kilometers, or about 825 miles. The point referred to concerns the effect of a water surface upon the temperature of the air at the altitude of the balloon (about 500 meters). At about 9 a. m. on October 1st the balloon began to drift over a part of the Baltic Sea, and the aëronauts at once noticed a fall in temperature and an increased humidity in the air through which they were moving. In consequence of these changed conditions, the balloon began to descend, and it was necessary to throw out ballast in order to maintain it at a proper altitude.

### THE BAGUIOS OF THE PHILIPPINE ISLANDS.

In the Monthly Weather Review for October, Abbe notes that in speaking of tropical cyclones, the word cyclone should uniformly be employed for all revolving storms, or else that names should be used which have a widespread local Thus the term hurricane, which has its root in the Carib word ourgan, should, at least in English works, be restricted to the violent tropical cyclones of the North Atlantic Ocean. Typhoon has been the recognized designation of the revolving storms of the China Sea for many And now the term baguio, which is commonly used by the Tagalogs and Viscavans seems likely to come into use. Baguio is the name universally applied in the Philippine Archipelago to the storms that, after they pass westward over the Archipelago, become typhoons on the coast of China.

#### THE DROUGHT IN INDIA.

It has for some time been the custom of the Indian Meteorological Department to issue long-range forecasts of the monsoon and cold weather rains in India. From Nature for January 11th we learn that this year the forecast of the cold weather (December-February) rains in northern and central India anticipated a rainfall slightly above the normal. The prediction has unfortunately not been verified, as an area comprising nearly two-thirds of India is now suffering from the most severe drought of the century, and there does not seem, at present, to be any immediate chance of a change for the better.

# METEOROLOGICAL CHART OF THE GREAT LAKES.

THERE has been issued by the Weather Bureau a publication entitled Meteorological Chart

of the Great Lakes: Summary for the Season of 1899, by A. J. Henry and N. B. Conger. This quarto pamphlet summarizes the information contained in the monthly meteorological charts of the Great Lakes, issued throughout the navigation season. The discussion concerns the storms of the year; precipitation and the possibility of evaporation in the Lake region; fog; ice during the winter of 1898-99, and the wrecks and casualities which occurred during the year. A dozen charts illustrate the text.

R. DEC. WARD.

### WAGNER FREE INSTITUTE OF SCIENCE.

THE lectures for the spring term at the Wagner Free Institute of Science will commence on Monday, February 12, 1900. The following is the schedule:

Mondays, Dr. Henry Leffman, 'Chemistry.'
Tuesdays, Professor W. B. Scott, 'Dynamical Geology.'

Wednesdays, Professor R. E. Thompson, 'American History, 1783-1865.'

Thursdays, Professor G. F. Stradling, 'Heat.'

Fridays, Professor S. T. Wagner, 'Metallic Materials of Engineering Construction.'

Fridays, Professor T. H. Montgomery, 'Invertebrate Animals.'

Saturdays, Dr. Emily G. Hunt, 'Some Aspects of Botany.'

At the annual meeting at the Institute Mr. G. H. Cliff, formerly president of the Girls' Normal School, was elected a trustee to succeed the late Richard B. Westbrook, Esq.

From the report of the Actuary it was learned that 13,828 persons had attended the Fall course of lectures, that 28,378 persons had used the Reference Library and that the Branch of the Free Library had circulated 269,618 volumes for home use; 1327 books and 2226 pamphlets and magazines were added to the Wagner Institute Reference Library during the year. The report dwelt at some length upon the splendid collection of government documents owned by the Institute, probably the best in the City of Philadelphia, which was now classified and was being thoroughly catalogued. The thanks of the Board were extended to the officers of the Spring Garden Institute for an important addition to this collection.

The Board has given permission to the Philadelphia Natural History Society to hold its meeting in the Institute. This Society is in a most flourishing condition and there is an average attendance at the meetings of from 35 to 40 persons.

The number of accessions to the Museum during the year was 386, making a total of 14.880 exhibits, not including the insects of which there are about 5000 species. The collection of Florida Pliocene Fossils is one of the best and most complete in the country. Among the most important contributions are 100 species of fossils collected by Dr. H. G. Griffith on the Caloosahatchie River, Florida; 50 species of minerals presented by Mr. Joseph Wilcox, a number of zoological crustacea and mollusks collected by the Zoological Expedition to Florida in June, 27 local species from the Academy of Natural Science Exchange, 22 species of birds and nests from J. Harris Reed, and a collection of coal plants from the Rock Hill Coal and Iron Company. The local collection of insects is now the most complete in the City.

## SCIENTIFIC NOTES AND NEWS.

MAJOR J. W. POWELL, director of the bureau of American ethnology, and Professor W. H. Holmes, head curator of anthropology in the United States National Museum, are in Cuba engaged in carrying out a plan for archæologic researches which are expected to throw light on pre-historic migrations of several native tribes, as well as on aboriginal commerce and interchange of arts. Their operations will extend to Puerto Rico and several other Antillean Islands.

THE REV. FATHER JOSÉ ALGUE, director of the Manila Observatory, and his associate, Father José Clos, have arrived at San Francisco on their way to Washington. They wish to arrange for the continuation of the work of the Observatory and the publication of the results by the government.

PROFESSOR A. J. HENRY, who has been for twenty years connected with the Weather Bureau and who is at present chief of the Division of Meteorology, has been appointed to fill the vacancy caused by the death of the late H. A. Hazen.

MR. A. A. HELLER has returned to Puerto Rico to extend his collections made in 1899 for the New York Botanical Garden. He will keep the field during January and February, with headquarters at Mayaguez in the western part of the island.

WE are glad to learn that Professor R. H. Chittenden of Yale University who has been seriously ill with typhoid fever is now better.

WE learn from Nature that the Council of the Manchester Literary and Philosophical Society have awarded the Wilde Medal for 1900 to Lord Rayleigh, for his contributions to mathematical and experimental physics and to chemistry; a Dalton Medal (struck in 1864) to Sir H. E. Roscoe, for his remarkable original researches in chemistry, and for his distinguished services to scientific education; and the Wilde Premium for 1900 to Professor A. W. Flux, for his papers on economic questions read before the Society. The presentation of the medals and the premium took place at a special meeting, when Lord Rayleigh delivered the Wilde Lecture for 1900.

M. Poincaré has been awarded the gold medal of the Royal Astronomical Society.

It is understood that Sir John Lubbock, on his elevation to the peerage, has decided to take the name of Lord Avebury, after a property of his in Wiltshire. According to Sir John Lubbock's description in 'Prehistoric Times,' the temple of Avebury, Wiltshire, was the greatest of all so-called Druidical monuments.

M. M. DARBOUX and Moissan have been appointed delegates of Paris Academy of Sciences to the celebration of the second centenary of the Berlin Academy of Sciences.

At the annual meeting of the Royal Meteorological Society, London, on January 17th, Mr. G. J. Symons, F.R.S., was elected president for the ensuing year.

At the first meeting of the Académie de Médecine for 1900 the retiring president, Professor Panas, gave his valedictory address, reviewing the important work and communica-