A Laboratory Handbook of Bio-Chemistry. By P. C. Raiment and G. L. Peskett. Pp. 102. (London: E. Arnold and Co., 1922.) 5*s.* net.

THE book before us would be more appropriately entitled physiological than bio-chemistry, as in its scope it is almost entirely limited to the elementary physiological chemistry usually taught to medical students. A short theoretical account of each subject precedes the practical work. Much of this is quite sound, but the text is frequently marred by looseness or inaccuracy of statement, which requires stringent revision before the book is placed in the hands of a student. Examples of this will be found in the account of the action of acids on soaps (p. 45), the precipitation of globulins (p. 24), the properties of the albumins (p. 16), and elsewhere. Again, histidine is omitted from the list of amino-acids derived from proteins, vitamin B is stated to be associated with the fatty radicles of milk, and so on.

The practical work is almost entirely confined to qualitative test-tube experiments, the chief exceptions being the quantitative methods of urine analysis, and, in an appendix, Kjeldahl's method and the methods for estimating reducing sugars. These experiments are clearly described and easy to perform.

We do not, however, believe that practical bio-chemistry can be satisfactorily taught in this way. Preparative work and, especially, quantitative methods are essential even in the earliest stages. Unless this kind of exercise is freely introduced the student will acquire no real grip of the subject, but will regard it simply as another dreary course of "test-tubing."

A. H.

Meteorological Office: Air Ministry. British Rainfall, 1921. The sixty-first annual volume of the British Rainfall Organisation. Report on the distribution of rain in space and time over the British Isles during the year 1921, as recorded by more than 5000 observers in Great Britain and Ireland. Pp. xxiv+300. (London: H. M. Stationery Office, 1922.) 12*s.* 6*d.* net.

RAINFALL statistics over the British Isles have now been collected and published annually for a sufficient period to render the observations of very great value, thanks to the foresight and persistent perseverance of the late Mr. G. J. Symons. Where observations do not exist, a shrewd approximation of the average fall can be obtained by means of neighbouring measurements.

The essential feature of the volume is a discussion of the drought in 1921, which was more remarkable for persistence than for intensity over short periods, although June and July were probably drier than any two consecutive months in living memory. In England and Wales 1921 was probably the driest year since 1788, and in London it was the driest for at least 148 years. The south-east of England experienced the greatest severity of the drought, and a part of Kent had for the year less than 50 per cent. of the average rainfall. A coloured map opposite to page 150 shows graphically for the British Isles the relation of rainfall in 1921 to the average of 1881–1915.

Rainfall is discussed in connexion with scarlet fever, and there is an article at the end of the volume on the fluctuations of annual rainfall.

C. H.

Design in Modern Industry: The Year-Book of the Design and Industries Association, 1922. With an Introduction by C. H. Collins Baker. Pp. 157. (London: Benn Bros., Ltd., 1922.) 15*s.* net.

THE Design and Industries Association, of which this appears to be the first Year-Book, is concerned with liaison work between the artist, the manufacturer, and the distributor, and aims at the improvement of British design through the intelligent and liberal use of the artist, both for ideal reasons and to meet foreign competition. The Association holds that good design is tested first and chiefly by fitness, and secondly by pleasantness in use. A teapot, for example, should have a spout that does not drip, a handle and spout that do not project unnecessarily (to save room in the cupboard and reduce risk of fracture), the lid should be securely held while the pot is in use, there should be the fewest, if any at all are necessary, of crevices and sharp angles, as these hold dirt and are difficult to clean, the cost should be reasonable, and so on. The illustrations include furniture, pottery, fabrics, kitchen equipment, metal work, printing, signs, tablets, shop fronts, etc. The designs as a rule are distinctly pleasing, and are appreciated by critical artists. The photographic reproductions are, with few exceptions, excellently done, but we hope that the Association in its second Year-Book will be able to introduce colour reproductions where they appear to be essential.

Alcohol in Commerce and Industry. By C. Simmonds. (Pitman's Common Commodities and Industries.) Pp. xii+119. (London: Sir Isaac Pitman and Sons, Ltd., 1922.) 3*s.* net.

THE late Mr. Simmonds had produced a larger and more detailed treatise on alcohol before undertaking the present small volume. It would therefore be anticipated that his treatment of the subject would be most expert. The present volume, in fact, is a wonderfully concise and complete account of the manufacture and uses of alcohol, and is well illustrated. It is perhaps scarcely realised by those not familiar with recent progress in chemical industry and engineering how many uses are found for alcohol, and how many more promise to be discovered. Mr. Simmonds's book will supply this information to the general reader, and the chemist will also find much that is useful in it.

Mathematics for Engineers. By W. N. Rose. (The Directly-Useful Technical Series.) Part I., including Elementary and Higher Algebra, Mensuration and Graphs, and Plane Trigonometry. Pp. xiv+514. (London: Chapman and Hall, Ltd., 1922.) 10*s.* 6*d.* net.

THE first edition of this work appeared in 1918, and was reviewed in our columns (NATURE, vol. 101, p. 463). It has now been put to the test alike by teachers and students, and has proved its value. The third edition, now before us, has been thoroughly revised; there are few additions, but we note one on elementary determinants which contains enough to enable the reader to understand certain methods employed in works on aerodynamics.