

Book Reviews

Kemp neatly calls, the “fantasia”, expressed by the painting of the *Last Supper* in which the perspectival illusion is interestingly explained. In the scientific field, similarly inspired ingenuity is found in Leonardo’s geometrical transformations.

The physiological truth so beautifully symbolized in the *Leda and the Swan* and the portrait of a *Lady on a Balcony* (the *Mona Lisa*) is here interpreted as “the procreative powers of all living things”. This exemplifies the author’s insight into the richness of Leonardo’s mind.

This book is full of insights which enrich the artistic interpretations offered; a feature which will make it exceptionally welcome to art historians. For historians of science it provides glimpses of the way from rigid mathematical exactitude into spatial transformations of the truth. This has been largely lost since algebra subjugated geometry as the chosen language of science. But spatial analysis was Leonardo’s great and unique contribution to the unification of art and science. His every painting and drawing is charged with his science in the form of his physics of light and shade, perspective, and the geometry of forces acting on all objects, be they rocks or men. Martin Kemp’s fluent expression of his awareness of this is to be warmly welcomed.

Kenneth D. Keele
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MARY C. GILLETT, *The Army Medical Department 1775–1818*, Washington, D.C., Center of Military History (US Army), 1981, 8vo, pp. viii, 299, illus., \$11.00.

By the most diligent research, Dr. Mary C. Gillett has skilfully picked her way through a mass of conflicting historical material to select, with great perception and clarity, the significant events which provided the milestones in the evolution of the American Army medical system. It is an all-too-familiar story of ineffectual central control, makeshift organization, confused legislation, ill-defined responsibilities, and blurred chains of command. Personal, professional, and unit rivalries prevented the collaboration necessary for the provision of medical facilities and the transport of casualties and supplies during the ebb and flow of battle. This ranged over territory either frozen in snow and ice or scorched by burning heat, so that the book is as much a testament to the ragged, often starving soldiers, militiamen, and volunteers exposed to raging epidemics of smallpox, typhus, malaria, dysentery, and other diseases, as to the inadequately trained, equipped, and disciplined regimental surgeons, knee-deep in the blood and water of their trenches, or their hospital counterparts struggling with a massive influx of casualties in unsavoury and insanitary buildings.

Dr. Gillett’s limpid literary style makes for enjoyable reading and her opening chapter on contemporary medical practice provides a yardstick by which the performance of her American surgeons might be judged. She could, with profit, have provided similar synopses of each campaign to enable the reader the better to orientate himself amidst descriptions of the various engagements and to draw more meaningful conclusions. In fact, as the author explains, documentation was so poor that records are incomplete and overall statistics difficult to establish. Despite this handicap, Dr. Gillett has provided an admirable concluding chapter on inferences to be drawn. This all pointed to the need for strong central administration. Yet, in spite of the lessons of the Revolutionary War, the War of 1812 found the Army again unprepared, and it was not until 1818 that the Army Medical Department was finally established on a permanent basis.

Useful appendices, character sketches, full notes, a comprehensive bibliography, and maps, tables, and illustrations all augment an absorbing and well-documented review of early American medical history.

Surgeon Vice-Admiral Sir James Watt
London

M. W. FLINN, *The European demographic system 1500–1820*, Brighton, Harvester Press, 1981, 8vo, pp. xi, 175, £15.95.

This book is one in a new series devoted to the history of pre-industrial Europe 1350–1850. Although not explicitly excluding the more traditional forms of historical writing and analysis, the list of titles leaves no doubt that the general editor, Geoffrey Parker, wishes to focus atten-