

Book Reviews

PAUL SAUNDERS, *Edward Jenner. The Cheltenham years 1795–1823. Being a chronicle of the vaccination campaign*, Hanover, N.H., and London, University Press of New England, 1982, 8vo, pp. xviii, 469, illus., £19.25.

A long-time resident of Cheltenham, Saunders became concerned with Jenner in an effort to save his house from demolition. Combining this with an interest in Cheltenham history and antiquities, he has sought to present the “social context” neglected by the official biographer, John Baron, at the behest of the very proper Jenner family within which Jenner lived and worked, from 1795 when he first took up seasonal residence in that fashionable spa. The result is a curiously truncated picture. The years before 1795, when Jenner completed most of his original work except for the final vaccination experiments, are passed over quickly in order to concentrate on important people who supported vaccination or who were in some way connected with Jenner.

The work is based on extensive use of primary sources relating to the history of Cheltenham, Gloucestershire, and the larger world, but on virtually none, it would appear, of the contemporary medical or the recent medical-historical literature other than LeFanu’s *Bio-bibliography*. Even the title of Jenner’s great work is given incorrectly as *An inquiry into the causes and effects of the variola vaccine of cowpox* (p. 66), and one is forced to wonder if the author has read it.

This neglect, combined with the author’s fascination with Cheltenham society, leads to some rather curious statements. Saunders apparently is of the opinion that the only difference between inoculated and naturally acquired smallpox was the opportunity to have the former under the most favourable medical and nursing conditions; that mortality from variolation was still high; and that Jenner devoted his career to finding a preventive of smallpox because he was adamantly opposed to variolation. He accuses Jenner’s nephews, who were in practice with him in Berkeley, of “trying to undo” his work by inoculating hundreds of persons in Berkeley when Jenner went to Cheltenham in the spring of 1795 to recuperate from a severe illness. “It is significant,” Saunders writes, that this “mass operation . . . was completely ignored by the family and never mentioned by Jenner himself.” (pp. 30–31.) In fact, Jenner referred to this “general inoculation” of April 1795 in case 1 of the *Inquiry*. Perusal of the *Inquiry* makes it obvious that Jenner and his nephews frequently inoculated and in the general discussion he writes favourably of the highly successful practice of his “respectable friend” Dr Hardwicke.

Jenner vaccinated Phipps on 14 May 1796, but no one in 1797. During most of that year, according to Saunders (pp. 52–60), drawing on evidence from the Berkeley peerage trial in 1811, Jenner lived at Berkeley Castle, taking care of Lady Berkeley. Baron “assures us”, Saunders notes, that the reason for the “blank year” was “a shortage of cowpox serum [*sic*; Saunders regularly uses this term for the vaccine fluid]”, but he implies that the real reason was Jenner’s “incarceration” in the castle, which “completely halted the progress of his vaccination research”, and he suggests that Baron ignored this fact because he “was not concerned with delineating Jenner’s association with the demimonde” (Lady Berkeley having lived with Lord Berkeley for some ten years and borne him three sons before they were married). In fact, Jenner did carry out at least two experimental smallpox inoculations in February and March 1797 (*Inquiry*, cases 7 and 8) and, more important, Baron merely followed Jenner in attributing the hiatus in vaccination to the absence of cowpox in the dairies (*Inquiry*, pp. 34 and 47).

Saunders also assures us (p. 43) that Sarah Nelmes, although “generally described as a Berkeley milkmaid”, came from “an old, highly respected local family”, was the daughter of a “prosperous farmer”, and was “certainly no peasant”. Aside from the fact that the term “peasant” is not properly applied to the lower orders of society in rural England, it seems to have escaped the author’s attention that it was Jenner himself, in the *Inquiry* (case 16), who described Sarah as a “dairymaid” infected from “her master’s” cows.

While there is much evidence to back up the account of Cheltenham society and the Regency rakes, there is relatively little that directly connects Jenner to their doings. The author is, therefore, frequently led to surmise that because certain prominent people were in Cheltenham during the season, Jenner must have known them, and perhaps he did. The famous actress Sarah Siddons was discovered, we are told, by Lord Aylesbury in 1774 in Cheltenham, and

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Edward's brother Henry was private chaplain to Aylesbury. In later years, she was frequently in Cheltenham during the season, as were the Jenners, and Edward was in London when she played the lead in a short-run play written by Joanna Baillie, the sister of Matthew, whom Jenner knew well. Also, Charles Moore, the brother of James Carrick Moore of vaccination fame, followed her about devotedly, to Cheltenham as elsewhere. From these events she becomes a "keystone of the Jenner circle" (p. xvi) – a curious metaphor surely. Similarly, with reference to the actress Harriot Mellon we read, "The romantic saga of this beautiful but penniless Cheltenham girl who married one of the richest men in the world will be [and is] dwelt upon later, since Jenner himself was obliquely involved" (p. 50) – to the extent of having Harriot's mother and stepfather, who ran the post office and a music store in Cheltenham, among his patients.

What makes this attention to the private lives of innumerable "exalted personages" so curious is the author's own acknowledgement of Jenner's devotion to his invalid wife and family, which severely limited any social life he might have had, and of his marked dislike for London. The enormous effort that Jenner put into the vaccination campaign seems to be obscured rather than elucidated by the chit-chat about the famous, much of it irrelevant to Jenner's career, so that in this book Jenner, instead of being raised in our estimation by having known so many famous people, would appear somehow diminished by so much association with the trivial. The author has undoubtedly turned up some new details on Jenner's career, but readers will find more balanced and useful accounts in the already existing literature.

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FRANCOIS DUCHESNEAU, *La physiologie des lumières. Empiricisme, modèles et théories*, The Hague, Boston, and London, Martinus Nijhoff, 1982, 8vo, pp. xxi, 511, Dfl. 185.00/\$97.00.

This work addresses the problem of how a distinct science of physiology evolved during the course of the eighteenth century. Before 1707, when G. E. Stahl's *Theoria medica vera* was published, investigators of nature recognized no clear epistemological frontier separating the study of the objects of the inorganic realm from that of organisms. Gradually, however, theories concerning the nature of living bodies gave way to physiology, an autonomous and strictly delimited field preoccupied with the functions and forces specific to vital phenomena. Concurrently, there was a transition from natural history to biology. That is, a descriptive and classificatory knowledge of morphological characteristics gave way to an experimental theory founded on the analysis of functions. To his examination of this process, Duchesneau applies the perspective of a historian and a philosopher who examines the method of formulation of scientific theories and their function. Accordingly, he is preoccupied with such problems as the role of experimental method, the genesis of hypotheses, the role and nature of models and the evolution of concepts.

In ten chapters, the author discusses the work of fourteen physiologists beginning with Stahl, who subjected prevailing mechanist models of organic function to a new philosophical analysis. He catalysed the development of physiology by contending that the composite living body is more than merely the sum of its parts. To account for the activity of life, he invoked the soul to serve as an integrating principle. A number of his successors, including Whytt and Barthez, would similarly assign the regulation of the body to a soul or other principle heterogeneous to the bodily substance. Others, including Haller, Bordeu, and Bichat, were to locate vital activity in the parts themselves.

The pivotal figure among enlightenment physiologists, according to Duchesneau, is Haller. He based his influential theory of living activity on a study of the phenomena of irritability and sensibility which were not reducible to physicochemical properties. Significantly, he attached them to minute fibres which were seen to be the instruments of bodily activity. The author identifies two types of conceptualization to which Hallerian theory came to be subjected. On the