

One of the most interesting genera treated of is *Strobilanthes*. So long ago as 1888 the author published in the *Indian Forester* a special study of the genus and an account of the curious periodic flowering of many of the species. Even in the condensed letter-press of this work, room has been found for brief details of this phenomenon. We learn, for example, that a gregarious shrub like *Strobilanthes Kunthianus* grows in such continuous masses on the grassy downs of the Nilgiris and other neighbouring hills that, when it all comes into flower together about every six years, it covers large tracts with blue. It is believed, indeed, by some that the name of that famous range was derived from this circumstance. Some of the other species have even a longer period of flowerless growth; *S. consanguineus*, for example, probably flowers only at intervals of twelve years.

Another family which shows evidence of a great deal of useful work is the Labiatæ, and near the beginning of this part is a valuable contribution to S. Indian botany in the treatment of the genus *Utricularia*.

*La structure des cristaux: déterminée au moyen des rayons X.* Par Prof. Ch. Mauguin. (Recueil des Conférences-Rapports de documentation sur la Physique. Vol. 6, 1<sup>re</sup> Série, Conférences 14, 15, 16. Édité par la Société *Journal de Physique*.) Pp. 281. (Paris: Les Presses Universitaires de France, 1924.) 20 francs.

This is an excellent introductory treatise describing the methods of X-ray crystal analysis and the results which have been obtained. A difficulty in the presentation of our new knowledge of crystal structure is due to the fact that we all dislike being asked to think in three dimensions. Prof. Mauguin has realised this, and provides numerous illustrations, many of them very ingenious, which force the reader to visualise the structures which are described. The book is well planned and deals thoroughly with the subject, while yet being concise. The student will find a short introduction to the geometry of space lattices which provides the necessary foundation for a study of crystal structure. The different methods of analysis are illustrated by examples of the more simple crystals. Three short chapters are devoted to atomic dimensions, the structure of the atom, and the interatomic forces, and a final chapter to a description of the principal types of crystals.

Prof. Mauguin has contented himself with a very brief reference to the more speculative aspects of the new science; a list of papers at the end of each chapter will aid the reader who wishes to pursue the subject further. The lucidity of the style makes the book easy to read, and it is a valuable addition to the literature on the subject.

*Dairy Farming Projects.* By Prof. Carl Edwin Ladd. (Macmillan Agricultural Project Series.) Pp. xix + 327. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1923.) 7s. 6d. net.

THERE are many novel features in this volume which, although it applies to American conditions, still contains such an amount of information and suggestion that it cannot fail to be of great value to the teacher or student of dairy farming, and ought also to be of considerable

interest to any farmer or owner of dairy stock. The whole field of dairy farming is covered: types of cattle; breeding, feeding, and management; methods of arranging and working the farm; business and financial aspects of dairy farming, even to suggestions for advertising stock and produce. There are also chapters on the diseases of dairy cattle, clean milk production, preservation of manure, etc., the whole being arranged under appropriate months from September to June.

It is perhaps doubtful whether the somewhat elaborate course of study which the author maps out could be worked in its entirety, but there is no question as to the educational value of what he proposes, and the ideas and methods could by slight adaptation be made to apply to any country.

*The Vegetable Proteins.* By Dr. T. B. Osborne. (Monographs on Biochemistry.) Second edition. Pp. xiii + 154. (London: Longmans, Green and Co., 1924.) 9s. net.

A NEW edition of this well-known work has now appeared. While it contains all the essential material of the first edition, it has been largely rewritten and considerably amplified. The chapter on the proteins of green plants is brought up-to-date by details of Chibnall's work on leaf proteins. The new volume also contains a chapter by L. J. Henderson on the relation of proteins to acids and bases. This discusses the titration curves of vegetable proteins in an extremely lucid manner and presents an interesting addition to the literature of the subject. Frankel's work on the rate of hydrolysis of plant proteins is cited at length in the chapter on the products of hydrolysis, and recent work dealing with the subjects discussed in the original edition appears to be included throughout in sufficiently detailed manner.

*The Philosophical Writings of Richard Burthogge.* Edited with Introduction and Notes by Margaret W. Landes. Pp. xxiv + 245. (Chicago and London: The Open Court Publishing Co., 1921.) 10s. net.

RICHARD BURTHOGGE (1638-1698) was an English medical practitioner who, with the exception of an early medical tract in Latin, "Disputatio de Lithiasi et Calculo," wrote entirely on philosophical and theological subjects. The chief of his works, "An Essay upon Reason and the Nature of Spirits" (1694), is interesting for the light it throws on the general state of philosophical opinion in England at the time when Locke's Essay appeared. The present work is not a reprint of any one of Burthogge's writings but a selection from several, accompanied by notes and collated facts concerning extant editions.

*Le Principe constitutif de la Nature organique.* Par Édouard Jung. (Bibliothèque de Philosophie Contemporaine.) Pp. 694. (Paris: Félix Alcan, 1923.) 30 francs net.

THIS large treatise seeks to bring under one comprehensive and constitutive principle the whole scheme of the conscious life from its basis in physiology and evolutionary biology to its manifestation in cognitive, moral, and æsthetic activity. It is mainly founded on the philosophy of Kant, and is an application of the logical categories and the Kantian method generally to the whole modern scientific biological problem.