

The book, to which (2) is in many ways a useful supplement, should be of great interest, not only and obviously to cytologists and physiologists, but also to colloid chemists. It will provide those who are in the position—at present still uncommon—of having to look for problems with a formidable array of them; it will also make even those who do not share Sir William Hardy's conviction ("Sixth Colloid Symposium Monograph", p. 8 (1928)) that "nothing is to be gained by claiming living matter as colloidal", realise how much remains to be done before their discipline can fully explain even the simplest properties of single cells. E. H.

Flowers of the World.

Totius orbis flora photographica arte depicta. Edited by Hugo Iltis. Vol. 2: *Floral Province of the European 'Mittelgebirge' I.* By Dr. Hugo Iltis and Bert Schulz. Translated by W. C. Worsdell. Pp. 50 + 100 plates. (Brünn: Rudolf M. Rohrer, 1928.) 29 gold marks.

THE authors have set themselves no small task in attempting to provide a pictorial presentation of the natural vegetation of the whole world. The present volume, the second in the series but the first to be published, deals with the phytogeographical region of the European *Mittelgebirge* of Engler's classification. It is stated that some further 'centuries' of photographs are contemplated of this province alone. If the intention is to deal with all regions of the world on the same scale, the work will indeed be monumental, and the cost of so many 'centuries', at twenty-eight shillings and sixpence each, will not be within the reach of many individuals.

Volume 2 consists of a brochure of fifty pages and one hundred photographic prints. The intention and scope of the work is explained, and a general account of the *Mittelgebirge* is given, followed by a more detailed account of the twenty-five 'formations' which the authors recognise as being found in this province. The brochure is published in English, French, and German. An index to the subjects of the photographs is given, and also an index to plants mentioned; the nomenclature adopted is that of K. Fritsch's "*Exkursionsflora*". A map, in colours, gives the principal phytogeographical areas of the western part of Czechoslovakia, and the more important places mentioned in the volume.

Each photograph is separately mounted on a loose leaf which bears a caption in the three languages, giving the vegetation type and the

habitat of the subject. The names of the chief plants depicted are given, and, in some cases, a brief enumeration of the principal associates. Individually, the photographs portray the plant in its immediate surroundings, and it is only by a general consideration of the series that an idea is obtained of the vegetation of the whole country.

The selection of the photographs has been made with the idea of illustrating the range of the different units of vegetation comprised in the area. The authors have considered the various general systems of classification in use, but have decided that a judicious combination of the principles generally accepted provides the best basis for the divisions which they have chosen, rather than the adoption of any one particular system. It is obvious that reconsideration will have to be given to this classification with each volume which deals with a new type of vegetation.

The work breaks new ground in presenting a study of the vegetation of a given area in the form of a series of actual photographs of plants in their natural habitat. The authors have an intimate knowledge of the area now dealt with, and, from the list of distinguished botanists mentioned as co-operating with them, it can be guaranteed that many volumes will be published which will provide an equally intensive study of "the flowers of the field" over large parts of the world. The volumes which are to deal with, for example, the little-known immense tracts of the tropics, may require different treatment, and the units of vegetation selected for each volume will require to be conceived on different scales.

In this connexion it is perhaps to be regretted that the terms 'formation' and 'association' have been introduced in the restricted application to which they are committed in the present intensive study of a part of the European flora. It is a little difficult to know what terms can now be used for the large units of vegetation which will be encountered in volumes dealing with other and less known parts of the world.

The volume is well produced, the brochure and loose leaves with the photographs being contained in a stout cardboard box neatly covered with dark green cloth and lettered in gold. The photographs have been carefully selected and admirably fulfil their purpose. The work is scarcely, from its size and cost, one that can be expected in the private library, but it will undoubtedly be of use in universities and institutions engaged in the study and teaching of botany.