

THE PROPER NAME OF THE ATLANTIC BOTTLENOSE
WHALE.

THE binomial long applied to the 'bottlenose' of the Atlantic Ocean and currently accepted by modern authors is *Hyperoodon rostratus* (Muller), described and named *Balæna rostrata* by him in 1776 in the 'Zool. Dan. Prodr.,' p. 7. This appears to be antedated six years by *Balæna ampullata*, a name proposed for the same animal by John Reinhold Forster in the 'Linnæan Travels' [Kalm], 1770, Vol. 1, p. 18, footnote. In this Forster criticizes Kalm for calling the 'bottlenose' a dolphin, because 'it has no teeth in its mouth as all the fish of that class have.' He then refers to "Mr. Pennant's 'British Zoology,' Vol. 3, p. 43, where it is called the beaked whale and very well described," adding, "a drawing is seen in the explanatory table, n. 1. Perhaps it would not be improper to call it *Balæna ampullata* F." In the 1812 edition of Pennant's 'British Zoology,' Vol. 3, p. 85, this 'beaked whale' or 'bottle head' is properly classed under Lacepede's genus *Hyperoodon*. From the foregoing I conclude the proper name of this whale to be *Hyperoodon ampullatus* (Forster).

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CURRENT NOTES ON METEOROLOGY.

LOSS OF LIFE IN THE UNITED STATES BY
LIGHTNING.

THE Weather Bureau has, since 1890, conducted a statistical inquiry into the number of deaths and of injuries caused by lightning in the United States. This work has been carried on up to the close of 1900, when it was discontinued. During the year 1900, 713 persons were killed by, or received fatal injuries through, lightning. Of this number 291 persons were killed in the open, 158 in houses, 57 under trees, and 56 in barns. The circumstances attending the deaths of the remaining 151 are not known. During the same year 973 persons were more or less injured by lightning strokes. On the average, it is probable that from 700 to 800 lives are lost each year by lightning in the United States. Tabulating the average mortality resulting

from lightning according to geographic districts subject to the same, or nearly the same, atmospheric conditions, it appears that the greatest number of fatal cases occurred in the Middle Atlantic States; the next greatest in the Ohio Valley and Tennessee, with the middle and upper Mississippi Valley a close third. The greatest number of deaths in any single state during the five years 1896-1900 occurred in Pennsylvania (186), followed by Ohio with 135, and Indiana, Illinois and New York with 124 each.

In the Gulf States the average number of deaths due to lightning per unit area (10,000 square miles) is 1. In New England, with probably half as many thunderstorms, the death rate per unit area is 2. In the latter district the death rate per million of rural inhabitants is nearly double that per million of total population, and the same holds true of the densely populated districts of the Middle Atlantic States. Considering both unit area and density of population, the greatest mortality by lightning is in the Ohio Valley and the Middle Atlantic States. If, however, the density of population alone be considered, it is in the upper Missouri valley and the middle Rocky Mountain region.

The foregoing facts are taken from Bulletin 30, of the Weather Bureau ('Loss of Life in the United States by Lightning,' by A. J. Henry), in which will be found further interesting information, as well as a chart—the first of its kind for this country—showing the geographic distribution of deaths by lightning in the United States.

TEMPERATURE, RAINFALL AND SUN-SPOTS IN
JAMAICA.

MAXWELL HALL returns to the subject of the relation between sun-spots, temperature and rainfall in a recent paper entitled 'Temperatures in Kingston, Jamaica, and the Connection between Sun-Spot Frequency, the Mean Maximum Temperature, and the Rainfall in Jamaica' (Kingston, 1902, 12 pp.). Using the observations of 1881-1898, inclusive, and taking the mean maximum temperatures of any three years as the mean of the middle year, the plotted curve of mean maximum

temperatures agrees remarkably closely with the curve of sun-spot frequency. There are about 2° in mean maximum temperature between the maximum and minimum of the sun-spot curve. The rainfall curve also accords as a whole remarkably closely with the sun-spot curve, but from the middle of 1887 to the middle of 1890 the rainfall was less than it should have been, and from the middle of 1891 to the end of 1895 it was greater than it should have been. These irregularities are interesting because in 1892 it was assumed that the curve would recover its position, and a smaller rainfall for the next few years was predicted, but 1893 proved to be unusually wet.

CLIMATE OF WESTERN AUSTRALIA.

CLIMATOLOGISTS will give the latest publication from the Perth Observatory a warm welcome, for it is the first comprehensive report on the climate of western Australia. Annual meteorological summaries have been issued since 1876, but the present volume comprises a selection and coordination of the principal meteorological facts which have been discovered during the past twenty-four years of observations. 'The Climate of Western Australia from Meteorological Observations made during the Years 1876-1899' is the title of this publication, and it reflects great credit on Mr. Ernest Cooke, Government Astronomer for Western Australia. Naturally, meteorological work has been carried on under the greatest difficulties in the district in question, and the earlier records cannot be compared as regards accuracy with those which are now being made.

It is a great satisfaction to note that Mr. Cooke gives at the very beginning of his report a series of seventeen weather maps illustrating the weather types of the district under discussion, for the best understanding of a climate is to be gained through an appreciation of the local weather types. There are two principal types of weather, the winter and the summer, although each of these is, of course, subject to endless modifications. A general, albeit very brief, description of the climate follows the discussion of the weather types, the statements having special reference

to Perth, and a full set of meteorological tables completes the volume. A table of special interest is that which shows the duration of the 'heat waves' which have passed Perth since January 1, 1880. The longest of these spells without a break occurred in 1896, when the maximum temperature exceeded 90° on every day between January 25 and February 12—nineteen days in all, but the most severe heat was apparently in January and February, 1880, when the maxima on several days rose over 100° , and on two days over 110° . It may be noted, however, that hot nights are exceptional, even during these hot waves, the minima being usually between 60° and 70° . A series of charts accompanies the volume, showing, for each month and for the year, the pressure; mean, maximum and minimum temperature, and the rainfall.

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SCIENTIFIC NOTES AND NEWS.

THE Academy of Sciences at Christiania has elected the following corresponding members: Dr. J.H. van't Hoff, professor of general chemistry, and Professor Adolf Engler, professor of botany, at the University of Berlin; Dr. Richard Abegg, professor of chemistry at Breslau; Dr. Karl A. Ritter von Zittel, professor of paleontology and geology at Munich, and Dr. Julius Hann, professor of meteorology at Vienna.

MCGILL UNIVERSITY has conferred the degree of doctor of science in course on Professor Frank Dawson Adams, M.A., Ph.D., Logan professor of geology and paleontology, McGill University, and on William Bell Dawson, M.A., M.A.E., of the Department of Marine, Ottawa.

GLASGOW UNIVERSITY has conferred its LL.D. on Mr. James Stevenson, of Largs, for his services in opening up Nyassaland and in establishing the Livingstone mission by which the work of Dr. Livingstone was continued and brought to fruition, and in the completion of the great highway between Lake Nyassa and Tanganyika, known as Stevenson-road.

PROFESSORS VICTOR C. VAUGHAN and Frederick G. Novy of the medical department of the