

Dr. Kappers has brought his extensive knowledge and consummate skill as a draughtsman to bear on the preparation of the plates. The results are at first sight somewhat bewildering in their complexity, but they will prove invaluable to the student and investigator of comparative neurology.

*Air Ministry: Meteorological Office. British Meteorological and Magnetic Year Book, 1918. Part 5: Réseau Mondial, 1918. Monthly and Annual Summaries of Pressure, Temperature, and Precipitation at Land Stations, generally Two for each Ten-degree Square of Latitude and Longitude. (M.O. No. 231g.) Pp. xiii+116. (London: H.M. Stationery Office, 1925.) 21s. net.*

THE present volume is the ninth of the series, the work now being completed for each year from 1910 to 1918. All the information refers to land stations; it has not yet been practicable to give data over the sea. The total number of stations utilised is 449, which is 9 fewer than in 1917. Stations are easily identified by a systematic numbering, maintained year after year. The majority of the stations for which information is given are under the control of government meteorological services. Wherever possible, the departures from normal of the monthly and annual values of mean pressure, mean temperature, and precipitation are given. Wind data are given for selected stations in the tropics; and there are notes on the state of the ice in the Arctic Seas and in the North Atlantic Ocean.

When data are received for another year, making a consecutive period of ten years, there will be sufficient information for many tentative inquiries, such as stable or varying barometric pressure from year to year over the whole globe, the effect and influence of normal and abnormal changes in one part of the globe on the conditions experienced elsewhere, the controlling factors being of much value for long period forecasting.

The highest mean shade temperature for 1918 was 86° F. at Berbera, Somaliland: the lowest mean 4° F. at Verkhoïansk. The absolutely highest temperature was 115° F. at Bourke, in New South Wales, on December 9: the second highest was 114° F. at Berbera on July 12, 16, and 25: the absolutely lowest was -76° F. at Verkhoïansk on February 2. The heaviest total rainfall for the year was 511 inches at Cherrapunji, which is 87 inches more than the average; 170 inches fell in June. The latter is more than seven times as heavy as the annual average fall at Greenwich. No rain fell during the year at Insalah or Iquique.

*Tabulae Biologicae.* Herausgegeben von C. Oppenheimer und L. Pincussen. Band 1: Reine und physiologische Physik, physikalische Chemie und biologische Anwendungen. Pp. vi+522. (Berlin: W. Junk, 1925.) Subscriptionspreis für alle vier Bände (einzelne Bände werden nicht abgegeben) 100 marks.

THESE are, we believe, the first biological tables of their kind, and in one respect they indicate very clearly the degree to which the biological sciences have advanced quantitatively. The old barriers dividing the so-called exact and the descriptive sciences are down, and many are exploring long-neglected territory. Science has to wait for its problems to be tackled, but there are now biologists who can themselves go a long way in problems

demanding some exact science. To these and to others following in their wake, we think that these tables will be of great service.

The authors are very frank in acknowledging the prototype of their work, and they assure us that what they have prepared is nothing but a Landolt-Börnstein of the entire field of biology; this includes physiology, anatomy, medicine, hygiene, zoology, botany, technics, pharmacology and bacteriology.

The range of information is extraordinarily wide, but there remains the all-important question of accessibility of the data. How easy is it to find the required information? The volume under review contains 522 pages, literally packed with data. The table of contents occupies one page and indicates thirty-four different sections. While, of course, some sections are longer than others, it will be seen that considerable time must be taken in getting what these tables have to give; vastly less time, however, than by any other method. Readers have the opportunity of consulting the original papers, for references to these are given at the ends of the sections. The authors have been at great pains to secure trustworthy data, and we have little doubt that advantage will be taken by scientific workers and readers of this mass of information.

*Plant Life on East Anglian Heaths: being Observational and Experimental Studies of the Vegetation of Breckland.*

By Dr. E. Pickworth Farrow. Pp. x+108+23 plates. (Cambridge: At the University Press, 1925.) 7s. 6d. net.

THE interesting studies of vegetation at Breckland, East Anglia, which Dr. E. Pickworth Farrow has been publishing in the *Journal of Ecology*, have now been gathered together and published, with additional matter, in book form. This work provides the most definite and striking data as to the effects produced by rabbits in determining the nature of the vegetation. Thus their influence is traced in the degeneration of Calluna heath to grassland and in the prevention of natural regeneration of woodland. Interesting notes are provided on wind effects upon Calluna in sandy soils and upon the water supply in the soil as a determining factor in the type of vegetation of the soils at higher levels at Breckland, but in the main this work is characterised by the manner in which it underlines the significance of biotic factors. Cases that may be cited, in addition to the rabbits, are the effect of the shade thrown by *Pteris*, notably by the dead fronds, upon the spread of Calluna, and the influence of the litter of needles below the pines upon the spread of *Carex arenaria*.

*Analytical Geometry of Conic Sections and Elementary Solid Figures.* By Dr. A. Barrie Grieve. Pp. xv+314+xiv. (London: G. Bell and Sons, Ltd., 1925.) 9s. net.

A TEXT-BOOK for students who have already finished the straight line and circle: its contents are about equally divided between the conic sections and the geometry of three dimensions, finishing with confocal quadrics and a chapter on curvature. The author wisely uses the calculus for finding gradients, but also gives the alternative treatment. The book can be confidently recommended for boys reading for scholarships and for first-year students at universities.