

impossible to cover this work in the time allotted to botany in the secondary schools, but there can be no doubt as to the high value of these suggestions, from which the teacher may well make such selections as his time may permit.

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CURRENT NOTES ON METEOROLOGY.

FOEHN WINDS IN THE ANTARCTIC.

DURING the Antarctic voyage of the *Discovery*, warm southerly winds were observed which, because of their high temperature, have generally been regarded as of *foehn*-like character. Sir Clements Markham (*Geogr. Journ.*, June) believes that the high temperature may result from the fact that these winds blow from the ocean beyond the pole, that is, Weddell Sea, and not from adiabatic warming during descent. Hence he thinks that the Great Barrier may end on the other side of the pole with another line of ice-cliffs facing the Weddell Sea, and that the winds may blow across the ice barrier with great velocity without lowering their temperature. On the other hand, Dr. W. N. Shaw suggests that the snow which comes with these warm southerly winds is carried along in a surface drift, and notes that intensely cold air can contain very little moisture.

LOW TEMPERATURE IN THE SAHARA.

IN the *Meteorologische Zeitschrift* for June, 1905, there is a note on some low temperatures observed on December 19, 1904, in the Sahara, between Tuggurt and Guerrara. The temperature at midnight was 30.2° Fahr.; at day-break (6:15 A.M.), 28.4°; at sunrise (7:15 A.M.), 33.8°; at 2:30 P.M., in the shade, 75.2°; at 7 P.M., 41.0°; and at 8:30 P.M., 39.2°. It was calm, and the sky was clear. On December 20, at 7:30 P.M., the temperature was 33.8°, and there was heavy frost, which in places reached a thickness of 1 cm.

NOTES.

Das Wetter for June, 1905, contains an interesting article, of a 'popular' nature, entitled 'Aus dem Leben der Wolken,' by Dr.

A. de Quervain; also a discussion, illustrated by means of curves, entitled 'Temperaturen auf Bergstationen und in der freien Atmosphäre,' by Dr. W. Wundt.

THE *Annuaire météorologique* of the Royal Observatory of Belgium contains a useful list of text-books of meteorology, prepared by J. Vincent. Special attention is paid to *general* treatises, but a considerable number of special works on marine, medical and agricultural climatology are included. The list begins with Aristotle, and includes books in Latin, Greek, English, French, German, Italian, Dutch, Russian, Danish, Spanish, Hungarian, Norwegian and Portuguese.

THE mechanism of the origin of rain-clouds, and the conditions of heavy rains and floods on the northern slope of the Pyrenees, were discussed by Marchand, Director of the Pic du Midi Observatory, before the Congrès du Sud-Ouest Navigable, held at Bordeaux in June, 1902. The paper was printed in the proceedings of that congress, and a German translation of a portion of the article, in the *Meteorologische Zeitschrift* for June, 1905, makes this interesting study accessible to the general reader.

RECENT publications on the meteorology of the free air are those of Teisserenc de Bort, on the diurnal changes in temperature (*Comptes rendus*, Vol. cxi., 1905, 467) and of Hergesell, on the results obtained by means of kites over the Mediterranean Sea and Atlantic Ocean in 1904 (*ibid.*, January 30, 1905).

R. DEC. WARD.

ANNUAL REPORT OF THE COUNCIL OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE annual report of the council for the year 1904-5 states that the arrangements for the meeting of the association in South Africa had been directed, under the sanction of the council, by a special South African committee, sitting in London, and consisting of the general officers of the association (the president and president-elect, the general treasurer and the general secretaries), Professor Armstrong, Dr. Horace Brown, Sir William Crookes, Sir

James Dewar, Sir Archibald Geikie, Professor H. A. Miers, Sir Henry Roscoe and Dr. Selater. The coordination of the work of the various local committees had been carried out under the direction of the central organizing committee for South Africa, sitting at Cape Town, consisting of Sir David Gill (chairman) and Dr. J. D. F. Gilchrist (secretary). An additional expenses fund having been opened to supplement the subvention of £6,000 from the South African colonies, contributions amounting to £3,100 had been received.

The following agreement has been made between the British Association and the South African Association in the matter of financial arrangements respecting the annual meeting in 1905: (1) That all members (but not associates) of the South African Association shall be entitled to associates' tickets at the meeting of the British Association in South Africa in 1905; (2) that the South African Association shall pay a contribution of £500 to the funds of the British Association; (3) the South African Association guarantees the purchase of a thousand copies at least of the annual volume, the copies to be sent direct to the members of the South African Association on payment to the British Association by the South African Association of the sum of 8s. per copy.

A committee of the council, consisting of Professor G. H. Darwin, Sir A. Geikie, the general secretaries and the general treasurer, was authorized to consider the appointment of an assistant secretary, in succession to Dr. Garson, resigned, with the result that Mr. A. Silva White was unanimously appointed to fill that office.

The books and other publications presented to or received in exchange by the association, with the exception of the publications of the corresponding societies of the association and the annual volumes of reports of the various Associations for the Advancement of Science, have been transferred to the Library of University College, Gower Street, the council of University College having undertaken to give the same facilities to members of the British Association for the use of University College

Library as were granted under similar circumstances by the University of London.

The council also reported on a plan for dealing with the meteorology of the British colonies and the relation of the association to corresponding societies.

SCIENTIFIC NOTES AND NEWS.

THE American Anthropological Association is meeting this week at San Francisco under the presidency of Dr. Frederic Ward Putnam, of Harvard University and the University of California. The preliminary program contains the titles of thirty-nine papers, which proves that the anthropologists at least can hold an unusually successful meeting in the summer and on the Pacific Coast. We hope to print subsequently abstracts of the papers.

MR. W. R. DUNSTAN, F.R.S., director of the scientific and technical department of the Imperial Institute; Mr. F. W. Dyson, F.R.S., chief assistant at the Royal Observatory, Greenwich, and Dr. R. T. Glazebrook, F.R.S., director of the National Physical Laboratory, have been elected members of the council of the British Association.

THE regents of the University of California have granted a year's leave of absence to Professor Wm. E. Ritter, of the department of zoology, for research at the San Diego Marine Biological Station and travel abroad. Associate Professor Charles A. Kofoed will have charge of the department in his absence. Mr. C. O. Esterly, Mr. L. Griggs and Dr. Alice Robertson have been appointed assistants in zoology.

MR. GEORGE K. CHERRIE, of the Museum of the Brooklyn Institute, has just returned from South America, where he has been collecting for that institution. He obtained about 800 bird skins representing very fairly the avifauna of the region about Ciudad Bolivar, Venezuela. These include a fine series of the Hoatzin, together with nests and eggs of that bird; skins and skeletons of the Guacharo bird, and skins of a number of species of South American herons. From the observations of Mr. Cherrie, it seems probable that the breeding of the hoatzin is largely influenced