THE WOOD BUFFALO.

THE following information has just come into my possession from the Inspector of Indian Agencies and Reserves, Mr. J. A. Macrae, who has recently returned from the far north. He writes: "At Fort Chipewyan, Fort Smith and Fort Resolution, I made close enquiries into the number of wood buffalo remaining, having an opportunity—owing to meeting so many Indians fresh from their grounds—such as I think no one else has enjoyed, to do this. Some of the Indians who were to meet me at each place had lately been near the Buffalo and had counted the different herds, which are generally speaking, three in number—one ranging from Salt River to Peace Point on Peace River; one from Salt River north to Great Slave Lake; and one from Salt River east and west. They number, I conclude, from 500 to 575. I understand that there has been an increase of perhaps a couple of hundred, and it would appear only to be necessary to continue vigorous protective measures in order to perpetuate the herd. It is noticeable that the fur of the wood Buffalo, owing no doubt to climatic conditions, is longer and thicker than was that of its brother of the plains, and it has that straightness and thickness which characterized the musk ox robe." OTTO J. KLOTZ.

DEPARTMENT OF THE INTERIOR,
OTTAWA, CAN.

CURRENT NOTES ON METEOROLOGY.

THE 'BOOM' POPULATION OF KANSAS.

SOME interesting facts concerning the change in the number of inhabitants of Kansas as a result of the rise and collapse of the 'boom' of the latter part of the decade 1880–1890, are given by Gannett in an article on 'The Population of the United States' in the last number of the *Bull. Amer. Geog. Soc.* (No. 5, 1900). It will be remembered that a succession of unusually rainy seasons at that time was followed by a large increase in land values, the whole region witnessing a tremendous 'boom.' There was a rapid gain in population. A number of dry seasons following, the settlers were literally starved out, and the country was quickly depopulated again. In 1885, at the beginning of the 'boom,' Kansas had a population of 1,268,530; in 1888, near its crest, the population numbered 1,518,552; in 1890 the figures were 1,427,096, and in 1895 only 1,333,734. The State thus gained nearly 250,000 inhabitants in three years, and later lost nearly 200,000. Similar conditions obtained in Nebraska and the two Dakotas.

THE METEOROLOGY OF LOWER CALIFORNIA.

IN an article on 'Explorations in the Central Part of Baja California,' in the *Bull. Amer. Geog. Soc.* (No. 5, 1900, 397–429), Dr. Gustav Eisen gives a brief account of the rainfall and climatic conditions of the meteorologically practically unknown peninsula of Lower California. There are two sources and two seasons of rainfall. The summer rains extend from Todos Santos and Cabo San Lucas, in the south, as far up as the Sierra Nevada, in the northern part of Alta California. These summer rains are most frequent and heavy in the backbone of the Sierra which runs along the eastern coast of Baja California. The winter rains now and then extend from Alta California down to the Pacific Coast, even as far south as San José del Cabo. These winter rains never enter the Gulf of California, and diminish in quantity and regularity to the south. As far south as San Quentin they are fairly regular, but beyond that point they are uncertain. In spite of these two sources of supply, the peninsula of Lower California is but very scantily supplied with rain.

THE HARVARD METEOROLOGICAL STATIONS IN PERU.

THE 55th Annual Report of the Director of the Astronomical Observatory of Harvard College contains an announcement which will fill meteorologists the world over with regret. Speaking of the meteorological stations of the Harvard College Observatory in Peru, concerning which mention has frequently been made in the columns of SCIENCE, Professor Pickering says: "The observations at these different stations have now been continued in many cases for eight or ten years. At such stations, where, from the necessities of the case, the observers are generally men of limited education and experience, observations of the greatest accuracy cannot be expected, except by maintaining trained observers at greatly in-

creased expense. * * * Taking into consideration the striking uniformity of conditions which prevail in different years in this region, it is probable that additional observations would not greatly increase our knowledge. It has been decided, therefore, to suspend, at the end of the year 1900, the meteorological observations of all the stations, except those at Arequipa."

RECENT PUBLICATIONS.

C. F. MARVIN: *Anemometry.* U. S. Department of Agriculture, Weather Bureau. Circular D, Instrument Division. 2d Edition. Washington, D. C. 1900. 8vo. Pp. 67.

This is a circular of general information respecting the theory and operation of instruments for indicating, measuring and automatically recording wind movement and direction, with instructions for the erection and care of such instruments of the Weather Bureau pattern.

C. F. MARVIN: *Psychrometric Tables for Obtaining the Vapor Pressure, Relative Humidity and Temperature of the Dew-Point.* U. S. Department of Agriculture, Weather Bureau. Washington, D. C. 8vo. 1900. Pp. 84. Price, 10 cents.

These are the tables for the reduction of the psychrometric observations at the regular and volunteer stations of the Weather Bureau. The use of these tables began Jan. 1, 1901.

NOTES.

DR. H. R. MILL has become the Editor of *Symons's Monthly Meteorological Magazine*, in place of Mr. H. Sowerby Wallis, who has held that position since the death of Mr. G. J. Symons.

ACCORDING to Professor A. J. Henry (*Monthly Weather Review*, Oct. 1900), a conservative estimate of the total loss of property by lightning in the United States during the year 1899 would probably be $6,000,000.

R. DEC. WARD.

THE NAVAL OBSERVATORY IN CONGRESS.

THE Observatory was discussed in the Senate on January 22d in view of an item in the naval appropriation bill. Mr. Morgan said:

I want to call the attention of the Senate to the fact that this great Observatory is without any real organization in law, and it is a haphazard, piecemeal sort of arrangement by which it has been put under the Navy Department. It was first called the National Observatory of the United States. It was afterwards called the Naval Observatory of the United States, and was put under the Navy Department. No head or management of the Observatory, as I understand it, has ever been appointed or given the direction of it, but an officer of the Navy is detailed to take charge of the Observatory from time to time, who controls this matter. However, it is not a military office in any sense of the word, and it does not follow that a man educated at Annapolis has any very special training in astronomy. It seems to me that that great institution is very badly crippled for want of a proper organization.

We have here, upon the recommendation of what is called the chief astronomer, a provision by which an assistant spectroscopist is to be appointed, and yet they have made no reports recently of any work of that kind in the Observatory. I suppose there must be work of that kind going on, but the reports ought to show it if they are of any value at all

Now, this great Observatory, perhaps the largest national observatory in the world—I think it is the largest one in the world—not larger, perhaps, though more costly, than some of the private observatories—has cost the Government of the United States for the site, buildings, grounds, and outfit $655,845, and the roads, pathways, and gradings, $95,900, making a total cost of $751,745.

As I understand it, the Observatory does not have the rank amongst the observatories of the United States that it ought to have. There is very valuable work done there, a great deal of it, no doubt, but simply for the want of proper organization the work has not been conducted in the way it ought to be. I have introduced a bill in the Senate to organize the Observatory, for it has never had any organization.

I wanted to call the attention of the chairman of the committee to this particular appropriation, with a view of drawing out some expression from him, or from some one who is informed particularly on the subject, about certain points. Congress, it seems, has neither defined the objects for which the Observatory was founded, made any provision for its control, or appointed any authority to determine what it should do or to report upon its work, nor assigned to it any public function. What the Navy Department has been able to do is to provide for its government as a naval station, appoint an officer to command it, detail professors in the Navy for duty, give to the senior of these professors the title of astronomical director, and charge him with the duty of determining what astronomical work shall be done. But, as far as known, it has never been able to provide the head of the es-