controversy. Before the 1880s, water analysis remained the province of the chemists, although their scientific dominance did not go unchallenged and their role as experts underwent a significant shift in the 1860s and 1870s: the straightforward publication of empirical results of very uneven value gave way to a more interpretative approach, and the discreet colouring of information to achieve the desired results. The instigator of this new professional style was Edward Frankland, a government scientist of the stature of the much better-known William Farr and John Simon, and a more successful revolutionary than either. In the last decades of the century Frankland dominated both the science of water analysis and, in his role as Britain's leading authority on water quality (a position he achieved almost by accident), the political debates over the sources and purity of London's water supply. In the later 1880s, however, Frankland's authority was almost undermined, as was the dominance of chemistry, by the advent of bacteriology. Bacteriology replaced chemistry as the basis for judging water quality, although it was no more satisfactory than chemistry as a source of scientific certainty. In substantiating this insight, Hamlin explodes a long-standing assumption of medical and scientific history, that bacteriology created a sure foundation for the forward march of knowledge. Indeed, scientific uncertainty about water quality is still with us, in the debates over fluoride and nitrites in drinking water, in the accident at Camelford, in the problem of *Cryptosporidia* in a major Oxfordshire reservoir.

All history is about continuity and change. In the history of water analysis—of that assessment of the composition of water which developed into the methods of determining whether water is safe for drinking purposes—this truism is very neatly illustrated. The continuity is provided by uncertainty, by the fact that there were no agreed or scientifically recognized standards of water purity either before or after the advent of bacteriology. Against this background, Hamlin reveals a kaleidoscopic array of personalities, perceptions, and politics; of rivalries, orthodoxies, and ideologies. *A science of impurity* is a many-layered, densely-themed book, yet Hamlin's prose is readable and his arguments clearly expounded. The incidental insights of his story are as thought-provoking as the major themes and help to make this a challenging and satisfying book.

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C. HELEN BROCK, *Dr William Hunter's papers and drawings in the Hunterian Collection of Glasgow University Library: a handlist*, Cambridge Wellcome Texts and Documents 1, Cambridge, Wellcome Unit for the History of Medicine (Free School Lane, Cambridge, CB2 3RH), 1990, pp. viii, 84, £3.50 (U.K.), £4.50 (Europe), £9.00 (elsewhere), incl. p&p, (paperback, 0–9516693–0–3).

RICHARD PALMER and JEAN TAYLOR (comps), DAVID W. FINDLAY (ed.), *The Hunterian Society: a catalogue of its records and collections relating to John Hunter and the Hunterian tradition, with a history of the Society*, London, The Hunterian Society, 1990, illus., pp. xxiv, 282, (0–9515710–0–1, inquiries to Prof. Christopher Wastell, The President, The Hunterian Society, Surgical Unit, Page St. Wing, Westminster Hospital, London SW1P 2AP).

Both these volumes will be helpful guides to those interested in the Hunters, Baillie and their immediate successors. It would be inappropriate to criticize a handlist according to standards applicable to a full catalogue. Nevertheless, at around 800 words, Brock's introduction is very brief and actually wanting in some respects. It mentions the Hunter-Baillie Papers in the "possession" of the Hunterian Society of London, but neglects to say they have been deposited in the Wellcome Institute Library since 1971. About a quarter of the introduction is taken up with a discussion of the fate of Hunter's anatomical preparations in Glasgow. Yet the volume lists only papers and drawings, and the latter—a third of all the entries—are scarcely mentioned. Finally, John Thomson's *Life of Cullen* is attributed to William Thomson, which is careless.

The volume produced by the Hunterian Society is a lavish one, with one part consisting solely of photographs of the Society's possessions. It must have cost them an arm and a leg to

produce, which seems appropriate, somehow. As well as parts taken up with the catalogue of the records, manuscripts and books of the Society, there is an account of its history from 1819-1989 by Palmer. Although brief, this is excellent and includes the history of the collection itself and its relationship to other material in Glasgow and London. Several institutions have Hunter bits and, in a note (p. 32), Palmer puts his finger on what is really required. A single catalogue of all the Hunter-related "benefactions" would be of the greatest use.

Two final things come to mind. One is that catalogues which straddle the paper-object divide, like the Hunterian Society's, have not changed much. For example, compare its "Caricatures", "Cataract Knives" and "Coffin-Plate Rubbing" (p. 244) with headings found in the mid nineteenth-century catalogue of the Edinburgh University Museum of Military Surgery, such as "Balls, Missiles and Warlike Weapons", "Worms", "Casts" (unrelated) and "Drawings, Plans, Etc.". Secondly, all these classifications, old and new, exemplify Foucault's thematic elaboration on the Borges passage about the different classifications of animals in a certain Chinese encyclopaedia ("belonging to the Emperor", "stray dogs" and "drawn with a very fine camelhair brush"). Strange, yes, but in another sense entirely familiar when one knows the sub-culture and forms of life they refer to. In this case, it is setting the Society's "possessions" and "benefactions" to work in the business of maintaining the Hunterian tradition.

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STEPHEN TROMBLEY, *Sir Frederick Treves: the extra-ordinary Edwardian*, London, Routledge 1989, 8vo, pp. ix, 218, £19.95.

At the peak of his career, Sir Frederick Treves (1853–1923) was arguably the best known surgeon of his time. He wrote an autobiography but, tantalising, had second thoughts about publication and, at the last moment, to the dismay of his publisher, he retrieved the manuscript. After his death his wife, in accordance with his instructions, destroyed it along with his personal papers. As his first biographer, nearly seventy years later, Trombley explains the difficulties he faced, notably due to "the absence of the kind of intimate material which has become the cornerstone of modern biography".

Not only was Treves remarkably energetic and industrious, even by Victorian standards but he also enjoyed writing. As a consequence there is an abundance of published work available, to an extent that Trombley has listed nearly 400 articles, letters and books written by Treves, which make up a most useful bibliography. Moreover, by incorporating passages taken from Treves's writings into the narrative, the reader is given opportunities to appreciate his talents as a vivid and effective writer. Overall, the book offers an enjoyable and informative read, not only in the portrayal of Treves's character and professional attainments (his achievements as an abdominal anatomist and surgeon are, in fact, underestimated), but also concerning the social and political context of his life, as well as giving insights into his many interests outside medicine.

For the medical reader there are certain irritations. The variety and complexity of British medical qualifications, so familiar to home-grown doctors, present a minefield to the uninitiated and, in this book, have led to several false interpretations. In an exploration of Treves's motives for pursuing a career in surgery, surely his recognition of particular practical and intellectual talents and potential within himself should be seen as more important in determining his destiny, than any constraints imposed by the English class structure of the time. More seriously, the author has, occasionally, added certain embellishments; they may enhance the story line, but will undermine the confidence of even a junior student of clinical medicine. Thus chapter one opens with a romanticized description of the youthful Treves in general practice, in attendance on a young woman only a year older than himself, who is critically ill with anaemia. The idea is a good one but several inconsistent details render the clinical vignette flawed. "Her finger-nails, once shapely, have become brittle and concave. . . There is no doubt about the diagnosis: pernicious anaemia". In fact, Treves's description of this case which he