Book Reviews

(M.D.) of this university at the time of Alfonso d'Este and Lucrezia Borgia, i.e. some time between 1513 and 1515 (see *Med. Hist.*, 1964, 8, 317). It is an authoritative essay from the pen of Robert Blaser, an eminent Paracelsian scholar to whom we are indebted for a detailed knowledge of the Basle period in Paracelsus' life and a number of important, notably linguistic, studies. Here the 'Phenomenon Paracelsus' is approached by means of a survey of the varied activities and viewpoints of Paracelsus, the thinker, the creator of a 'new' medicine, the psychologist, the man whom personal experience and insight into the 'mystery of nature' enabled to succour suffering humanity. A short bibliography includes a number of Italian papers published during the war and thus little known abroad.

Rocca's essay successfully describes the links of personal friendship and ideas (notably anti-astrological) which drew together Pico and the Florentine preacher. It is adorned with the beautiful group of three friends—Pico, Poliziano and Ficino—from the *Miracolo del Sacramento* of the Florentine Cosimo Rosselli, a fresco (1486) in Sant'Ambrogio at Florence.

Piccolomini of Ferrara is by no means unknown in the annals of anatomy. He was given full credit by Portal for his description of the Linea alba, of intra-hepatic anastomoses of the portal and cava veins, and some advanced insight into the origin of some of the cranial nerves. Haller, however, deprecated his 'bad and arbitrary' pictures, Sprengel his denial of correct observations of some of his predecessors, for example the Fallopian tubes in woman, and Haeser brackets him with Carcano Leone as 'less important' in a small-type passage. In view of these conflicting opinions Pierro's new review and assessment of the work and personality of Piccolomini is welcome. Its result is that the latter should be grouped with the post-Vesalian Galenists such as Jacobus, Sylvius, Winther of Andernach, Zerbi and others, but he has to his credit certain observations, including (in addition to those mentioned) the central canal in the spinal cord, the different arrangment of the venous valves in the extremities and the upper part of the body, the continuity of the visceral and parietal pleura and peritoneum and the normal and pathological anatomy of the kidneys.

WALTER PAGEL

Medicine and Health in New Jersey: A History, by DAVID L. COWEN, The New Jersey Historical Series, volume 16, Princeton, N. J., New York, Toronto, London, D. Van Nostrand Company, 1964, pp. xvi, 229, illus., \$3.95.

Around the turn of the century a number of state medical histories were written and then for some reason interest lagged. In more recent years, several new studies have appeared. The author of this one, Professor David L. Cowen, was asked to write a short medical history of New Jersey, and he has done an admirable job. Despite the brevity of the work (about 200 pages), the author has covered virtually every important aspect of medicine. In addition to dealing with such standard topics as medical practice, education, associations, regulations, journals, hospitals and dispensaries, he has provided a remarkably clear picture of public health developments. For the historian, medicine and public health in the 20th century is an exceedingly difficult subject to handle. It was an era in which discoveries came tumbling after

Book Reviews

each other and medical practice was revolutionized. Despite this, Professor Cowen lucidly narrates the way in which New Jersey reacted—and contributed—to the scientific and social changes.

As the author would agree, the history of American medicine is well served by a brief medical history of New Jersey. As one of the smallest states, New Jersey's size is a sound indication of its contribution to American medicine. Completely overshadowed by New York and Pennsylvania, or more specifically by New York City and Philadelphia, medical and public health developments in New Jersey generally followed the patterns set by the larger states. As late as 1863, as Professor Cowen points out, not a single hospital existed in the State, and as late as 1954 there was no medical school.

Individual physicians and scientists in New Jersey, however, did make notable contributions to medicine, and Professor Cowen has given them full credit. On the other hand, he has no illusions about the role of his State, and he has placed its history in the correct perspective. Rather interestingly, he ends his book with a mild exhortation to his New Jersey readers to live up to their health responsibilities.

Professor Cowen's book is a readable and welcome addition to the literature on the history of American medicine.

JOHN DUFFY

A History of Immunization, by H. J. Parish, Edinburgh and London, E. and S. Livingstone, 1965, pp. xi, 356, 50s.

This history by the former Clinical Director of the Wellcome Research Laboratories, Beckenham begins with an introductory survey of the whole subject, and then considers in detail certain diseases which have responded to immunization.

Prophylactic inoculation against smallpox (variola) was practised in China, India, Persia and elsewhere for many centuries. In the seventeenth century it was even done by some lay persons in Wales and the Highlands. Introduced into England from Turkey it was recommended by the Royal College of Physicians in 1754. Yet by cross-infection it increased the incidence of smallpox and fatal cases occurred. Then came Jenner's cowpox vaccine which he proved by experiment could prevent smallpox. His work is still criticised. His observations were not new, but he brought them together, proved their validity and made communal vaccination practicable. Copeman's introduction of glycerinated calf-lymph in place of crude vaccinia was an important advance and other advances have been made in the present century in vaccination.

Louis Pasteur's work on the attenuation of viruses was a further advance, and he was inspired by Jenner's experiments to prevent other diseases than smallpox by preventive inoculation. He obtained attenuated viruses by passage through animals for the prevention of anthrax, fowl cholera, swine erysipelas and rabies. The Pasteur Institute was founded in 1888 in Paris. Salmon and Theobald Smith had shown in 1884 that dead virus can induce immunity against living virus as Haffkine, Wright and Pfeiffer afterwards demonstrated. Out of all this work and opposing views on humoral and cellular (phagocytic) immunity came the researches of Metchnikoff,