successive days, reaching a maximum in the afternoon or early evening, and falling off in the night and early morning. The winds are cold, bringing temperatures of 45° F. or even less, and humid, but they are accompanied by a clear sky with only a few sirrus or cirro-cumulus clouds. They are generally associated with a slight fall of the barometer. At other seasons of the year less violent winds from the same direction bring overcast skies and heavy rain.

The gales from E. or SE. are less violent; they occur always between noon and 16 h. [4 p. m.], are warm and dry, with a clear sky, and have no appreciable relation to the barometer. They are evidently Föhn-like winds from the mountains of Macarao and Los Teques, which rise to 2,500 m. a few kilometers to the ESE.

THE DROUGHT IN ENGLAND.

[Reprinted from *Nature*, June 23, 1921, p. 535.]

Dry weather has been persistent in England during several months, and now that we are more than halfway through the first month of summer the absence of rain has become serious. The observations at Greenwich, which very fairly represent England, show that the conditions are most exceptional. The Greenwich rainfall was below the normal for each of the eight months from October, 1920, to May, 1921, and compared with the average for 100 years the deficiency of the period is 6.21 inches, approximately equal to the normal rainfall for the four months, February to May. There have, however, been only two months, November and February, with the rainfall less than 1 inch. The total measurement of rain for the eight months is 9.32 inches, which is 60 per cent of the average. An examination of the Greenwich observations for the last 105 years shows only one corresponding period as dry, the rainfall for October, 1879, to May, 1880, amounting to 8.24 inches, a deficiency of 7.29 inches. October, 1873, to May, 1874, had 9.60 inches of rain, and the next driest was apparently October, 1897, to May, 1898, with 10.50 inches. There have been several spring droughts in the last 100 years, and for the four months, February to May, there have been 10 years with the total measurement less than 4 inches. This year the measurement for February to May is 3.78 inches. The years with the smallest measurements for the corresponding period are 1834 with 2.60 inches, 1857 with 2.76 inches, 1863 with 2.90 inches, and 1874 with 3.16 inches. Temperature throughout the past eight months was abnormally high, the mean for each month at Greenwich being above the average and the excess for the whole period 2.3°.

NEW BRAZILIAN METEOROLOGICAL ORGANIZATION.

Members of the Weather Bureau staff are in receipt of *Foreign Bulletin No. 1*, dated June 28, 1921, and signed by Dr. J. de Sampaio Ferraz, the new director of the Brazilian Meteorological Service. The following paragraphs, quoted from the *Bulletin*, will show the scope of the work contemplated by the new organization:

I have the honor of advising you that the "Directoria de Meteorologia Astronomia" of the Brazilian Department of Agriculture has been divided in two separate services, "Directoria de Meteorologia" and "Observatorio Nacional."

The new "Directoria de Meteorologia," which was placed under my direction, will continue the climatological work established in 1909, uniformizing methods of all meteorological activities in the country and publishing all available data of the last ten years. I hope to be able to put out nine yearly bulletins by the end of this year. The Directoria will also establish a forecast service for central and southern Brazil; an aerological service for the aviators and general progress of meteorological science, creating kite and pilot balloon stations; a special coast service for navigation; an agricultural meteorology service; a marine meteorological service; a special service of rains and floods, and the usual investigations in every department of meteorology, principally those which may lead us, possibly, to longer ranges in forecasting weather. The Directoria will strive to explore conditions over land and ocean, in and near Brazil, and do its best to present rapidly the results to every meteorological institute of the world, being very pleased to receive their suggestions and counsel. All information concerning the whole of Brazil will be promtply given with pleasure. Rio Grande do Sul, Minas Geraes, and S. Paulo continue with their State services but under the supervision of the Directoria. The Reclamation Service of semiarid northeastern Brazil will maintain their rain organization.

The Directoria will be able to attend to any foreign requests of data from these separate services.

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Attention is called to the fact that the old "Directoria de Meteorologia da Marinha" does not exist any more. It was extinguished many years ago.

METEOROLOGICAL STATION ON NAVASSA ISLAND.

In cooperation with the Naval Radio Service a special meteorological station has been established by the Weather Bureau on Navassa Island, West Indies. Masters of vessels that pass near Navassa may have their ship barometers checked by a standard instrument upon wireless request to the naval radio station at that point

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