

British Rainfall 1934 :

the Seventy-fourth Annual Volume of the British Rainfall Organization. Report on the Distribution of Rain in Space and Time over the British Isles during the Year 1934 as recorded by over 5,000 Observers in Great Britain and Ireland. (M.O. 385.) Pp. xvi + 299. (Air Ministry : Meteorological Office.) (London : H.M. Stationery Office, 1935.) 15s. net.

THE total rainfall during 1934 in the British Isles was exactly normal or 100 per cent, the figure for England and Wales being 95, Scotland 110 and Ireland 105. The run of mainly dry months which began in November 1932 continued through part of the year, and the effect of the drought is illustrated in the frontispiece, which shows Rudyard Lake in Staffordshire dried up. The event of the year, however, was the intense and persistent rain of the very warm December—in many places the wettest December on record. In this month nearly every part of the British Isles was wet, but by far the greatest excess occurred in the south of England, where in a few places the rainfall was more than 300 per cent of the average. The entire south-west of England and most of Wales had between 10 in. and 20 in. in December, as did also the Downs in the counties south of the Thames. Places on the flanks of Dartmoor received the enormous amount of 25 inches—not much less than that which fell on Snowdon, which had the greatest monthly total, namely, 30·8 inches. Practically none of the country south of the Thames had less than 6 inches, but north of the Thames, in the Midlands and East Anglia, the amount was below 5. This distribution was quite typical of very wet winter months in the south of England, where the rains in the hilly country south of the Thames are often very intense.

Original articles include one by Dr. J. Glasspoole giving a useful collection of heavy falls of rain in 24 hours from 1865 until 1934 ; another by Messrs. Bilham and Hay on rains at Kew lasting between 1 and 48 hours during the period 1878 to 1927, and a third by Messrs. Bilham and Lewis on a 'day and night' rain-gauge. L. C. W. B.

Essentials of Tissue Culture Technique

By Gladys Cameron ; Illustrations and Chapter on Photomicrography by C. G. Grand. Pp. xvi + 134 + 9 plates. (New York : Farrar and Rinehart, Inc., 1935.) 3 dollars.

THIS admirable book should be acquired by everyone who uses the tissue culture technique. It contains delightfully clear and precise descriptions of most of the chief tissue culture methods and the apparatus and laboratory accommodation required, and also deals in great detail with such general matters as the arrangement and ventilation of the laboratory, sterilisation, cleaning of glassware and the preparation of physiological solutions. There is a chapter by C. G. Grand devoted to photomicrography, and the book concludes with four useful appendixes, one of which enumerates the principal pitfalls which the beginner is likely to encounter, and will doubtless prove a boon to many readers. The references to

literature are listed in a bibliography and should have been more carefully checked, as at least two of the references to special techniques are wrong.

Although some of the procedure recommended is in the reviewer's experience unduly elaborate, the author very sensibly distinguishes between necessity and luxury when discussing equipment, and suggests cheap and serviceable substitutes for some of the more costly articles recommended. This greatly enhances the value of the book for those whose laboratory funds are limited.

The author is to be congratulated on having treated a complicated subject in such an orderly and lucid manner, and even research workers with considerable experience of tissue culture are likely to find useful information in this volume. H. B. F.

India's New Constitution :

a Survey of the Government of India Act 1935. By J. P. Eddy and F. H. Lawton. Pp. xi + 239. (London : Macmillan and Co., Ltd., 1935.) 6s. net.

IN preparing this summary of the provisions of the Government of India Act, 1935, the authors, of whom one is an ex-judge of the High Court of Judicature, Madras, have shown a full appreciation of the importance of the historical point of view. They indicate how, in its main provisions, the act represents a logical development of a policy, which has been followed, slowly, but on the whole consistently, over a long period of time—the policy of introducing Western representative institutions into India. To grasp this is an essential condition of an understanding of the present position and of the conditions which have preceded it. Hence in each section of their exposition of the terms of the act, as for example in regard to the Crown, the States, federation, provincial autonomy and like matters, the way for examination of the relevant provisions is prepared by brief, but lucid, summaries of the essentials of earlier development.

Although intended primarily for the assistance of the layman, a free use of textual quotation, references to cases of constitutional interest and detailed appendixes make this a handy book of reference for the professional man.

A Textbook of Practical Botany :

for Intermediate and Higher School Certificate Students. By Dr. William Leach. Pp. x + 160. (London : Methuen and Co., Ltd., 1935.) 4s.

THIS publication is the outcome of experience gained by the author in the organisation and supervision of large classes of students. The subject matter and material, however, do not differ from that chosen for most elementary courses in the subject. The book covers the syllabus of university intermediate and Higher School Certificate courses. At this stage, few students find a practical book necessary, or even desirable. The book should, however, prove valuable to 'private' students, and also as a useful guide to teachers who wish to organise a similar course in practical botany.