

sect the intricacies of early nineteenth century metaphysical speculation on affinity.

Leveré sees "chemical affinity as a unitary concept in nineteenth century chemical theory" (page vii), but as the material is presented, it seems more a projection of his own fascination with the speculative than a believable historical reality. He devotes more pages to the Kantian metaphysics of the poet Samuel Taylor Coleridge than to the two contemporary books on chemical affinity by Claude Louis Berthollet; he treats Boscovich's point-atomism in more detail and with more sympathy than the operational atomism of John Dalton. Though such an emphasis is consonant with the author's expressed desire to move history of chemistry away from a concern with only those events that led directly to the "truths" of present day chemistry, Leveré's interpretation seems as distorted as the "Whiggish" one he is trying to replace.

Nonetheless this is an impressive book, both for what it contains and the scholarship that produced it. The empirical basis for most of the speculations about the nature of chemical forces was Davy's announcement in 1806 that electrical attraction and chemical affinity might be the same thing. Davy's own undisciplined speculations get the fullest treatment, but Leveré gathers his evidence from many scientists and much of it from manuscript sources. The sheer quantity of speculation from men known chiefly for their experimental discoveries is significant and tends to confirm the sense of uncertainty visible from other evidence at this time, a disquietude that chemistry's progress appeared to be accidental and its basis unphilosophical.

The material in this book has been previously little attended to, probably because such speculations have not been thought to have contributed to the progress of chemistry. Leveré, however, seems to believe that their metaphysical views led these men to their scientific discoveries. For example, he states that Oersted's metaphysical outlook "was eminently successful in furnishing him with theories that led to discoveries, and as such it deserves attention" (page 139). This is an enormously important claim, but Leveré hardly attempts to prove it. He does not describe the particular hypothesis that Oersted had in mind when he discovered the relationship between electricity and magnetism; he does not show how that hypothesis could have been derived from Oersted's metaphysics; he does not describe the experiment nor the relationship it demonstrated. Nonetheless, Leveré has shown that these scientists cared very deeply about their speculations, and future biographers will probably find individualized explanations for the

relation of metaphysics to discovery.

The material in this book is important and largely new. Whether or not he agrees with the interpretations through which it is here presented, no historian of nineteenth century science should neglect it.

ROBERT SIEGFRIED

Medical Care

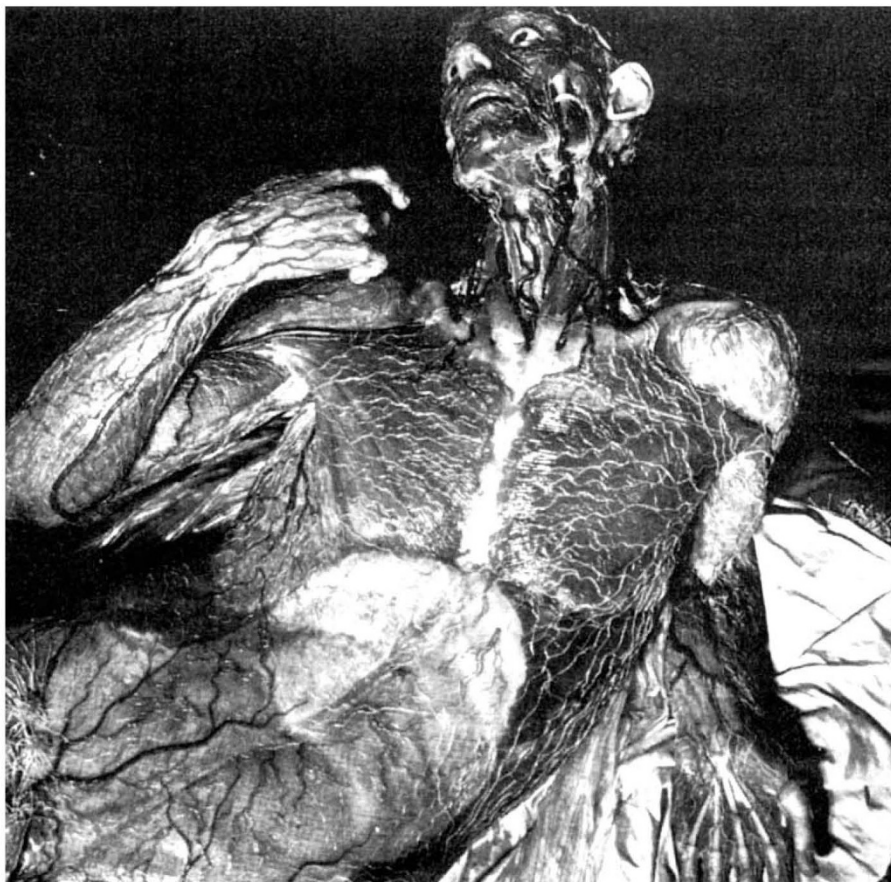
Medical History and Medical Care: A Symposium of Perspectives. (Arranged by the Nuffield Provincial Hospitals Trust and the Josiah Macy jun. Foundation.) By Gordon McLachlan and Thomas McKeown. Pp. xii + 244. (Oxford University: London and New York, 1971.) £3.

THIS book is the record of a symposium held in London in October 1970 under the auspices of the Nuffield Provincial Hospitals Trust and the Josiah Macy jun. Foundation. The purpose was to explore and evaluate the history of the human experience of disease in an attempt to ascertain how far such historical studies are capable of contributing to the solution of contemporary problems.

In the preface Lord Cohen of Birkenhead comments that it is far too early to assess the ultimate value of the symposium. "Perhaps as much was gained in the informal meetings with one's colleagues as in the more formal sessions, and perhaps future meetings of similar type will help to illuminate the persisting shadows."

The book is, in effect, a series of essays, each of which is followed by a summary of the original discussion on it. They comprise two papers by Thomas McKeown, on a sociological approach to the history of medicine and a historical appraisal of the medical task; changes in the supply and characteristics of American doctors in the twentieth century by John Z. Bowers; historical trends and future prospects in public health by George Rosen; evolution of medical practice by John Brotherston; historical discontinuity, hospitals and health services by Paul J. Sanazaro; the influence of medical technology on medical services by Bernard Towers; on measuring economic benefits of health programmes by Rashi Fein, and a contemporary view

Science in Florence



One of a collection of anatomical models made in wax by Clemente Susini (1754–1814) which can be seen in the Specola Museum, Florence. This city has a history of scientific achievement dating from Etruscan times which is recorded and profusely illustrated in *La Scienza a Firenze* (edited by G. Chiarelli for the Florence Tourist Board. Pp. 205. Edizioni d'Arte Il Fiorino, Florence, 1971).