G. H. Darwin in Britain and those of Winchell, Walcott, King, and Gilbert in America. The American estimates varied greatly, but were all far smaller than those made in Europe. Burrell in 1917 restored the balance by an estimate more than three times as large as any of them.

In laying down this book an impression remains of the immense labour which the collecting of such a mass of material must have entailed. The mass indeed is too rich for easy digestion and might have been the better for a little boiling down and arrangement in the earlier chapters. Still the information is all there, available for any one who has the leisure to look for it. The book has been published on the Philip Hamilton McMillan Memorial Fund, and, as the first fruits of her bequest, must be a source of gratification to Mrs. McMillan.

A. STRAHAN.

## The Brauner Jubilee Volume.

Recueil des travaux chimiques des Pays-Bas. Publié par la Société Chimique Néerlandaise. Tome 44 (4° Série, T. 6), No. 5, Mai. Numéro jubilaire en l'honneur du Professeur Bohuslav Brauner, publié par ses amis et élèves en commémoration de son 70° anniversaire, 1855—8 Mai—1925. Pp. 281-628. (Amsterdam: S.A. d'Éditions scientifiques D. B. Centen, 1925.)

TUMEROUS friends and pupils of Prof. Bohuslav Brauner, the illustrious Director of the Chemical Institute of the Charles University of Prague, have signalised his seventieth birthday by issuing this splendid volume of researches in his honour. It opens with a most delightful "Hommage au Professeur Bohuslav Brauner" written by Prof. Urbain and entitled "Discours sur les éléments chimiques et les atomes." In this brilliant essay, the author, in tracing the development of scientific research concerning the chemical elements and the nature of the atoms, shows the fundamental character of Prof. Brauner's work in the fields of the rare earths, the atomic weights, and the Periodic System of Mendeléeff. Whilst every one is familiar with Prof. Brauner's long and splendid series of researches on the atomic weights, it is well that the younger chemists of the present generation should be reminded of the fact that he it was who discovered that the old "didymium" was in reality a mixture of two elements, neodymium and praseodymium.

The present volume bears ample witness to the fact that Prof. Brauner has done much more than greatly to advance the science of chemistry by his own researches. He has created and built up a great school of chemical research in the land of the Czechs.

On the cover of this Jubilee volume there is a picture of the fine Chemical Institute which was founded by his efforts in 1903, whilst the 348 pages contained between the covers include a large number of very interesting researches carried out by his present and former pupils. Although it may appear perhaps a little invidious to single out any of these for special praise, attention may be directed to the series of ten investigations with the dropping mercury cathode, published by Dr. Heyrovsky (professor of physical chemistry in the Institute of Prof. Brauner) and his collaborators.

Amongst the papers contributed by foreign chemists, one is very glad to see that there are two from England, namely, Prof. H. B. Dixon's investigation on "The Ignition of Carbon Disulphide Vapour and its Phosphorescent Flame," and a paper by Dr. J. G. F. Druce on "The Stannonic Acids and Some of Their Derivatives. A New Series of Organic Compounds of Tin."

On his impending retirement from the active direction of the Chemical Institute at Prague, Prof. Brauner will carry with him not only the affection and esteem of his many pupils, but also the highest respect and admiration of chemists all over the world. For upwards of half a century he has held high the torch of science and true learning, and in the annals of chemistry his name and his work will ever be remembered with honour and gratitude.

F. G. Donnan.

## British Butterflies.

Natural History of British Butterflies: a Complete, Original, Descriptive Account of the Life-History of every Species occurring in the British Islands, together with their Habits, Time of Appearance, and Localities. By F. W. Frohawk. Vol. 1. Pp. xv+207+36 plates. Vol. 2. Pp. iv+206+29 plates. (London: Hutchinson and Co., 1924.) 6l. 6s. net.

R. FROHAWK is well known to naturalists as an admirable delineator and accurate observer of British lepidoptera in all their stages. The present work amply fulfils the expectations of those who knew that the author was engaged upon the task of describing and figuring every British butterfly in all its phases from egg to imago. The work may fitly be termed monumental; for it represents an immense amount of patient labour carried on through a long series of years, and accomplishes what has never been attempted before, namely, a complete life-history of every species of butterfly that has any claim to be considered British. The ground has been partly covered by the works of Barrett, Buckler, and others, but never before has