

Book Reviews

AGOSTINO RAMELLI, *The various and ingenious machines of Agostino Ramelli (1588)*, translated by Martha Teach Gnudi, London, Scolar Press, 1976, fo., pp. 604, illus., £50.00.

In 1588 Ramelli (1531?–c.1608), a military engineer, published in Paris his *Le diverse et artificiose machine*, a work that became one of the outstanding examples of Renaissance book production. It was written in Italian and French and with its remarkable sequence of 194 illustrations it is the most elaborate and one of the earliest pictorial technical works to be printed. Its very extensive influence lasted into the nineteenth century and machines of today have pieces in common with those of Ramelli.

In this superbly produced volume the text explanatory to the drawings has been translated by the late Martha Teach Gnudi, into English for the first time, and all of the original 194 engraved plates are faithfully and elegantly reproduced. Dr. Gnudi also supplied a scholarly biographical study of Ramelli, together with notes on his preliminary material and on linguistic and bibliographical matters. There is also a helpful analysis of the principal elements of the machines in a “Pictorial glossary” compiled by E. S. Ferguson.

Living at a time of almost continuous warfare, Ramelli as a military engineer obviously specialized in machines of war: military bridges, military screwjacks and breaking devices, military hurling machines, and appliances to breach defences, cross rivers, moats, etc. However, these constituted only about one-sixth of all his mechanical inventions. There were also mills, cranes, machines for dragging heavy objects, machines for raising excavated earth, cofferdams, and fountains. As far as the technological aspects of the history of medicine are concerned, grain mills and water-raising devices are of special interest. The latter consist of piston and rotary pumps, bucket-filling, and other ingenious devices.

As well as the practical public health issues, such as the provision of drinking, bathing, and irrigation water, and the draining of swamps with the reduction in the mosquito population and thus of malaria, there are also the analogies made between machines and parts of the body. Thus we are aware of the influence of the pump on developing concepts of heart action and blood flow, but others exist, which are less well known, or at present unsuspected. A detailed analysis of the interactions between technology and medicine is needed, and when this is carried out Ramelli's book will be of great importance.

The present edition of it can be awarded high praise as an outstanding, scholarly contribution to the history of technology and a masterpiece of publishing.

MARVIN ROSEN, GERALD R. CLARK and MARVIN S. KIVITZ (editors), *The history of mental retardation. Collected papers*, 2 vols., Baltimore, Md., and London, University Park Press, 1976, 8vo, pp. xxiv, 400, and ix, 453, £18.50.

Wishing to learn from the lessons of history in dealing with a deviant and disabled population, the authors have collected together papers which relate directly with present-day problems still unsolved. Others illustrate marked changes in attitudes. These old articles humble, intrigue and stimulate, and their presentation here is also to inspire others to commute by further study the raw materials they represent.

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Unfortunately, despite the laudatory aims of the editors this work suffers from many defects: the in-born errors of the anthology, arising probably from the mistaken idea that to collect and reprint selections is the easiest way of compiling a book. The authors chosen are almost exclusively American, as though similar problems and studies have not occurred in other countries. No doubt it is easier to present material written in English, rather than having to translate it or have it translated from a foreign tongue. Or has there been more mental retardation in the United States than elsewhere, thus inciting a larger and better literature? The introduction to the sections and the papers are quite inadequate, and there is little or nothing about the authors. The literature referred to is insufficient, and the final indignity is that the authors have had sufficient historical objectivity to consider one of their own papers worthy of inclusion!

CARLO M. CIPOLLA, *Public health and the medical profession in the Renaissance*, Cambridge University Press, 1976, 8vo, pp. viii, 136, illus., £5.50.

In his outstanding book, *Cristofono and the plague* (1973), Professor Cipolla has already demonstrated brilliantly how to employ medico-historical manuscript sources to the best advantage. Now he immerses himself again in the extraordinarily wealthy Italian archives, and the result is a second book of impeccable scholarship, which is likewise well written and replete with documentation.

It is composed of two parts: 'The origin and development of the Health Boards' (the author's Ellen McArthur Lectures, 1975); and, 'The medical profession in Galileo's Tuscany'. In the first the author shows how, to begin with, the health authorities were concerned only with plague, the disease that dominates the Renaissance, here considered to be from approximately the beginning of the thirteenth century to the middle of the seventeenth century. Italy was far ahead of other European countries in the field of public health, and gradually the Boards began to control general standards of hygiene, registration of deaths, prostitution, movement of foreign merchandise and the selling of food. Professor Cipolla, who is a historian of economics, discusses these public health measures as related to the social and economic factors of the time. The concept and practice of public health, however, was basically a creation due to the perils of plague and when this disease subsided in Italy at the end of the eighteenth century, so did the controls, and the next advances took place in Britain and France.

In the second part of his book, Professor Cipolla analyses a census of the medical profession taken in Tuscany in 1630. The results are of the greatest importance, because they produce a new picture which refutes or modifies previously accepted opinions. With this document it is possible to quantify the doctor's role in society and the creation of community doctors.

Professor Cipolla has produced another praiseworthy and significant contribution to the history of medicine and others should be inspired to emulate him. With his liberal use of manuscripts he is laying sure foundations for further research and this is exactly what should also be done in Britain, even though the material may not be as rich as in Italy. Too much history is copied from secondary sources and too few writers go to the fountain-head.