

As an illustration of the ingenuity that has to be applied in deciphering the results, we transcribe here from p. 28 an example in which we have merely changed the notation for the convenience of printing. Thus we use four symbols, p, q, P, Q, where the original uses lines and dots either black or red. We have replaced red signs by small letters, black signs by capitals, dots by p or P, lines by q or Q. We use brackets to divide one group of symbols from another. Then we have to decipher (p)(PPQQQ)(q)-(PPPPQQQ)(pqq)(PQ)(pppp)(QQ)(p). The following interpretation may be considered correct, because it makes sense (the process may be compared with solving an equation by trial and error):—Let p or P denote unity, q or Q denote five; then the sentence reads: One, add seventeen, leaves remainder five; add, nineteen, leaves remainder eleven; add six, leaves remainder four; add ten, leaves remainder one. By "leaves remainder" we mean on dividing by thirteen. It is, as we might say, Sunday; in ten days it will be Wednesday; in five more, Monday; in twelve more, Saturday; and in eight more, Sunday again.

With this sample of the contents we must leave the book to our readers. Some will, no doubt, be interested in the problems of decipherment, others in the results obtained; perhaps still more will feel that they cannot be interested in everything, and other problems and other people have greater claims upon their attention. The world at large would regret to see any branch of knowledge die out or remain stationary, and will, in consequence, feel grateful to the author for his labours.

A MONOGRAPH OF DENDROBIUM.

Das Pflanzenreich, Regni vegetabilis conspectus. Edited by A. Engler. N. 50, II., B. 21, Orchidaceæ, Monandriæ, Dendrobiinæ. Pars i., genera n. 275-277. By Fr. Kränzlin. Pp. 382. (Leipzig: W. Engelmann, 1910.) Price 19.20 marks.

THE present volume is the forty-fifth of a series of monographs, comprising the "Pflanzenreich," and the third which deals with the great family of orchids. Of the three latter, the few diandrous genera formed the subject of the first, the work of the late Prof. Ernest Pfitzer, while the second volume, begun by Pfitzer, and completed by Dr. Kränzlin, dealt with the small group of the Coelogylinæ. The bulky "Heft" by Dr. Kränzlin, which is the subject of this notice, is devoted to the great genus *Dendrobium* and its immediate allies. It is evident therefore that there is still very much to be done before we have, what has been a desideratum since the time of Lindley, a complete monograph of this large and important natural order.

The plan of arrangement of tribes and genera adopted in the "Pflanzenreich" is that which was elaborated by Pfitzer in his account of the Orchidaceæ in the "Pflanzenfamilien." Dr. Kränzlin, however, takes a somewhat different view of the limitations of genera. He is here treating of that portion of the section *Dendrobiinæ* which is characterised by the presence in the anthers of four pollinia without

appendages, and in Pfitzer's arrangement included three genera, *Latourea* (a monotypic genus), *Dendrobium* (with 300 species), and *Aporum* (with twelve species). Dr. Kränzlin points out that the first of these was founded on a misconception, and must be regarded as a synonym of the larger genus, in which he also includes the small genus *Aporum*. On the other hand, he finds reason for resuscitating the very doubtful genus *Callista* of Loureiro, which depends on a fragmentary specimen of Loureiro's in the British Museum herbarium, and the genera *Sarcopodium* of Lindley and *Desmotrichum* of Blume. He also raises to generic rank the sections *Inobulbon* and *Diplocaulobium*, and maintains the genus *Adrorhizon*, founded by Sir Joseph Hooker on a single species from Ceylon.

The number of species admitted is more than double the estimate given by Pfitzer in the "Pflanzenfamilien" in 1889. The great genus *Dendrobium* includes more than 600 species, which are distributed among ten subgenera, and the grand total of species contained in the seven genera recognised is more than 700. This great increase in number of species is an index of the large and widespread interest which has been taken in the family of orchids during the last twenty years, a period which, by a strange coincidence, starts from the date of the abrupt termination of the work of the younger Reichenbach. During the whole of this period Dr. Kränzlin has been working continuously and steadily on the order, and with the completion of his monograph of one of the largest genera, as well as one of great interest, to botanists and horticulturists, he has earned a new debt of gratitude from workers both in the pure and applied aspects of the science. A. B. R.

ANTHROPOLOGY.

History of Anthropology. By Dr. A. C. Haddon, F.R.S., with the help of A. H. Quiggin. Pp. x+158. (London: Watts and Co., 1910.) Price 1s. net.

THIS is a fascinating little volume, and deals in a masterly manner with the history of anthropology in so far as that can be done within the compass of some 150 pages. Anthropology is now so vast a subject that it is necessary for the individual student, if he wishes to become a specialist, to confine his attention to a comparatively small fraction of the whole, and very often the specialist in one department knows little or nothing of what has been done in other departments. To such specialists this short history will be of the greatest value, and the science of anthropology as a whole will benefit by the coordination of results obtained in different departments.

The authors divide their subject into the two main divisions of physical anthropology and cultural anthropology, and these again are divided into chapters with somewhat eclectic titles, dealing with the more important and interesting sections. We have, for example, chapters on the "Pioneers of Physical Anthropology," "Anthropological Controversies," and "The Unfolding of the Antiquity of Man," under the