a quick reference guide, and as a poignant reminder of what the history of technology used to be like.

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J Rosser Matthews, Quantification and the quest for medical certainty, Princeton University Press, 1995, pp. x, 195, £32.00, \$39.50 (0-691-03794-9).

The launch of the journal Statistics in Medicine in 1982 marked, by one set of criteria, an important step in the emergence of medical statistics as an established medical specialty. In the folk memory of that young discipline, its modern origins are very precisely dated to 1937, the year in which Austin Bradford Hill published in the Lancet the