"Weymouth Pine at Bournemouth" is also misleading. There are very few Weymouth pines (*Pinus strobus*) at Bournemouth, and those on the spot illustrated are almost exclusively *Pinus pinaster*, with a few Scotch pines mixed among them.

W. J. B.

OUR BOOKSHELF.

British Rainfall, 1917: On the Distribution of Rain in Space and Time over the British Isles during the Year 1917. By Dr. H. R. Mill and C. Salter. Pp. 240. (London: Edward Stanford, Ltd., 1918.) Price 10s.

THIS is the fifty-seventh annual volume of "British Rainfall," and it is an exceedingly creditable piece of work for a private organisation, entirely without State aid. Records are given for upwards of 5000 stations, and every care has been taken to render the monthly and annual maps and tables complete, the curtailment due to the exigencies of the times being in the letterpress.

A small area near the estuary of the Thames had fewer than 150 rain days during the year, while over a large part of Scotland and Ireland, as well as in parts of South Wales and Lancashire, the rain days exceeded 200. Rain spells are given, or periods of more than fourteen consecutive days, every one of which is a rain day, and there is also a summary of droughts. The general rainfall tables afford most valuable information, and, fortunately, the war has caused no break in the publication of the data which have been accumulated now for so many years.

A special article is given on the unprecedented rainfall in the south-west of England on June 28, when 9.56 in. during the twenty-four hours were measured at Bruton, in Somerset. The snowfall of 1917 is dealt with.

The diminution of rainfall with elevation above the ground at Greenwich Observatory is discussed by Mr. W. R. Nash, whose long service at the Royal Observatory adds much to the value of the results. The monthly and yearly values for the several heights carry with them a high degree of exactness. Approximately at 10 ft. above the ground there is a diminution of about 3 per cent., at 22 ft. a diminution of 10 per cent., at 38 ft. a diminution of 20 per cent., and at 50 ft. a diminution of 35 per cent. of the ground rainfall. These results are rather suggestive for aircraft.

C. H.

The Scientists' Reference-Book and Diary, 1919. Pp. 147+Diary. (Manchester: Jas. Woolley, Sons, and Co., Ltd.) Price 3s. 6d.

THE physical and chemical constants, together with the scientific and general information contained in the reference-book, will prove of real assistance to the worker in science. The convenient manner in which the data are arranged will make reference easy, and the fact that the book and diary are bound together in a case of a size suitable for the pocket should continue to give the pocket-book a wide popularity.

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LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

Climograph Charts.

MY attention has been directed to a note in NATURE of October 17, 1918 (p. 132), on the origin of the chart called a climograph, which gives a graphic representation of the climatic conditions of a locality in the course of the year in respect of warmth and moisture. The paragraph states that the method is due to Dr. Griffith Taylor, of the Meteorological Bureau, Melbourne. I think it should be noted that diagrams of a similar character with the dry bulb, instead of the wet bulb, combined with the relative humidity, were described and illustrated by Dr. John Ball, of the Egyptian Survey Department, eight years ago in the November issue of the *Cairo Scientific Journal*, vol. 1., No. 4. We discussed the diagrams at the Meteorological Office early in 1911, when the late Mr. W. Marriott, of the Royal Meteorological Society, produced a number of similar diagrams for English stations, some of which were particularly intriguing, because they failed to distinguish, as we thought they might have done, between places which had the reputation of being bracing on one hand, and relaxing on the other.

The subject was further pursued in a paper by Dr. Ball and Mr. J. I. Craig, read at the meeting of the British Association at Portsmouth in 1911. Mr. Craig, in reading the paper, exhibited slides representing on that plan a variety of climates, such as unhealthy climates, continental and marine climates, London, the cotton lands, the monsoon, the influence of altitude, dry health resorts as compared with London, Toronto as compared with Davos, and various climates of the United States. These graphs differ from those afterwards prepared as climographs by Dr. Griffith Taylor in having the dry bulb instead of the wet bulb, and the alteration, for the most part, makes little difference to the general appearance of the diagram, though it alters its position on the sheet.

As a matter of fact, neither form of diagram seems to be completely satisfying as distinguishing between the comfortable, the tolerable, and the unendurable in climate. Some years ago Mr. W. F. Tyler, of the Chinese Customs Service, pointed out that between limits of temperature, say 55° F. and 65° F., nobody minded much what the humidity was; but outside these limits of the "generally comfortable" there was a range of temperatures of the "just tolerable" order for damp air, which soon got to the "unendurable" on the side of higher temperature. Beyond these, again, is a range of temperatures under which life is possible only in dry air. An effective climatic diagram would in some way or other exhibit the relation of the climate to the ranges compatible with comfort, life, and death.

NAPIER SHAW.

Meteorological Office, South Kensington,
London, S.W.7, January 1.

A University Association.

PROF. ARMSTRONG'S letter in NATURE of January 2 has just come to my notice, and as chairman of the Conference of University Lecturers, to which reference was made in these columns under the "University and Educational Intelligence" of December 12, I hasten