vision of Vegetable Physiology and Pathology of the United States Department of Agriculture which will attract more than usual attention is that on 'Some Edible and Poisonous Fungi,' by Dr. W. G. Farlow, of Harvard University. In the introduction the author says: "The question which everyone asks first is: How can you tell a mushroom from a toadstool? This is one of the questions which no one can answer, unless an explanation of why the question should never be asked may be considered an answer. You cannot tell a mushroom from a toadstool, because mushrooms are toadstools. The reason why the question is so frequently asked is because the belief is well-nigh universal in this country that the fleshy umbrella-shaped fungi are divided into two classes, mushrooms, which are edible, and toadstools, which are poisonous. This assumed difference does not in fact exist. All the fleshy umbrella-shaped fungi are toadstools, and to a small number of the best-known edible forms the name mushroom is applied popularly and in commerce; but not a small number of the other toadstools are edible, and a great many of them, probably the most of them, are not poisonous."

As to how we may tell an edible from a poisonous fungus, the author says: "Our knowledge on this point is empirical. We know that certain species are edible, and others are poisonous, because people have eaten the former and found them to be good, while the latter have produced unpleasant symptoms and even death." He says further that "with regard to the species which have not been tried experimentally or accidentally we can only say that they are probably edible or poisonous, judging by their resemblance to other species known to be such. Although, in the absence of experience, analogy is the only guide, it is not a sure guide, and unpleasant surprises may arise."

The sections which follow treat of growth, structure and characteristics of toadstools, followed by descriptions and figures of *Agaricus campestris*, the common mushroom, (edible); *Amanita muscaria*, the fly Agaric (poisonous); *Amanita phalloides*, the deadly Agaric (poisonous); *Agaricus arvensis*, the horse mushroom (edible); *Hypholoma appendiculatum* (edible); *Coprinus comatus*, the horsetail fungus (edible); *Lepiota procera*, parasol fungus (edible); *Cantharellus cibarius*, chanterelle (edible); *Marasmius oreades*, fairy-ring fungus (edible); tube-bearing fungi, morels, puff-balls, etc. A half dozen rules for the use of beginners close this valuable paper. It should be in the hands of every teacher of botany, from colleges and universities down through the high schools into the grammar and primary grades.

CHARLES E. BESSEY.
THE UNIVERSITY OF NEBRASKA.

CURRENT NOTES ON METEOROLOGY.

REPORT OF THE CHIEF OF THE WEATHER BUREAU.

FROM the *Report of the Chief of the Weather Bureau for 1896–97* we learn that during the last fiscal year a total of 4,625,250 weather maps was issued, and that daily forecasts and warnings were sent to 51,694 places, by mail, telegraph, telephone, etc. There are now 81 map-printing stations outside of Washington, D. C.; about 8,000 places from which climate and crop conditions are reported, and about 3,000 voluntary observers make daily observations. The stations at which storm signals are displayed number 253. The river and rainfall stations, making daily observations to be used in river and flood forecasts, number 113 and 42 respectively. Substantial progress has been made in perfecting the kites used in the exploration of the free air, and it is hoped soon to publish daily weather charts based on the high-level readings made by means of in-

struments sent aloft on kite lines. This would be a step in advance, of the very greatest practical value in forecasting. The discussion of the data obtained by the Weather Bureau during the International Cloud Year is in the hands of Professor F. H. Bigelow, and his report is to be ready during the present year. That our Weather Bureau is carrying on a very important work, of immense value to the commercial and agricultural interests of this country, is emphatically proved by a glance at this Report. It is to be hoped that the Chief of the Weather Bureau may secure the additional appropriations which he needs in order to carry on and to extend the work under his direction.

In addition to the usual tables of meteorological data, the Report contains two monographs, *Rainfall of the United States*, by A. J. Henry, and *Floods of the Mississippi River*, by Park Morrill, already published as separate Bulletins by the Bureau.

THE MAURITIUS OBSERVATORY.

THE *Annual Report* of the Director of the Royal Alfred Observatory for the year 1896 brings official announcement of the resignation of Dr. Meldrum from the directorship of that Observatory, a position which he had held for 22 years. The work which Dr. Meldrum has done in connection with the law of storms is well known wherever meteorology is studied the world over, and meteorologists will always associate his name with that of the island in the Indian Ocean on which he lived so long and worked so indefatigably. The new Director is Mr. T. F. Claxton, F.R.A.S., whose name appears on the new volume of *Results of the Magnetical and Meteorological Observations made at the Royal Alfred Observatory, Mauritius, in the Year 1896*. This publication contains the daily, monthly and annual values of the principal meteorological elements, and the usual tables of magnetical observations.

WEST INDIAN HURRICANES.

THE Weather Bureau has recently published an important article on West Indian hurricanes by the late Father Benito Viñes, formerly Director of the Colegio de Belen, Habana. Viñes' previous monograph entitled *Apuntes relativos a los huracanes de las Antillas en Setiembre y Octobre de 1875 y 1876* is a classic. The present article was prepared by Father Viñes, shortly before his death, for the Chicago Meteorological Congress of 1893, and has been translated from the Spanish by Dr. C. Finley, of Habana, the author revising the greater part of it before his death. The title is *Investigation of the Cyclonic Circulation and the Translatory Movement of the West Indian Hurricanes*. Owing to the present interest in everything that concerns the meteorological conditions of the West Indies, the Chief of the Weather Bureau has wisely decided to give this article immediate publication, rather than to await its long-delayed appearance in the Bulletin (No. 11) which contains the papers prepared for the Chicago Congress, three parts of which have been issued, leaving the fourth still to come.

R. DEC. WARD.

HARVARD UNIVERSITY.

CURRENT NOTES ON ANTHROPOLOGY.

PYGMY TRIBE IN AMERICA.

So far as I am aware, no tribe of dwarf stature has been found in America. The Changos, of the Atacama desert, are probably the shortest. The average of the males is four feet nine inches. Of course, individual instances of dwarfs occur in many tribes, as they do among ourselves. These are due to other laws of growth than a generally diminished height.

In the *Revue* of the Paris School of Anthropology for July, Dr. Collineau