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German Meteorological Service of the U.S. Zone

THE former German meteorological service, the Reichswetterdienst, ceased to exist at the end of the Second World War, and separate meteorological services were set up in each of the Occupation Zones in Germany under the auspices of the respective Occupying Powers. A number of publications of the German Meteorological Service of the United States Zone have now been received. They consist of three series, the *Berichte* which report major researches, a minor series entitled *Mitteilungen*, and finally the 'year-books' containing the record of the observations made at meteorological stations in the Zone. The earlier numbers of the *Berichte* are mostly reports of war-time researches. Of these perhaps the most interesting is No. 1, by G. Schulz, which describes the work of the Cloud Investigation Centre, directed during 1940-45 by W. Findeisen. The work included laboratory research, observations in flight, and a theoretical study on sublimation nuclei, ice accretion on aircraft, temperature, humidity and electrical measurements from aircraft, determination of height of cloud top by balloon-borne apparatus, and condensation trails. Findeisen's researches on the critical temperatures for the formation of ice crystals by the condensation of water vapour in the atmosphere are described in this publication. In No. 3, W. Schwerdtfeger applies the observations made in the war-time meteorological reconnaissance flights over the North Sea and Atlantic in a study of the detailed structure of fronts and the relations between temperature distribution in fronts and the cloud and precipitation. Later numbers include an exhaustive description, by H. Hauer, of the weather and climate of the Zugspitze (2,962 m. above mean sea-level) based on the observations made during the fifty years since the famous mountain observatory was opened in 1900, and works on agricultural meteorology by S. Uhlig, N. Weger and W. Baier. As an example of the last class, No. 28 describes the effects of radiation from walls on growth of plants and of the influence of soil coverings of various types, from fine sand to aluminium foil, on the temperature and humidity of the soil and the air immediately above and on plant growth.

Astronomy at Geneva

THE issues during recent years of "Publications de l'Observatoire de Genève" (Série A, Astronomie, Chronométrie, Géophysique; Fasc. 37-43, 1946-52) contain a number of short articles on such matters as seismic disturbances and the behaviour of the pendulums at the Observatory, an approximate solution of the motion of the isochronous pendulum, and the first quartz clock at the Geneva Observatory, illustrated with eight figures. No. 39 contains an article regarding the tercentenary of Newton, in which is reproduced a passage from the address presented by the Helvetian Society of Natural Sciences to the Royal Society; No. 40, "A propos du Centenaire de la Découverte de Neptune", reproduces

a number of letters written by Gautier to his parents and also some of the correspondence between Le Verrier and Gautier, which show the close collaboration between them; and in No. 42 Pierre Challande gives a short mathematical analysis of the functioning of a quartz resonator in the neighbourhood of the frequency of resonance, illustrated by ten diagrams, and Dr. R. Luthy deals with the radiotelegraphic reception of the hourly signals. Two other "Publications"—"Résultats des Observations de Chronomètres en 1951" and "Série M, Météorologie" (Fasc. 25)—appeared in 1952; the latter gives a résumé of the meteorological results obtained at Geneva in 1951, first for the whole year and then in tabular form for each month from December 1950 to December 1951.

The Blue-cheeked Bee-eater

A NEW species of bird, the blue-cheeked bee-eater (*Merops superciliosus*), was added to the British list in 1951. Publication of the record was delayed by the editors of *British Birds* since it was felt that the occasion demanded a specially prepared coloured plate. This has now been prepared by Mr. Roger Tory Peterson, and in a recent issue of the journal it is accompanied by details of the first observation of the bird by Miss Hilda M. Quick on the Scilly Isles in June 1951 (*Brit. Birds*, 45, No. 7; July 1952). The bird is about the size of a cuckoo and has a beautiful iridescent green colour with rather darker primaries. There is a dark copper spot on the throat, a black line through the eye, and the forehead and crown are pale blue. The blue-cheeked bee-eater has occurred as a vagrant in France and Sicily, but Europe is outside its normal range, which includes East Africa, Madagascar, north-west Africa, Egypt, Syria, Iraq and Persia, and most of the Oriental region. It would appear that the bird which Miss Quick saw belonged to the Middle Eastern race, although this is not certain.

Studies of a Red Alga

IN a recent paper, Dr. K. M. Drew (*Phytomorph.*, 2, 38; 1952) has compared collections of the common but insufficiently investigated red alga *Bangia fuscopurpurea* from Wales and Naples, by growing them for several generations, under controlled conditions in the laboratory, in a culture solution consisting of filtered sea-water, soil extract and added mineral nutrients. Reproduction has been by asexual spores throughout. Under identical conditions, marked differences, which are described and illustrated, have been consistently observed between the cultures from the two localities. The indications are that further investigations are required to ascertain if *B. fuscopurpurea* is an aggregate species comprising physiological and morphological races. The point is also made that the methods of spore formation in the genus *Bangia* merit re-examination, particularly with reference to the desirability of using the relevant data as a basis of generic distinction in this group.

Persistence of *Rhizoctonia solani* in Soil

THE effects of different living host and other plants, of various mineral additions to soil (sodium nitrate and calcium hydroxide), and of *Trichoderma lignorum*, with and without added corn meal, on the persistence of a heavy artificial inoculation of *R. solani* in the soil, have been investigated under controlled conditions by G. B. Sanford (*Canad. J. Bot.*, 30, 5,