his excellent *Life of Harvey* in the revised bibliography, particularly as it illuminates the notes of provenance. Both Severino and Peiresc, who appear in the Appendix, seem to have owned and annotated copies of *De motu cordis*.

Keynes's *Life* updates and sometimes contradicts previous statements in the bibliography, so that rewriting the bibliographical prefaces (a task shared by both editors, it should be noted) with the minimum of alteration to the original text at times becomes a tortuous exercise in unspeak. It is a pity that more of the evidence about ownership of Harvey's works could not have been incorporated. Indeed, this compromise on the part of the publisher between a reprint and a revision is dissatisfying: the quality of recent Harvey scholarship deserves a bibliography to match. One is tempted to misquote Harvey himself: "Not to praise or dispraise, for all did well, as beholden to those who concluded erroneously for they missed opportunity."

Katy Hooper, Wellcome Institute

ANDREAS-HOLGER MAEHLE, Johann Jakob Wepfer (1620–1695) als Toxikologe: die Fallstudien und Tierexperimente aus seiner Abhandlung über den Wasserschierling (1679), Veröffentlichungen der Schweizerischen Gesellschaft für Geschichte der Medizin und der Naturwissenschaften, Aarau, Sauerländer, 1987, 8vo, pp. 222, illus., SFr. 42.00/DM 48.00.

The Swiss physician and researcher Johann Jakob Wepfer headed the so-called Schaffhausen Medical School in the late seventeenth century, cultivating an active circle of pupils and co-workers despite a heavy burden of public offices.

Andreas-Holger Maehle, physician and medical historian, has compiled a detailed account of Wepfer's clinical-toxicological treatise on water hemlock (*Cicuta aquatica* Gesner) poisoning, which included supporting studies on such other "warm" or "hot" plants as spotted hemlock (*Conium maculatum* L), Indian berry (*Menispermum cocculus* L.), nux vomica (*Strychnos nux vomica* L.), bitter almond (*Prunus amygdalus* Batsch. var. *amara* Focke), aconite (*Aconitum napellus* L.), white hellebore (*Veratrum album* L.), and jalap (*Exogonium purga* Benth.), the mineral poisons antimony and mercury, and an expert opinion on a case of arsenic poisoning.

Wepfer's interest in water hemlock toxicity was prompted by a village poisoning tragedy but his observations did not easily fit the classical Galenical ideas of his time. Therefore he developed his own individual theory of the poisoning mechanism, which recognized current iatrophysical, vitalistic, and chemical concepts.

The author has carefully analysed and commented on Wepfer's work, reproducing the original Latin texts together with relevant German reports and communications. Appropriate annotations and references illuminate Wepfer's experimental plan, viz. careful description of animal technique, doses, times, and symptoms together with accurate recording of the poisoning sequence, intensity, and duration. Although Wepfer performed no comparative quantitative work such as minimum lethal dose estimation, he clearly separated precise observation from interpretation and developed vivisection methods. Consequently he also found it necessary to defend the ethics of his work.

Maehle's book is a scholarly insight into the scientific approach of a pioneer who laid the foundations of modern toxicological testing at a time when science itself was undergoing considerable changes. This volume will continue to be worthy of detailed study.

W. E. Court, Mold, Clwyd

JOHN HUXHAM, An essay on fevers, with an introduction by Saul Jarcho, Resources in Medical History, Canton, MA, Science History Publications USA, 1989, 8vo, pp. xxxi, 191, \$15.95 (North America)/\$19.95.

Shortly after he attended Hermann Boerhaave's medical lectures at Leiden and received his MD degree at Rheims in 1717 at the age of 25, John Huxham began medical practice at

Book Reviews

Plymouth in his native Devonshire. Avid for clients, Huxham advertised himself by arranging to be summoned urgently from church to attend patients and by galloping his horse through the streets. Despite such transparent devices, he became one of the leading physicians of Plymouth, accustomed to walk abroad adorned in a scarlet coat, carrying a gold-headed cane, and followed by a footman bearing his gloves. In later life, although born and educated a Dissenter, he was a communicant of the Church of England.

In 1755, after almost 40 years of practice, Huxham published his Essay on fevers, perhaps in emulation of Thomas Sydenham's Methodus curandi febres of the previous century. But whereas Sydenham had been concerned largely with intermittent fevers, so common in the 1660s in the marshy areas around Westminster, Huxham, although familiar with intermittent fever, was preoccupied by different diseases. During the wars with Spain and France in the 1740s ships of the fleet returned to Plymouth with multitudes of sick sailors, soldiers, and prisoners of war. In addition to scurvy, so common among sailors, sick men were often brought ashore from naval ships with such infectious diseases as the "putrid, malignant or pestilential, petechial fevers", which, Huxham noted, was very different from the "slow nervous fever" common at Plymouth (pp. 38-9). Huxham thus distinguished epidemic typhus fever (petechial fever) from the less severe, but more prolonged typhoid fever (slow nervous fever). In 1745 both petechial fever and smallpox became severely epidemic among soldiers, sailors, and prisoners of war at Plymouth. Huxham also described pneumonia, pleurisy, and what he called peripneumonia notha (bronchitis). Both to cure and to prevent the scurvy that attacked sailors especially on long voyages Huxham recommended fresh fruits and vegetables. "Apples, Oranges and Lemons, alone," he said, "have been often known to do surprising Things in the Cure of very deplorable Scorbutic cases . . ." (p. 138).

The present work is a facsimile reprint of the third edition of Huxham's *Essay*, published at London in 1757, and chosen because it includes Huxham's 'Dissertation on the Malignant, Ulcerous Sore-Throat'. At Plymouth in 1751 Huxham encountered this new disease, that he noted had already been described in England three years earlier by Dr John Fothergill of London. It was familiar to Spanish and Italian physicians as the *garotillo* because of its strangling effect on its victims and to later generations as diphtheria. During the following year (1752) the malignant ulcerous sore-throat became epidemic in Devonshire. It seemed, wrote Huxham, "to be a *disease sui Generis*, yet it certainly had a very great Resemblance of the *Febris anginosa*, which I formerly described . . ." (p. 156). The *Febris anginosa* was probably scarlet fever. Huxham was thus aware of both diseases, but could not distinguish them clearly.

In his erudite introduction Saul Jarcho analyses Huxham's concepts of fever, tracing their Hippocratic and Galenic roots. As Dr Jarcho so aptly notes, one of Huxham's great merits is the clarity with which he explained his concepts of disease and what he was attempting to accomplish in treatment. "Hence," writes Jarcho, "his treatise can be used as a textbook of eighteenth-century medicine, a subject which the lapse of two centuries has made increasingly difficult to understand."

Leonard G. Wilson, University of Minnesota

JOHN R. MILLBURN, in collaboration with Henry C. King, Wheelwright of the Heavens: the life and work of James Ferguson, FRS, London, Vade-Mecum Press, 1988, 8vo, pp. xi, 328, illus., £30.00/\$55.00.

John Millburn has already given us a first-class biography of the eighteenth-century instrument maker Benjamin Martin. He has now turned to Martin's sometime neighbour in the Strand, the inventor and lecturer in natural philosophy, James Ferguson. In doing so Millburn has surpassed himself. It would be difficult to praise this book too highly.

James Ferguson's spectacular career might have been a model for the thousands of eighteenth-century Scots who left their native land and plundered the English Enlightenment. Born in 1710, this son of a lowly Banffshire shepherd, and self-taught mathematician, set off for London in 1743 to seek his fortune. In 1776 he died rich, well known, and an FRS. Now