

Werkstatt der mythologischen Wissenschaft.'

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

CURRENT NOTES ON METEOROLOGY.

AUSTRALIAN METEOROLOGY.

THREE valuable contributions to the meteorology of Australia have recently been published together in one volume by Hon. Ralph Abercromby, under the title *Australian Weather*. All of these papers have been previously published elsewhere, but they are now brought together and issued in book form for convenient reference. The first paper, by H. C. Russell, the Government Astronomer of New South Wales and Director of the Sydney Observatory, on *Moving Anticyclones in the Southern Hemisphere* (originally published in Quart. Journ. Roy. Met. Soc., Jan., 1893), gives a general account of the anticyclones which control Australian weather south of latitude 20° S. The average number of anticyclones which pass over the country every year is 42; they are most numerous in summer, and their average velocity is 400 miles a day. The author holds out the hope of possible long range forecasts for a month in advance, or even for longer periods.

The second paper, on *Southerly Bursters*, by H. A. Hunt, of the Sydney Observatory (originally published in Journ. Roy. Soc., N. S. W., xxviii, 1894), was awarded a prize of £25 offered by Hon. Ralph Abercromby for the best essay on southerly 'bursters.' The 'burster,' formally called the 'brick-fielder' because it was heralded by a cloud of reddish dust from the neighboring brick-fields, is a strong southerly wind associated with a V-depression, and bearing some resemblance to the 'pampero' of Brazil and the 'norther' of Texas. This is an exhaustive study of this interesting phenomenon. The last

paper, also by Hunt, on *Types of Australian Weather*, is a clear and useful account of the typical atmospheric conditions controlling Australian weather, and is illustrated by numerous maps.

INTERNATIONAL CLOUD ATLAS.

THE *International Cloud Atlas*, already referred to in these notes, may be purchased of MM. Gauthier-Villars et Fils, 55, Quai des Grands-Augustins, Paris, for 14 francs a copy. The *Atlas*, which contains 28 views, is now the official cloud atlas of the world, and the illustrations in it are the types to which all cloud forms must hereafter be referred. It is the work of the International Cloud Committee, appointed by the International Meteorological Conference held at Munich in 1891, and the standard types now adopted were selected from over 300 photographs collected from all parts of the world. The Cloud Committee is composed as follows: Hann, Hildebrandsson, Mohn, Riggenbach, Rotch and Teisserenc de Bort, and the sub-committee in charge of the publication of the *Atlas* comprises Hildebrandsson, Riggenbach and de Bort.

METEOROLOGICAL WORK AT BATAVIA.

FROM the 17th volume (for 1894) of the *Observations made at the Magnetical and Meteorological Observatory at Batavia*, we learn that the sub-director of the Observatory, Dr. S. Figee, is conducting an elaborate inquiry into the influence of the moon upon the magnetic elements at Batavia, some of the results of which study appear in the present volume. A large number of cloud photographs have also been taken at the Observatory, with satisfactory results, as a preparation for the work of the International Cloud Year. It is disappointing to note that it is feared the cloud observations by means of theodolites will prove to be too trying for the eyes of the observers at Batavia, and may have to be given up.

WEATHER MAP OF THE ST. LOUIS TORNADO.

THE Weather Bureau has issued what it calls a 'souvenir' weather map of the St. Louis tornado of May 27th. The sheet is of small size (8 in. by 10 in.). On one side there is a map showing the weather conditions over the United States on the evening of May 27th, with the tornado districts indicated by red crosses, and with brief descriptive text beneath. On the reverse side is an explanation of the wind, weather and temperature signals of the Bureau.

R. DeC. WARD.

HARVARD UNIVERSITY.

NOTES UPON AGRICULTURE AND HORTICULTURE, VIII.

POTATO CULTURE.

WITHIN the past month no less than six bulletins have been issued by as many Stations upon potato culture or some phase of it.

HASTENING MATURITY OF POTATOES.

'HASTENING maturity' is the sub-title of bulletin No. 36 from the Rhode Island Station. Three methods of bringing about an earlier crop are considered and one in detail, as it has been tested at the Station. Director Flagg and Mr. Tucker write: "Maturity may be hastened in three ways. (a) By planting sets in pots in a greenhouse and transplanting to open ground; (b) by sprouting, that is planting sets thickly in a cold frame, and when ready to break ground transplanting them to the field, and (c) by building." For the latter small potatoes the size of hen's eggs are given heat and light for six weeks or so before planting time, thus causing a strong bud to develop and roots to form. The budded potatoes are placed in the field with the care given to onion sets, etc. A gain of 32 bushels per acre was obtained by this method over the ordinary way of planting.

CRIMSON CLOVER GOOD FOR POTATOES.

IN Bulletin No. 38 of the Maryland Station, Director Miller and Mr. Brinkley find that crimson clover plowed under increased the yield in 1894 thirty-six and in 1895 fifty per cent. Ridge and level culture have given the same results, and also deep and shallow cultivation proved of equal value. Spraying four times with Bordeaux mixture to prevent blight doubled the crop.

POTASH FOR POTATOES.

AT the Kentucky Station (Bulletin No. 61) Director Scovell found that potash was the most profitable commercial fertilizer to use, while the nitrates and phosphates were sometimes used at a financial loss. Several tests were made to check the scab; but here is an instance in which it is a misfortune for the enemy to fail to appear anywhere in the field and the results are postponed thereby.

SCAB AND INTERNAL BROWN ROT.

PROFESSOR GREEN in Minnesota Station Bulletin No. 45 reports that the subsoiling of heavy clay land increases somewhat the yield of potatoes. Considerable space is given, with engravings, to the report upon treatment for scab. The germ theory, or fungous nature of the disease is recognized in full, for it is stated that: "Perfectly clean seed planted on land which is free from scab fungus will always and in any season produce a crop of smooth clean potatoes, no matter what the character of the land. * * * Land infected by the germs of this disease will produce a more or less scabby crop, no matter how clean and smooth the seed is." It is recommended to dig scabby potatoes as soon as ripe, because the scab continues to grow so long as the potatoes are in the ground.

The internal brown rot works at the center of the potato, and all thus infested