

(2) The volume by Prof. Supino, director of the hydrobiological station of Milan, forms a useful practical guide to the culture of fresh-water fishes, those specially considered being several species of trout, Coregonus, carp, tench, and eel. Details are given of the process of artificial fecundation, of methods and apparatus employed for rearing the young fish and for packing and transporting eggs, young, and adults, and of the raising of trout in ponds. Copies are given, extending to 117 pages, of the laws and regulations relating to fresh-water fish in Italy and in the lakes bounded in part also by Switzerland and by Austria. There are seventy-nine text-figures and fourteen plates.

#### OUR BOOKSHELF.

*British Rainfall, 1916. On the Distribution of Rain in Space and Time over the British Isles during the Year 1916.* By Dr. H. R. Mill and C. Salter. The Fifty-sixth Annual Volume. Pp. 256. (London: Edward Stanford, Ltd., 1917.) Price 10s.

"BRITISH Rainfall for 1916" contains, despite many trying circumstances, the essential features which make this annual so useful. Mr. L. C. W. Bonacina describes the snowstorms of spring, 1916: on the Black Mountains of Brecon snow lay 5 ft. deep. Mr. Carle Salter discusses the differences in rainfall records due to the use of Halliwell and hyetograph gauges; in connection with "The Measurement of Rainfall Duration" he decides in favour of the hyetograph.

The number of rain-days in 1916 was above the average; both absolute and partial droughts were less frequent than the average, but the absolute droughts lasted longer than usual. At Dungeon Ghyll 0.97 in. of rain fell daily on the average during seventeen days in October. At Camden Square the 1916 rainfall was 34 in., an excess of 39 per cent. on the average, while the number of rainy hours was 628, 44 per cent. above the average; at Cray Reservoir, Brecon, 72 in. fell in 1396 hours. At Kendal an inch of rain fell in 32 min. on July 21.

July 7 was perhaps the wettest day ever recorded for the east of Scotland; 29 sq. miles received more than 4 in. of rain; illustrative maps indicate that the rain fell on the left-hand front of a cyclonic depression which advanced from South Wales to Hull on that day.

On August 29, 622 sq. miles in the south of England received on the average 3.23 in. of rain on the left-hand front of a depression coming up-Channel. February was a relatively wet month in England and Wales. In March the normal distribution of rainfall was completely inverted. A widespread drought terminated on August 12. September was relatively the driest month of the year, while October outdid its reputation as the wettest month of the year, most of Ireland receiving double the normal rainfall.

*Les Universités et la Vie scientifique aux Etats-Unis.* By Prof. Maurice Caullery. Pp. xii+302. (Paris: Librairie Armand Colin, 1917.) Price 3.50 francs.

PROF. CAULLERY, professor of organic evolution in the University of Paris, was exchange-professor at Harvard University in 1916, and during his five months' stay in the United States he made a study of the American university system, especially from the scientific point of view. In his description of the rise, development, and administration of the various universities in the States, and his illuminating account of the extensive facilities offered for scientific research on the other side of the Atlantic, Prof. Caullery seeks, at every opportunity, to point out the lessons which France might usefully learn from American experience. He emphasises the success with which the universities in the United States have produced not only scholars, jurists, and physicians, but also engineers, agriculturists, and financiers—leaders, in fact, in every department of human activity. He urges the desirability of encouraging in France the intimate connection between university activity and contemporary life which he found existing in America.

The volume appeals almost equally to our own people, and responsible authorities should acquaint themselves with Prof. Caullery's message.

*The Cause, Prevention, and Treatment of Cancer and other Diseases.* By Lt.-Col. W. H. Hildebrand. Pp. viii+163. (London: Cole and Co., 1917.)

THE author offers in this book of fewer than 200 pages a complete explanation of the cause, cure, and prevention of cancer and of "rheumatism, sciatica, lumbago, uric acid, neuritis, varicose veins, arthritis, gout, eczema, pruritus vulvæ, and lunacy." Another short chapter disposes of "adenoids, infantile diarrhœa, tropical dysentery, and hay fever."

"Cancer is a cell-growth actually caused directly by radium or other radio-active mineral substance." "Drinking-water, especially hard water, is the medium through which the radium or other radio-active minerals . . . are generally conveyed into our bodies." The lime and other minerals harden the linings of the various organs, and the radium becomes entangled in this excessive fibrous tissue. Once safely ensconced in the fibrous tissue, it sets up cancerous growth by its continuous bombardment of the surrounding structures. An unsuspected source of radium for this nefarious work is, according to the author, "by so-called transmutation of lead into radium in old water-pipes." This is held to account for cancer-houses.

Suggestions for legislation or inquiry by a Royal Commission are plentifully scattered throughout the book, which contains much curious information, of no scientific value.