reprint of a lecture course, and may be fairly said to fulfil well the object proposed in the preface. Great pains has evidently been taken to obtain data of actual examples of important works within the above scope; the series of twenty-one well-executed large plates of these is a most valuable feature of the work. The get-up of the work, being issued from the Clarendon Press, is of course excellent; the number of folds in the plates is an inconvenience (few have less than six, and one has ten folds), which might have been obviated by placing fewer diagrams on each plate. A very useful feature is the addition at the end of each chapter of a short summary of its matter, with many good practical remarks.

The work opens with a chapter on the physics of the subject, followed by one on discharge-measurement, then by one on general principles. Then come seven chapters on various appliances and details, viz., dredgers, piling, foundations, locks, inclines, lifts, fixed and movable weirs, dams, and movable bridges. Then follow one chapter on inland canals, one on great ship canals, one on protection from floods, four on improvement of tidal rivers, and lastly, one on the improvement of the mouths of tideless rivers.

From the great variety of subjects treated of in a compass of 322 pages, the treatment is sometimes unequal. The descriptions of the newest forms of the various appliances are, together with their illustrative plates, very interesting and instructive. But perhaps the most valuable part of the whole work is the last five chapters on the difficult and important subject of the improvement of river mouths; the few guiding principles that can be said to be known about so obscure a question are well brought out from the study of grand examples. The subject of discharge-measurement is not adequately treated: a reference to the recently-published (1881) "Roorkee Hydraulic Experiments" would probably have materially influenced this chapter in giving less importance to current-meters, and more to floats (especially tube-rods), and in the entire rejection of the old Chézy formula,  $V=C \times \sqrt{RS}$ , with a *constant* value of C. The chapter on inland canals is also (perhaps unavoidably) sketchy : thus the description of Indian canals covers only two pages, many of them being simply named.

## Allan Cunningham

## Galeni Pergamensis de Temperamentis et de Inæquali Intemperie Libri tres, Thoma Linacro Anglo Interprete, 1521. Reproduced in exact Facsimile. With an Introduction by Joseph Frank Payne, M.D. (Cambridge: Macmillan and Bowes.)

THE book before us is one of a series of facsimile reprints of eight books, published in the years 1521-22, by John Siberch, at the first press established at Cambridge; and it would appear, that after the issue of this series, no other works were published there until the year 1585, when a law was passed, limiting the printing of books to London and the Universities.

The revival of classical literature which swept over Europe towards the close of the fifteenth century, effected a complete revolution in the theory of medicine, as well as in philosophy. English scholars of that period were, as a rule, unacquainted with Greek, the few exceptions being men who had studied at the Italian Universities ; among these was Thomas Linacre, a Fellow of All Souls, Oxford, who, about the year 1495, visited Italy in the suite of Selling, when the latter was appointed envoy to the Pope, and, after being a fellow student with the sons of Lorenzo de Medici, under Politiano and Chalcondylas, proceeded to his degree of Doctor of Medicine at Padua. On his return to England, he brought with him the reputation of being one of the most elegant and accurate scholars of the day. Shortly afterwards he was appointed tutor to Prince Arthur, and became Court physician on the accession of Henry VIII. to the throne. The physicians of

the day were mostly ecclesiastics, but no restriction was placed on the practice of medicine by persons, however ignorant of its principles; and Linacre, with the view of remedying the abuses that prevailed, devoted his fortune, amassed by the sale of the clerical livings to which he had been presented, to the foundation, in the year 1518, of the Royal College of Physicians, which, under its charter, had power to regulate the practice of medicine in the neighbourhood of London. It is interesting to know, that according to Linacre, a physician should be "a grave and learned person, well read in Galen, respecting but not bowing down to the prestige of the Universities; claiming for his own science a dignity apart from, but not conflicting with that of theology; looking upon surgeons and apothecaries with charity, and not without a sense of his own superiority."

The Galenical theories of humours and temperaments formed the groundwork on which the Greeks based their practice of medicine, and Linacre to bring these theories within the reach of all students of medicine translated "into Latin six of Galen's works, among which were the "De Temperamentis" and "De Inæquali Intemperie," now before us, thus helping to replace the mysticism and empiricism of the Arabians by the accumulated observations recorded by Hippocrates and Galen. In these works it is assumed that to the four humours, blood, pituite, yellow bile, and black bile, there are the corresponding properties, moist-heat, moist-cold, dry-heat, and dry-cold; and that between health and disease there are four temperaments, characterised by an excess of either one or two of the cardinal qualities, heat, cold, moisture, and dryness. These were the only external influences acting on the body the ancients could recognise, as they were ignorant of the chemical processes of respiration, of the constitution of the atmosphere, and of electricity, of which we now take account. These theories are elaborated, and further, it is indicated that medicines may be classified according to their heating, drying, cooling, or moistening qualities, and should be administered so as to temper the errors of the humours in disease; and though the work has ceased to have a practical value for physicians, it yet remains of interest to the student of humoral pathology, and of the philosophy of the middle ages.

Students are indebted to the enterprise of Messrs. Macmillan and Bowes for the reprint of this scarce work, which was the first book containing Greek characters printed in England, and we are glad to learn that the same publishers propose shortly to issue the remainder of the series. The book is edited by Dr. J. F. Payne, and is prefaced by a portrait and an admirable life of Linacre.

Rhopalocera Malayana: a Description of the Butterflies of the Malay Peninsula. By W. L. Distant. (London: W. L. Distant, care of West, Newman and Co., 54, Hatton Garden, E.C.)

WE have received the first part of this handsome work, in which it is proposed to describe and figure all the species of butterflies which inhabit the Malay Peninsula and the islands of Penang and Singapore. Forty-four coloured figures of butterflies are given in this part, occupying four plates of large quarto size : and they are most admirably executed in chromo-lithography. Some of the figures, indeed, are hardly to be distinguished from good hand colouring. The descriptions are full and careful, and much judgment is shown in using, as far as possible, old and well-established names, and in rejecting needless sub-divisions of the genera. It is expected that the work will be completed in six or seven parts, forming a handsome quarto volume; and we trust that the author may obtain numerous subscribers in our wealthy colonies of Singapore and Penang, as well as at home, to encourage him to complete the work in the same full and careful manner as he has commenced it.

As most of the butterflies of the larger Malay Islands