

*Westminster Gazette* in its account of the British Association meeting:

It is interesting to note the dangers to a scientific institution directly under our bureaucracy when Professor Oliver, in his address this morning to the botanical section, actually urges that the British Museum botanical collections should be transferred from the enlightened charge of the independent trustees to Kew, which is under the board of works. If government is to advance the pursuit of scientific research by subsidies, it must be content to entrust the disposal of these subsidies to boards of independent men.

It seems to us that, of course unconsciously, he has supplied a weighty argument in favor of retaining the two herbaria, so that if at one the 'dead *Welwitschia*' should be ousted by the 'live dandelion,' the former may yet be retained in safe custody for the benefit of future students.

Much more might be said did space allow. It would be possible, for instance, to show more fully what has already been indicated—namely, that Professor Oliver is hardly qualified, either by knowledge or by position, to pronounce judgment upon matters as to which older if not wiser men have expressed very different opinions. We think that, on reflection, he will regret that he introduced what was felt by many who heard it to be an element of discord into an assembly of botanists from all parts of the country. 'He is evidently,' as Bentham said of Naegeli, 'a man of great ability and zeal, and a constant and hard worker'; and we can only hope that increasing years will enable him to take broader views, and at least to recognize that his individual standpoint is not the only one, and need not necessarily be the best.

JAMES BRITTEN.

NOTE.—The death of Mr. C. B. Clarke since the above was written suggests the mention of him as one who was in no sense a creation of 'the schools,' and whose name will always be associated with Kew, where he did most of his work, and with the national herbarium, to which he was a frequent and welcome visitor.—*The Journal of Botany*.

#### CURRENT NOTES ON METEOROLOGY.

##### THE MONTHLY WEATHER REVIEW.

THE July, 1906, number of the *Monthly Weather Review* (dated October 11) contains the following papers:

'The Waterspout seen off Cottage City, Mass., on Vineyard Sound, on August 19, 1896,' by Professor F. H. Bigelow. This is one of a series of papers on the thermodynamics of the atmosphere, and is the most complete discussion of a waterspout which we have ever seen. Several excellent half-tones are given. An early notice of this waterspout and of some of the photographs here reproduced was included in these notes in *SCIENCE*, N. S., Vol. IV., 1896, 718-719. Professor Bigelow has made a careful study of all the available accounts of this waterspout, and has made calculations as to its dimensions.

'Climatology of Porto Rico from 1867 to 1905, inclusive,' by W. H. Alexander. Mr. Alexander has already contributed other studies of West Indian climatology. The present paper contains numerous tables of climatological data which will be valuable to any one who seeks information regarding Porto Rican climate.

'Snow Rollers,' by Wilson A. Bentley. Mr. Bentley's name is well known in connection with his remarkable studies of snow crystals by micro-photography. The present article deals with the formation of 'snow rollers' at Jericho, Vt., on January 18, 1906, and is illustrated by means of two half-tones. 'Snow Rollers at Mount Pleasant, Mich.,' by Professor R. D. Calkins, is another study of a similar occurrence, at a different place.

##### MAMMATO-CUMULUS CLOUDS.

THE September, 1906, number of the *Meteorologische Zeitschrift* contains a study of mammato-cumulus clouds by H. Osthoff, with some illustrations reproduced from drawings. In all, sixty-seven observations of this peculiar cloud form were made by the writer, the majority being in summer and during the warmer hours. A rapid disappearance of the cloud was noted as characteristic, the form being a passing stage of an existing cloud.

The writer believes that the probable cause of the mammato-cumulus is to be found in a descending air movement, which, however, in view of its usually being very limited in area, seldom reaches down to the lowest air strata.

#### BIRD MIGRATION AND WEATHER IN HUNGARY.

THE spring dates of arrival in Hungary of migrating birds have been studied in relation to weather conditions for the period 1894-1903, by J. Hegyföky, who presents the general results in the September number of the *Meteorologische Zeitschrift*. Weather which is warm and pleasant accelerates the arrival of the birds, while unpleasant cool weather delays their coming. When high pressures prevail over the continent the arrival is regular, but when depressions, of short duration, occur, the arrival is irregular.

#### NOTES.

J. R. SUTTON, meteorologist of the De Beers Consolidated Mines at Kimberley, continues his valuable discussions of the meteorology of the South African table-land in a paper on 'The Climate of East London, Cape Colony' (*Trans. So. Afr. Phil. Soc.*, XVI., 3, August, 1906).

R. DEC. WARD.

#### BOTANICAL NOTES.

##### PAPERS ON FUNGI.

Two years ago Dr. G. P. Clinton, of the Connecticut Experiment Station, published a very helpful monograph of the North American *Ustilagineae* (*Proc. Boston Society Nat. Hist.*, Vol. 31) which was noticed in this journal (*SCIENCE*, July 7, 1905). The same author has published another paper on the same group of plants, but for a restricted area under the title, 'The *Ustilagineae*, or Smuts, of Connecticut.' It constitutes Bulletin No. 3 of the State Geological and Natural History Survey, and includes forty-four pages of text and seven full-page plates. There is first an introduction of seven pages in which the general characters, life history and economic importance of the smuts are discussed, and this is followed by a systematic key to the genera, of which there are twelve represented by spe-

cies in the state. Under each genus, after its characterization there is a key to the species with the specific descriptions clearly drawn. No synonyms are included, but hosts and localities are given with much fulness. In all, forty-nine species and one variety are described. The plates (mostly half-tones) add much to the usefulness of the paper.

In 'A Preliminary Report of the Hymeniales of Connecticut' Professor Edward A. White published (in Bulletin 3 of the State Geol. and Nat. Hist. Survey) the results of his studies of the larger fungi (mainly toadstools and pore-fungi) of Connecticut. It constitutes a thick pamphlet of eighty-two pages of text, and forty excellent half-tone plates of photographs. As stated in the preface, the author's aim 'has been to compile as far as possible a complete and accurate list of native species, together with notes regarding the characteristic genera.' This plan has been so carried out that one finds here clear, non-technical descriptions of fifty-five genera, aided by the very good plates, and following each generic characterization is a list of the species with localities and notes in regard to edibility. There are enumerated of *Agaricaceae* 233 species, *Polyporaceae* 103, *Hydnaceae* 23, *Thelephoraceae* 18 and *Clavariaceae* 11. This pamphlet should prove useful to beginners in the study of the larger fungi in Connecticut, as by it the genus of any specimen can be determined, and that is all that the beginner should attempt. The identification of species may well be deferred until genera are pretty well fixed in mind.

Professor Doctor Arthur contributes to the volume 'Resultats scientifiques de Congrès international de Botanique Vienne 1905' a paper on the classification of the *Uredineae* based upon their structure and development ('Eine auf die Struktur und Entwicklungsgeschichte begründete Klassifikation der Uredineen'), in which he proposed an entirely new arrangement of the group. He divides the order *Uredinales* into three families, viz., *Coleosporaceae*, with seven genera (*e. g.*, *Coleosporium*, *Chrysospora*, etc.) representing three subfamilies; *Uredinaceae*, with twenty-