

## Book Reviews

being a mental patient in seventeenth- and eighteenth-century England, although in many ways they are also frustrating. In the Foreword, Roy Porter returns to a favourite theme from his book, *A social history of madness* (1987), the importance of listening to the voices of the mad, and Professor Ingram's Introduction provides a cogent analysis of the way in which these authors chose to make use of the written word to highlight their plight, but also to make sense of their experience. History has treated the writings of the mentally ill with a great deal of condescension, but it would be a mistake to go to the other extreme and portray their accounts as the authentic voice of the marginalized. Unpicking what these pamphlets can really tell us is problematical.

It would have considerably added to the impact of this volume if Ingram had been able to provide some corroborative archive material to clarify the immediate events alluded to—what the official records had to say—although he does provide useful historical background to the period. Despite the consumer perspective, much of what is written about madhouse confinement rings true. Bruckshaw's comment about his attendants' repulsive air of familiarity, finds echoes in similar monographs, and Cruden's diary of daily chainings supports the view that although some madhouses were pursuing reduced levels of personal restraint by the late eighteenth century, patients were routinely subjected to long hours of physical confinement.

The three male authors were seeking recompense for unjust confinement, but Hannah Allen's account is particularly interesting, as she was the only one cared for in a home setting, and the only one who accepted she had been ill. Allen detailed several serious suicide attempts and her eventual triumph over the Devil through Christian fortitude. The extent of self-loathing expressed, and her retrospective sorrow for rude and scornful behaviour, all provide an authentic picture of severe depression, and depict a form of home care which placed her illness in a religious rather than a medical framework. Cruden, Bruckshaw and Belcher,

all writing in the eighteenth century, did not accept that they had been ill. The two former both sought personal restitution, but Belcher's blend of sarcasm and irony lays out a wider case for reforming the system. His monograph addressed to Frederick Bull, a Wilkeite, made appeal to traditional liberties, as did the patient John Perceval in the nineteenth century.

Aside from publishing, none of these authors attempted, like Perceval, to galvanize a wider basis of support for the mentally ill (N Hervey, 'Advocacy or folly', *Med. Hist.*, 1986, 30), and after reading these accounts one is left with an uneasy feeling that although they provide a fascinating window on past discourses long lost to us, they are deeply personal documents lost in a borderland between official indifference and the impulsion to assert a self which may have been deeply flawed.

**Nick Hervey**, Charlton, London

**William H Brock**, *Justus von Liebig: the chemical gatekeeper*, Cambridge University Press, 1997, pp. xiv, 374, illus., £50.00, \$79.95 (0-521-56224-4).

Hot on the heels of the recent biographies of Hermann Kolbe and Edward Frankland, by Alan Rocke (1993) and Colin Russell (1996), comes the long-awaited account by William Brock of an even more important nineteenth-century organic chemist, Justus von Liebig (1803–73). He is best known for the way in which, in the 1830s and 1840s, he used his position as professor of chemistry at the tiny University of Giessen to develop practical teaching of his subject in the laboratory where he launched one of the most famous research schools that European science has ever seen. Brock covers these themes well, bringing out the importance of pharmacy in Liebig's teaching and giving as an appendix Carl Wilhelm Bergemann's detailed report of 1840 to the Prussian Ministry of Education about Liebig's laboratory. Brock also shows that there was much more to Liebig than the renowned chemist breeder. For Liebig chemistry was the

fundamental science, the boundaries of which he tried to extend from about 1840 into enterprises which he regarded as contiguous. In a series of thematic chapters we learn about Liebig's activities in industry, agriculture, physiology, pathology, and public health. He was thus the chemical gatekeeper of Brock's sub-title. He was also an effective popularizer of chemistry and a philosopher of science, who condemned what he regarded as the naïve inductive philosophy of Francis Bacon.

Brock is particularly revealing about Liebig's medical interests. His agricultural chemistry was based on the idea of giving mineral medicine, and not manure, to the land; this view was stoutly opposed by John Bennet Lawes and Joseph Henry Gilbert (a former pupil of Liebig) working together at Rothamsted. Liebig's contributions to animal or physiological chemistry, now called biochemistry, were equally contentious. His views about fat metabolism, protein degradation, and fermentation generated sustained and acrimonious controversies. For example, Jöns Berzelius publicly criticized Liebig's physiological chemistry as facile because it was created at the writing table; privately he denounced it as drivel. At the end of Liebig's life Pasteur had pushed him into a paradoxical position: though Liebig accepted that yeast was a living organism, he maintained his original stance on the essentially chemical nature of fermentation. In the field of public health, Liebig had the temerity to pen *Letters on the subject of the utilization of the metropolitan sewage addressed to the Lord Mayor of London* in 1865. Comfortably ensconced in Bavaria from 1852 as professor of chemistry at the University of Munich, where he did little laboratory work, and from 1858 as perpetual president of the Bavarian Academy of Sciences, he advocated unsuccessfully the intermittent hosing and spraying of land with town sewage and opposed using it to irrigate sandy areas to create sewage farms. In the vexed matter of theories of disease Liebig was influential: from the 1840s until the 1880s many theorists used his chemical process model. In the 1860s

Liebig became obsessed with nutrition, not just intellectually but also commercially. Though his extract of meat was quickly shown to be less nutritious than he supposed, he founded the Liebig Extract of Meat Company which made a fortune for him; after his death it became famous for its Fray Bentos Corned Beef and Oxo. Sadly Liebig's diet of cognac, wine, and his own meat extract did not prevent his death from pneumonia. As a business man, Liebig was also involved in successful ventures with baking powder and with malted and dried milk sold as infant foods.

Brock's is the first English-language biography of Liebig since William Shenstone's hagiographic account of 1895. Those who read German fluently may still turn with profit to the biography published in 1909 by Jacob Volhard, a pupil and friend of Liebig. Brock says modestly that his book should be regarded as complementing but not replacing Volhard. I beg to demur. Drawing on a wide range of primary and secondary sources, Brock gives us new insights and information about the familiar and unfamiliar aspects of Liebig's personality and career. With meticulous but easily carried scholarship he quietly corrects errors made by other historians including myself. His prose is lucid, flowing, and sequacious. Without any Latourian jargon he depicts the Liebigization of not just Germany but much of Europe. There is no doubt that this accomplished book deserves to be the standard biography of Liebig for many years to come.

**Jack Morrell**, Bradford, Yorkshire

**Andrea A Rusnock** (ed.), *The correspondence of James Jurin (1684–1750): physician and secretary to the Royal Society*, *Clio Medica* 39, Wellcome Institute Series in the History of Medicine, Amsterdam and Atlanta, Rodopi, 1996, pp. viii, 577, Hfl. 275.00, \$171.00 (hardback 90-420-0039-2), Hfl. 75.00, \$46.50 (paperback 90-420-0047-3).

The correspondence of James Jurin, a mathematician and physician who served as