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that Gadamer associates with "health".

Gaiger and Walker have translated Gadamer's critique of modern medicine in elegant and eminently quotable language. Anyone interested in Gadamer, and anyone seeking quotable quotes from a famous and influential philosopher who is sceptical of the claims of modernism in medicine, would do well to peruse this book. Anyone interested in important new ideas about medicine and its history, however, would be best advised to look elsewhere. For the primary and perhaps the sole importance of this book is that it is written by a famous and influential philosopher.

Robert Baker,

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Reginald Horsman, Frontier doctor: William Beaumont, America's first great medical scientist, Missouri Biography series, Columbia and London, University of Missouri Press, 1996, pp. xv, 320, illus., £31.95 (0-8262-1052-X).

William Beaumont is recognized as an early nineteenth-century American physician who studied gastric juices, but he was also a career army surgeon and community practitioner. The many primary sources, including letters, diaries, notebooks, reminiscences, and army documents, make him a worthy subject for a biography.

Beaumont was born in 1785, studied medicine as an apprentice, and became an army surgeon in 1819. He was permitted to maintain a profitable private practice throughout his army service. Like most of his contemporaries, Beaumont employed heroic therapy with its armamentarium of bloodletting, purgatives, emetics, and blisters. He was a dedicated and conscientious surgeon.

In 1822 Beaumont treated Alexis St Martin, a 28-year-old Canadian Indian, for a very large and severe gunshot wound in the stomach. The wound healed so that small fistulas or holes remained in the skin and the stomach in such a

way that Beaumont could observe the interior of the stomach and insert and remove objects. At first the hole had to be plugged to enable St Martin to retain food, but a small fold developed that made this unnecessary.

Beaumont originally intended to publish his treatment of a very unusual case, but after six months, when St Martin was much improved, he realized the research opportunities and employed St Martin as a family servant. Beaumont was unfamiliar with research techniques but he learned from his mistakes and his ignorance of the scientific controversies about digestion enabled him to avoid preconceptions. His most basic experiment was to remove gastric juices from St Martin's stomach, mix them with a piece of canned beef, and maintain them at body temperature. At the same time, he inserted a similar piece of beef attached to a string directly in St Martin's stomach. Both pieces were digested, which supported a chemical rather than a vitalistic theory of digestion. Beaumont investigated digestion rates, the digestion of different foods, and showed that gastric juices were not simply acids.

Joseph Lovell, army surgeon general from 1818 to 1836, became the sympathetic, gracious, and bountiful patron of Beaumont, who was often demanding and unappreciative. He reduced Beaumont's army responsibilities for years, sent him books, enabled him to travel to meet scientists, and enlisted St Martin in the army to save Beaumont the cost of supporting him. Under Lovell, the army's support of Beaumont's research was the equivalent of several hundred thousand dollars today.

Beaumont published his findings in a book in 1833. His subsequent research on St Martin was sporadic and inconsequential but his scientific reputation grew steadily. Beaumont left the army in 1840 and was a prominent practitioner in St Louis, Missouri, until his death in 1853. St Martin died in 1880.

This fascinating biography provides an extremely thorough and well-written account of Beaumont's scientific investigations and professional career. A map and occasionally

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more context would have been useful. Frontier doctor is an outstanding and stimulating contribution that can be enthusiastically recommended to those interested in Beaumont or early nineteenth-century American army medicine and physicians' careers.

William G Rothstein,

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Diana E Manuel, Marshall Hall (1790–1857): science and medicine in early Victorian society, Wellcome Institute Series in the History of Medicine (Clio Medica 37), Amsterdam and Atlanta, GA, Rodopi, 1996, pp. xiii, 378, illus., Hfl 60.00, \$40.00 (90–5183–905–7).

Even though Marshall Hall's father was a bleacher, in the eyes of many influential members of the medical profession his son always remained something of a black sheep. In the culture of medicine, Hall cottoned on fast: an Edinburgh MD, followed by Nottinghamshire public and private work, followed by a successful transition to London medical practice. After an opening biographical account, each of these periods in his high-flying career form the early chapters of Manuel's biography. She also shows, however, that Hall was never solely interested in acquiring the staple of a medical living. From the outset, he wanted those much more fancy and finished polite physicians' goods: literary reputation, Fellowship of the Royal Society, and access to its prestigious Transactions.

Hall's fluency with the pen on the subjects of diagnosis and the diseases of women and children helped him spin a number of convincing medical yarns from the raw material of his early medical experiences gained in hospital, dispensary and private sick room. Later he took up physiological research and began to focus on the reflex function of the spinal nervous system. Thus Hall chose a subject with even more woofs and warps than his overwhelming sense of importance as its

self-proclaimed progenitor. And so, like many a manufacturer's son who thought he cut a fine figure in London clothes bearing the "Discoverer" label, he found himself unravelled. His social betters, competing with him for footnotes as well as fortunes, failed to acknowledge and print the fashionable Nottinghamshire designer of the "true spinal system". Some even said it was stolen from a much earlier Eastern European Prochaska show. Hall's relations with the distinctly unimpressed Royal Society and his work on the nervous system constitute two later chapters of Manuel's book.

Her final chapter recounts Hall's later years, including a trip to America, writings on slavery, resuscitation and various other remnants he patched together at the last moment. Thus Manuel has chosen the standard and well-tried pattern for relating individual to context. This could be summarized as: general biographical outline, detailed analysis key episodes, and "Final Years" (ch 6) considered as a last dayslast work summary. The end result is a well printed calico which covers Hall usefully and adequately. By the same token, it is unlikely to be paraded on the catwalks of the history of medicine for its innovative treatment and stylish writing. The same biographical details are often rehearsed in several places, and the balance of detail between the analysis of Hall's views and the details of the various controversies he changed in and out of is very much in favour of the latter.

Manuel does draw on a variety of modern scholarship to illuminate Hall's career during his London period, when he struggled unsuccessfully for a permanent post which combined practice and teaching at a large hospital-based medical school. However, elsewhere, there is insufficient reference to and use of history of medicine writings published after the mid-1980s, and greater awareness of wider material about early Victorian culture would have helped turn this book from an off-the-peg study to an eye-catcher. Less calico and more batik, in which the social and personal dimensions of Hall's life run into one another, would certainly have livened the show.