

nineteenth century these medical staff also began to measure the effects of the environment on the health of prisoners, and he concludes that a competent service developed with an independent ethos of knowledge-based medical care, offering treatments which were closely in line with the accepted methods of the day.

Clinical practice in the prisons was influenced by the prevailing belief that atmospheric miasma communicated much disease. In that context Higgins examines the struggle with specific well publicized diseases such as typhus (gaol fever) and Asiatic cholera and evidences medical staff going to considerable lengths to intervene against these, using methods such as ingenious ventilation devices, sanitary improvement and cellular separation. But practitioners also had recourse to interventions not based on miasmatic theory, for example vaccination against smallpox. Indeed most of the work of the prison surgeon involved recourse to an extensive pharmacopoeia to treat the less dramatically highlighted daily round of illness such as gastro-intestinal, ulcerous and venereal conditions. He concludes that at the forefront of the minds of these staff was combating disease and illness and curing prisoners effectively rather than subjugating and repressing them.

Insanity, deaths in prison (including self-inflicted) and malingering attracted much attention from penal critics at the time, and Higgins assembles a wealth of case material to show the day to day realities behind the public rhetoric before turning finally to the relationship between prison surgeons and the prison authorities such as governors and magistrates. He uses the infamous scurvy outbreak at Millbank Penitentiary in the first six months of 1823 to challenge those who see this as a prime example of callous doctors colluding with the management to drive diets down to the point of starvation.

I have two comments on detail. Higgins's argument that William Baly, Medical Superintendent at Millbank, saw no connection between water quality and cholera

needs qualification. Although admittedly Baly believed miasma to be the primary cause of its spread, my reading of the record is that he also saw foul water as a subsidiary, "exciting" cause. Secondly, what a poster from communist Russia urging death to lice in 1919 is doing reproduced in this book escapes me—I suspect it is a sacred cow the author should have slaughtered.

I accept Higgins's central contention that the history of prison medicine has too often been negatively labelled as collusive repression, although I think he swings the pendulum rather too far in the opposite direction. He has presented a wealth of evidence showing the suffering which prison medical staff encountered daily and the ingenuity and commitment they showed in confronting it. His book is a useful corrective to revisionist texts and, following the recent integration of prison health care with the community-based primary care trusts of the National Health Service, provides food for thought more generally.

Bill Forsythe,
University of Exeter

Peter Jones, *A surgical revolution: surgery in Scotland 1837–1901*, Edinburgh, John Donald, 2007, pp. 231, £20.00 (paperback 10-0-85976-684-5).

A wonderful subject, still to be fully fathomed as a serious historical topic, let alone finished: Scotland and the making of modern surgery (or engineering if you do not like blood). That there was a surgical "revolution" in the second half of the nineteenth century and that Scotland was a key setting in which this was brought about are affirmations that seem as sound today as they were when first made by surgeons of the time. Rightly, I think, none of the revisionist history of surgery of the last thirty years has sought to challenge them. In Peter Jones's book they are taken-for-granted assumptions which he exemplifies in detail but does not query or explain. There is

nothing new in this volume's framework and much is retold in the original, tired, often mythological, form that late nineteenth-century surgeons created: the discovery of anaesthesia, Lister's antiseptics, etc. The contents of this work—the great men, the famous operations—can easily be found in many places elsewhere. The virtues of this volume derive from Jones's personal experience—he is a retired paediatric surgeon—and he brings to the technical history of the operations he describes an informative clarity rarely encountered. Among other things the accounts of Lister's operations on carious joints (especially wrists), the corrections for the deformities of rickets in the lower limbs, the various interventions for an inflamed appendix, and Macewen's surgery for cerebral lesions are models of exposition of complex practical matters to which any interested reader could be directed.

These accounts demonstrate both Jones's first-hand knowledge of surgery and his careful return to primary sources. Of secondary sources, however, there is scarcely a trace except older hagiographic biographies. Inevitably all the familiar stories invented by surgeons and their pupils of the time are rehearsed. To take but one example in which I admit an interest: once again Lister is credited with saying that "if dust suspended in the air could cause sugar solutions to ferment" then "it was possible for dust carrying harmful germs to gain access to living tissues . . . and cause putrefaction" (p. 145). Before 1880, and probably much later, Lister never said any such thing and certainly not in 1867 nor for many years after this date when he first published on his antiseptic technique. Sugar solutions were not considered similar to living tissues by Lister or anyone else and he never made a leap from non-living organic matter to the healthy body. Living tissues, he repeatedly asserted, were perfectly resistant to "germs" but organic matter in wounds—congealed blood, dead tissue—like sugar solutions, he endlessly iterated, could form an ideal nidus for "germs" to cause putrefaction by fermentation. It was the absorption of toxins

from this putrefaction, Lister said, that led to conditions such as hospital gangrene. To suggest otherwise is to be taken by the myth later created by Lister and his followers that he used a modern germ theory of infection—basically a German construct of the 1880s—to guide his researches. Lister used antiseptic dressings to prevent "germs" settling on dead material and fermenting it. Oddly, Jones repeatedly uses Lister's own phrase "the germ theory of putrefaction" but seems not know the words of Lister's most famous disciple, recurrently referred to in this book. In 1882 William Watson Cheyne declared "the germ theory of infective disease . . . [has] no essential bearing on the *principles* of antiseptic surgery" which was "simply a struggle with the causes of putrefaction" (*Antiseptic surgery*, pp. 287–8).

At any rate the heroic picture of Lister champion of the germ theory, once again obscures the man—a most original, painstaking and much-admired (albeit remote and serious) surgeon who built up a cadre of devoted pupils brought up in the new science of the 1880s who created him as a prophet of modernity. Recently in their excellent study, *Medical lives in the age of surgical revolution* (2007), Anne Crowther and Marguerite Dupree have begun to show how this was done. This work may have appeared too late for Jones to have taken cognizance of it but, since the most recent works cited in his chapter 'The birth of the antiseptic principle' are from 1977, and then before that the appreciations of Lister by his pupils Rickman Godlee and Hector Cameron, it is hard to imagine its appearance would have made much difference had it been noticed.

Christopher Lawrence,

The Wellcome Trust Centre for the
History of Medicine at UCL

Julie Anderson, Francis Neary and John V Pickstone, in collaboration with **James Raftery,** *Surgeons, manufacturers and patients: a transatlantic history of total hip*