world, has done very little for astronomy, and it is with profound satisfaction we learn that commerce and navigation, on which the supremacy of New York largely depends, is to be aided by the founding of the 'New York Observatory and Nautical Museum.'

This institution will consist of two distinct departments:

- 1. A Nautical Museum, where will be collected and exhibited models of all types of vessels, safety and signal devices, nautical instruments and methods of determining position, charts, marine engines and motors, and historic instruments and relics. The museum and collections will be open to the public and will be arranged so that properly qualified persons can avail themselves of the facilities there offered for investigation and research.
- 2. An Astronomical Observatory, where will be made scientific investigations in the field of astronomy, navigation and kindred subjects, and for this purpose the observatory will be provided with a great telescope, for photographic and visual work, astrophysical instruments for the investigations of interesting problems of the sun, magnetometers, seismographs, etc. A time service will be instituted so that chronometers may be rated, all kinds of marine instruments will be tested, and tidal investigations will be taken up.

The institution is to have an endowment of not less than \$500,000, and in addition to this it is expected that the city of New York will provide a site in Bronx Park adjacent to the Botanical Garden and Zoological Park, and will also erect the museum building and the domes and smaller buildings for the observatory.

The organization committee consists of such well-known New Yorkers as Frederick G. Bourne, Cornelius Vanderbilt, Edward S. Isham, George A. Cormack, J. D. Jerrold Kelley and Charles Lane Poor, and their backing means success. Dr. Poor, professor of astronomy at Columbia University, has made an enviable record for himself through his cometary researches, and by his recent discovery that the sun is a vibrating body continually changing its shape. Further re-

searches carried out through a series of years will probably make clear the meaning of this change; and this will go a long way towards solving some of the outstanding problems of astronomy.

There is every reason to believe that the new observatory will be founded and will at once take its place among the great observatories of the world.

## BILLS OF SCIENTIFIC INTEREST PASSED BY THE NEW YORK LEGISLATURE.

THE New York legislature has passed a bill providing for a new building for the State Museum, State Library and the Education Department, to cost not more than four million dollars. The bill carries an appropriation for the acquisition of a site and the preparing of plans. For these plans twenty thousand dollars in prizes are to be awarded to the first, second and third choice of plans submitted to the commission having the erection of the building in charge.

The legislature also passed a bill to acquire Watkins Glen, one of the many ravines running into the Finger Lakes of western New York, for a state reservation.

The following legislation was passed in regard to the protection of Niagara Falls: Four inactive charters were repealed, leaving four others still outstanding, two of which are actively engaged in diverting water. The legislature also passed the Foelker bill to prevent any abstraction of water beyond the present chartered limits of abstraction.

A referendum for a constitutional amendment to permit the flooding of parts of the state reservation in the Adirondacks for the manufacture of power by private corporations was also passed.

## AMERICAN ASSOCIATION FOR THE AD-VANCEMENT OF SCIENCE.

The work of the local committee in arranging for the Ithaca meeting is approaching completion. In addition to the usual sessions for the reading of papers the program will include the following events:

Thursday evening, June 28, an informal smoker at the Town and Gown Club.

Friday evening, June 29, formal opening of the new Physical Laboratory, Rockefeller Hall, with short addresses by several well-known speakers.

Saturday, June 30, special local excursions will be arranged for botanists, geologists, zoologists, entomologists, chemists, etc., also an excursion to the George Junior Republic and trips to local points of scenic interest. It is probable that a trip to Niagara Falls, returning Sunday evening, will be arranged.

Monday evening, July 2, public meeting under the auspices of the local chapter of Sigma Xi in celebration of the twentieth anniversary of the founding of the society, with an address by some eminent man of science.

The permanent secretary has arranged for a special railroad rate of one and one third fares plus twenty-five cents on the certificate plan, and other passenger associations are expected to cooperate. Tickets may be obtained not earlier than June 25 and not later than June 30 and will be good for the return journey up to July 6.

The preliminary program will be sent out about June 1.

## SCIENTIFIC NOTES AND NEWS.

The University of Edinburgh has conferred its doctorate of laws on Professor A. Graham Bell, who was born in Edinburgh in 1847.

Dr. Morris K. Jesup, president of the American Museum of Natural History, New York, has been elected a corresponding member of the Frankfort Society of Natural History.

DR. J. H. Finley, president of the College of the City of New York, has been elected president of the American Social Science Association.

WE are glad to learn that Mr. William T. Hornaday, director of the New York Zoological Park, who has been seriously ill from actinomycosis, supposed to have been contracted from a chimpanzee, is in an improved condition after an operation.

Dr. John K. Rees, professor of geodesy and astronomy in Columbia University and director of the observatory, has been made professor emeritus. We regret that his retire-

ment from active work is due to continued illness following a stroke of apoplexy.

Dr. L. O. Howard, chief of the Division of Entomology, U. S. Department of Agriculture, and permanent secretary of the American Association for the Advancement of Science, expected to return on the *Oceanic*, which was due in New York on the sixteenth.

Among the members of the U. S. Geological Survey in the neighborhood of San Francisco at the time of the recent earthquake was Mr. G. K. Gilbert, geologist, who has been engaged for several months in making hydraulic experiments in the mining laboratory of the University of California at Berkeley. Instructions were telegraphed him immediately to make as thorough a study as possible of the earthquake phenomena.

MR. F. H. NEWELL, chief engineer of the U. S. Reclamation Service, has recently returned from an inspection of the works under construction in the territories of Oklahoma, New Mexico and Arizona, and in the states of California, Nevada, Utah, Colorado and Rapid progress is being made on Kansas. construction. The work in its general magnitude now stands well toward the front of public undertakings. The expenditures on water storage and distribution systems aggregate about \$1,000,000 a month. Most of the large engineering problems have been worked The present rate of construction and expenditure is probably at the maximum and will decrease gradually, many of the most expensive structures being now at the period of greatest activity. During his absence in the west Mr. Newell has been elected a member of the corporation of the Massachusetts Institute of Technology, of which he is a graduate; also a member of the board of trustees of the Washington (D. C.) College of Engineering of the George Washington University. He has also been elected as one of the board of directors of the Washington Society of Engineers and chairman of the committee on meetings.

Dr. Julius Wiesner, professor of the physiology and anatomy of plants in the University of Vienna, has been made a life member of