author has since that time compared its movements with the changes of atmospheric pressure recorded by his aerograph. He finds that when the barometric pressure is high over the Pacific slope from British Columbia southward to California, while off the Pacific coast the barometer is comparatively low, the horizontal pendulum of the seismograph tends to move towards the eastward. When an extensive storm area is approaching from the westward, and often eighteen to twenty-four hours before the local barometer begins to fall, the pendulum of the seismograph swings steadily to the eastward, and in the event of a wellmarked high area following, the pendulum will begin to swing towards the westward before it is possible to ascertain this area's position on the current weather charts.

R. DEC. WARD.

HARVARD UNIVERSITY.

SCIENTIFIC NOTES AND NEWS.

The National Academy of Sciences will hold its annual stated session at Washington, beginning on April 15.

Professor F. B. Crocker has been elected chairman of the executive committee to arrange for the reception in honor of Lord Kelvin, which will be given at Columbia University on the evening of April 21.

THE University of Wales will confer its doctorate of science on Lord Kelvin, Lord Lister and Mr. Alfred Russel Wallace.

M. Yermoloff has been elected a correspondent of the Paris Academy of Sciences in the section of agriculture, in the room of the late Sir John Bennet Lawes. M. Baillaud has been elected correspondent in the section of astronomy.

Dr. EWALD HERING, professor of physiology in the Medical School at Leipzig, has been elected a corresponding member of the Munich Academy of Sciences.

At the annual general meeting of the Geological Society of London, on February 21, the president, Mr. J. J. H. Teall, F.R.S., presented the balance of the proceeds of the Lyell

Geological Fund to Dr. Wheelton Hind, F.R.C.S., of Stoke-on-Trent, stating that the council of the Society had made the award as a mark of their appreciation of his enthusiastic labors among the carboniferous rocks of this country.

Dr. Theodore Paul, professor of chemistry in the University at Tübingen, has been called to the directorship of the Imperial Board of Health at Berlin.

M. SAVORGNAN DE BRAZZA, the Italian explorer in the service of the French Government, has been granted a pension of 10,000 francs.

Dr. S. Weir Mitchell, who has for over thirty years been associated with the Philadelphia Orthopedic Hospital and Infirmary for Nervous Diseases, has resigned as senior physician, but remains as one of the consultants. Dr. John K. Mitchell has been elected to the vacancy caused by his father's withdrawal.

It is said that the Hon. Andrew D. White will retire from the ambassadorship to Germany in November.

A COMMITTEE has been formed, under the presidency of Professor von Zittel, for the erection in Munich of a memorial of the late Professor Max von Pettenkofer.

Professor Albert Ripley Leeds, since 1871 professor of chemistry in the Stevens Institute of Technology, died on March 14 at the age of fifty-eight years.

Dr. Johannes Christoph Klinge, head botanist of the Botanical Gardens at St. Petersburg, has died at the age of fifty-one years.

The death is announced from St. Petersburg of Major-General Pewzoff, known for his explorations in Central Asia, Mongolia and Tibet.

At a meeting of chemistry teachers held at the Hotel Albert, N. Y., March 20, the Chemistry Teachers' Club was organized. A constitution was adopted, and the following officers were elected: A. C. Hale, *President;* R. H. Fuller, *Vice-President;* A. L. Arey, *Treasurer;* M. D. Sohon (Peter Cooper High School), *Secretary*.

After paying all the expenses of the last international medical congress, a surplus of about 40,000 francs is left. The committee expect to apply this sum as an endowment of a triennial prize to be awarded at future congresses.

LORD WALSINGHAM has given to the British Museum (Natural History) his collection of butterflies and moths. This collection of microlepidoptera contains over 200,000 specimens, and is probably the largest and most valuable in the world. It includes the Zeller, Hoffman, Christoph and other collections, and contains many type specimens. Lord Walsingham has himself published numerous monographs on the microlepidoptera.

THE University of Cincinnati has ordered for its observatory a refracting telescope, with an objective of 16 inches, from the Alvan Clark & Sons Corporation. The observatory at Cincinnati, established in 1842, is one of the oldest in the country, and has during the last twenty years been under the direction of Professor J. G. Porter.

THE magnetic observatory at Nice was compelled to remove to Mount Mounier, owing to interference by the electric trolley car system, and is suing the company for \$20,000, the cost of removal.

Commissioner George M. Bowers has selected a plot of thirty acres of land near Tupelo, Miss., for a new Government fish hatchery.

Professor C. B. Davenport and Dr. H. C. Cowles, of the University of Chicago; Professor W. S. Leathers, of the University of Mississippi, and a number of graduate students of the University of Chicago visited Mississippi Sound from March 15 to 31. Making its headquarters at Biloxi, Miss., the party worked on the mainland on Deer, Ship, Cat, Horn and Chandeleur Islands and in the Sound. Special studies in ecology, variation and geographical distribution were made.

The following are among the lecture arrangements at the Royal Institution, after Easter: Dr. Allan Macfadyen, three lectures on 'Recent Methods and Results in Biological

Inquiry'; Professor Karl Pearson, three lectures on the 'Laws of Heredity, with Special Reference to Man' (the Tyndall lectures); Professor Dewar, three lectures on the 'Oxygen Group of Elements'; Dr. A. Smith Woodward, three lectures on 'Recent Geological Discoveries. The Friday evening meetings will begin on April 11, when Professor Dewar will deliver a discourse on 'Problems of the Succeeding Friday evening Atmosphere. discourses will be delivered by Sir John H. A. Macdonald, Dr. J. Mackenzie Davidson, Sir Robert Ball, Sir Benjamin Baker, Professor A. E. Tutton and others.

Dr. L. A. BAUER will give the following illustrated series of lectures on 'Terrestrial Magnetism' at the Johns Hopkins University from 5 to 6 P.M.:

April 28—'The Principal Phenomena of the Earth's Magnetism.'

April 29 "' The Instruments and Methods of Magnetic Surveys.'

April 30—' The Objects and Results of Magnetic Surveys.'

May 1—'The Present Status of the Theory of the Earth's Magnetism.'

The annual meeting of the German Public Health Association will be held this year in Munich from September 17 to 20. The following questions are proposed for discussion: (1) The Hygienic Supervision of Watercourses; (2) Town and Country in their Sanitary Relations and the Sanitation of Rural Districts; (3) Damp Dwellings: Cause, Influence on Health, and Measures for Amelioration; (4) Influence of Quackery on the Health and Life of the Population; (5) The Baking Trade from a Hygienic Standpoint in regard both to Trade and the Consumer.

The Peary Arctic Club's steam barque Windward has arrived at New York from Brigus, N. F., where it has been wintering since its return from the Arctic last September. The vessel is to have new engines and boilers installed. It will return to the Arctic regions this summer for Lieutenant Peary.

The London Times prints some details regarding the French hydrographic expedi-

tion to Indo-China under Lieutenant Hevond. It has begun its labors in the Siamese Peninsula by preparing maps of the bay of Kampong Som and the gulf of Ha Tien. On the completion of this work the ship will return to the eastern coast of Indo-China, where it will remain a month, in order to give the mission time to verify the plans of the mouths of the Mekong. The expedition will then carefully reconnoitre the whole coast of Anam, a work the duration of which it is impossible to estimate, and will subsequently spend several months in Tongking. The rest of the time will be devoted to verifying the results previously reached. Besides its work of preparing maps, the expedition will aim at gathering all general geographical information of interest.

The House committee on interstate and foreign commerce has voted to report the Hepburn Pure-Food bill to prevent the adulteration, misbranding, and imitation of foods, beverages, drugs, etc., and regulating interstate traffic in such goods. The bill was framed by the National Pure-Food Congress.

The bill appropriating \$10,000 for experimenting on the destruction of mosquitoes in New Jersey has been defeated in the senate by a vote of 8 to 10.

We learn from the British Medical Journal that it is reported that Professor Emil v. Behring (Marburg) will give the amount of the Nobel prize recently awarded him (\$40,000) to the Prussian State for the permanent endowment of the Institute of Experimental Therapeutics founded by him in the University of Marburg. The gift is to be devoted to the prosecution on a large scale of the researches on serum initiated by Professor Behring. The fact may appropriately be recalled that several years ago Professor von Behring gave the half of a French prize awarded to him, equivalent to a sum of \$5,000, in furtherance of serum research.

The report of progress of stream measurements for the calendar year 1899, by Mr. F. H. Newell, with the two accompanying papers noted below, has been issued as Part IV. of the Twenty-first Annual Report of the United

States Geological Survey. The whole makes a volume of 768 pages, illustrated by 156 plates and 329 figures, including views of rivers and the methods of measuring them, with maps and diagrams of river flow. In the report of progress, tables of maximum. minimum, and mean discharge of streams in various parts of the United States are given, and other data of use to engineers and investors, as well as to the public in general. Following the report of progress of stream measurements is a paper by Mr. N. H. Darton, giving a preliminary description of the geology and resources of the southern half of the Black Hills and adjoining regions in South Dakota and Wyoming. The volume closes with a paper by Mr. Willard D. Johnson on the 'High Plains and their Utilization,' giving a description of the structure of the Great Plains region of western Kansas and adjacent states, and discussing the occurrence of water under ground.

The London Times states that at the last meeting of the council of the Royal Geographical Society it was decided to recommend Sir F. D. Lugard and Major Moles-Sykes, as recipients of the Royal medals for the present year. Since 1888 Sir Frederick Lugard has served in tropical Africa, first in Nyasaland, next in what is now British East Africa, then in Uganda, and since then in Ngami Land and in Northern Nigeria, where he now holds the position of high commissioner. During the fourteen years of his African service in countries very little known, he has always devoted much personal attention to the geography of the districts through which he passed, making maps and plans. Major Sykes has been awarded the medal for his journeys in Persia, extending over nine years. Many thousands of square miles of good mapping have been obtained by his political assistance, independently of the large area for the geography of which he has been personally responsible. The other awards of the Society have been made as follows: The Murchison grant to Mr. J. Stanley Gardiner, for his researches in Funafuti Island in the Pacific, and the Maldive Islands in the Indian Ocean; the Gill memo-

rial to Mr. G. G. Chisholm, for the services he has rendered during twenty-five years to geographical education by text-books of various kinds, atlases, and lectures, all of a high standard of value, as well as for his geographical investigations, among other subjects into cataracts and waterfalls, and on the sites of towns: the Back grant to Lieutenant Amdrup, of the Danish navy, for his two voyages of exploration to the east coast of Greenland, during which he surveyed and mapped in detail much of the coast hitherto unknown or imperfectly mapped; the Peek award to Mr. J. P. Thomson, the founder of the Queensland branch of the Australian Geographical Society, who, by his writings and in other ways, has done much to promote the interests of geography in Queensland.

UNIVERSITY AND EDUCATIONAL NEWS.

Harvard University has received three large bequests: \$450,000 from the late George Smith, of the class of '53, to be used in erecting three domitories; \$100,000 without restriction from the late Robert C. Billings, of Jamaica Plain, and \$100,000 from the late Jacob Wheelock, of Worcester, Mass. Mr. Wheelock also bequeathed \$100,000 to Clark University, and Mr. Billings bequeathed \$100,000 each to the Massachusetts Institute of Technology and the Boston Museum of Fine Arts.

Barnard College, Columbia University, has added \$500,000 to its endowment, one half having been given by Mr. John D. Rockefeller and the other half having been collected as a condition of this gift.

By the will of George L. Littlefield, of Providence, Brown University receives \$100,-000 for the establishment of a chair of American history and the residue of the estate, which, it is said, may amount to \$500,000.

By the will of Mrs. S. P. Lees, of New York, Washington and Lee University receives a bequest of \$30,000.

SIR WILLIAM McDonald has given McGill University \$20,000 for the purchase of books needed for the research work of students in arts, and has also presented to the physics

building a liquid-air plant, and to the zoological department equipment for the teaching of embryology.

The class of '76 at Yale University has established with \$5,000 a scholarship, named in honor of President Hadley, who was a member of the class.

OTHER gifts to educational institutions include \$20,000 to Carroll College, in Wisconsin, from Mr. Ralph Vorhees, and \$5,000 to the Stevens Institute of Technology from Mr. Alexander C. Humphreys.

WE are informed that the Science Hall at the University of Montana was only partially burned on March 14, the loss falling almost entirely upon the engineering department. The foundry, forge room, machine shop and the assay laboratory in chemistry were gutted. The loss is about \$6,000, fully insured. The other laboratories were not injured. The burned portion will be immediately rebuilt. The origin of the fire is unknown.

THE troubles in the Russian universities and other institutions of learning seem to be very serious. It is said that the University of St. Petersburg will not be open until the autumn, and perhaps not then. In a technical school at Plock the students set fire to the building and attempted to lynch the professors. About one hundred students of Moscow University have been banished to Siberia and about 500 have been imprisoned.

The Carnegie Trust of the Universities of Scotland has prepared its first report. No appropriations have as yet been made for research or the improvement of the facilities of the universities. But in accordance with Mr. Carnegie's wishes, the fees of a large number of students have been paid, the number at each of the four universities and the amount of the fees being as follows: St. Andrew's, 268 students, class fees, £2,452 16s.; Glasgow, 828 students, class fees, £7,672 13s. 6d.; Aberdeen, 473 students, class fees, £3,806 1s. 6d.; Edinburgh, 872 students, class fees, £9,010 5s. 6d.

MISS ELEANOR MARIE NAST has been awarded by the Woman's College of Baltimore a foreign fellowship in biology.