cates, embraces the whole field of useful knowledge.

The publication committee, under the rules of the society, will arrange for the immediate publication of the papers presented.

The activity of the society is reflected in the increasing volume of its publications, which constitute a series covering one hundred and forty years, and include *Transactions* in quarto and *Proceedings* in octavo; its exchange list embraces most of the scientific societies of the world. The society thus offers valuable avenues of prompt publication and wide circulation of the papers read before it.

SCIENTIFIC NOTES AND NEWS

The colleagues and friends of Professor A. A. Michelson and those who appreciate the honor done to this country by the conferring on him of the Copley medal of the Royal Society and the Nobel prize in physics, have arranged to unite in a dinner at Chicago on January 3, the last day of the meeting of the American Association for the Advancement of Science.

The Munich Academy of Sciences has elected as corresponding members Mr. G. K. Gilbert, of the U. S. Geological Survey, and Professor J. J. Thomson, professor of experimental physics at Cambridge University.

The Hayden memorial geological medal of the Academy of Natural Sciences of Philadelphia will be presented to Mr. Charles D. Walcott, secretary of the Smithsonian Institution on Tuesday evening, January 7. The presentation address will be made by Dr. Persifor Frazer.

SIR W. H. BENNETT has been elected president of the Institute of Hygiene, London, in succession to the late Sir W. H. Broadbent.

Dr. Berthold Laufer, lecturer in anthropology in Columbia University, has accepted the position of curator in the Field Museum of Natural History in Chicago and will proceed on January 7 to Thibet, where he will spend three years. The money for the expedition has been given anonymously.

Professor Dugald C. Jackson, of the Massachusetts Institute of Technology, Boston, has consented to act as temporary technical assistant of the expert accountant engaged in

devising a system of bookkeeping by which the city can keep informed of the financial operations of the Chicago Telephone Company under the new ordinance.

Dr. Geo. I. Adams, has returned to Washington from Peru, where since 1905 he has been chief geologist to the government of Peru.

A SMITHSONIAN grant has just been approved by Secretary Walcott in favor of Professor William Hallock, of Columbia University, New York, to investigate a 3,300-foot well near Oakland, Maryland. Among other things, Dr. Hallock will determine, if possible, the conductivity of gas at this extreme depth and will try to get information as to the possible radioactivity of rock far below the surface.

Professor Henry B. Ward, of the University of Nebraska, has been elected a foreign member of the Russian Imperial Society for the Acclimatization of Animals and Plants.

The Société d'Anthropologie de Paris has elected Dr. Ales Hrdlička an associate foreign member. Heretofore he had been a corresponding member.

Dr. Stroud proposes to resign the Cavendish professorship of physics in Leeds University, after twenty-two years' service.

Dr. HERMANN GRAF ZU SOLMS LAUBACH, professor of botany at the University of Strasburg, has retired from active service.

Dr. Gustav Jäger, of Stuttgart, known for his contributions to hygiene, has celebrated the fiftieth anniversary of his doctorate.

It is stated in *Nature* that Mr. Haffkine has accepted an appointment to a post at Calcutta offered to him by the secretary of state for India. It will be remembered that Mr. Haffkine was held responsible for an unfortunate accident that occurred in the Punjab in connection with plague inoculation, an accident for which a large body of scientific opinion has pronounced him to be in no way to blame.

WE learn from the Geographical Record that Mr. Leo Frobenius, the German ethnologist and explorer, whose researches along the Kasai River in 1904–6 are well known, has returned to inner Africa, to make further investigations. He is accompanied by Dr. Hugershoff as surveyor and geologist and Mr. Fritz Nansen as cartographer and photographer. The party will study, for a year, the little-known region to the south of the great Niger bend. Another year will be spent along the lower Niger, and, if the health and resources of the expedition permit, similar investigations may be extended to Togo and the Cameroons.

Dr. Ernest H. Starling, professor of physiology in the University of London, will give the Herter lectures of the year on the subject "The Fluids of the Body," beginning on January 6 at 4 p.m. and continuing at the same hour throughout the week at the Carnegie Laboratory of the University and Bellevue Hospital Medical College, 338 East 26th Street, New York City.

Dr. Frank Thilly (A.B. Cincinnati, '87), Sage professor of philosophy at Cornell University, made the address on the occasion of the first reunion of the colleges of the University of Cincinnati. The subject of his address was "University Ideals."

At a meeting of the Geographical Society at Philadelphia on December 19, Captain Roald Amundsen gave an illustrated account of his discovery of the Northwest passage.

It is reported that the remains of the philosopher Kant are to be transferred to the Fürstengruft of the cathedral in Königsberg.

WE regret to record the death on December 29 of Dr. Coleman Sellers, at the age of fifty-nine years. Dr. Sellers was chief engineer of the Niagara Falls Power Company and chief mechanical engineer of the Canadian Niagara Power Company. He had been president of the American Society of Mechanical Engineers and of the Franklin Institute of Philadelphia.

The death is announced of Mr. M. Walton Brown, secretary of the British Institution of Mining Engineers.

The Rev. George Nelson Webber, D.D., who had been professor of philosophy at Middle-

bury College and Smith College, died on December 20, at the age of eighty-one years.

Professor Oskar Lassar, of the University of Berlin, known for his work in dermatology, died on December 23, at the age of fifty-eight years.

There will be a civil service examination on January 15 and 16 to fill four vacancies in the position of aid in the U.S. Coast and Geodetic Survey with a salary of \$750 per annum. An examination is also announced for the position of chemist aid in the Bureau of Chemistry, department of agriculture, at a salary of \$1,000. Applicants will not be assembled for this examination, but will be graded on their education and training. On January 29-30, 1908, there will be an examination to fill at least three vacancies in the position of miscellaneous computer, Naval Observatory, Washington, D. C., and vacancies requiring similar qualifications as they may occur in that observatory. The department states that miscellaneous computers are paid by the hour and earn from \$1,000 to \$1,200 per annum. Promotions are made from this grade, without further examination, to the grade of assistant, at \$1,200 per annum, as vacancies occur.

At the meeting of the Department of Superintendence of the National Education Association in Washington, D. C., February 25-26-27, considerable attention will be given to agricultural education. A round table conference will be held at which will be discussed among other things "Cooperation between the State Agricultural College and the State Normal School in Training Teachers for Elementary Agriculture" and "Cooperation between the United States Department of Agriculture and State School Authorities in Promoting Agriculture in the Public Schools." Arrangements have also been completed to organize at the February meeting a "Department of Rural and Agricultural Education" coordinate with other departments of the National Education Association. Permission to organize this department was given by the board of directors of the National Educational Association at the meeting in Los Angeles in July, 1907.

At the meeting of the Cardiff City Observatory committee on November 30, says Nature, it was announced that arrangements are busily proceeding for the installation of a seismograph at the observatory on Penylan Hill. The seismograph is being provided by the Cardiff Naturalists' Society, its up-keep being undertaken by the city council. It is hoped that the instrument may be installed early in the new year, and that Professor Milne will be able to attend the opening. Professor Milne has urged the establishment of a seismograph at Cardiff, which will form a triangle with the existing stations at Birmingham and Shide.

It is stated in Symon's Meteorological Magazine that the commonwealth of Australia has inaugurated a meteorological bureau for the whole continent, with its headquarters in Melbourne, and Mr. H. A. Hunt has been appointed the first commonwealth meteorologist. The new bureau will have control of the weather service over an area scarcely less than that of the United States or the Dominion of Canada, and very much larger than that of India.

A NUMBER of government bureaus and scientific societies of Germany have united to establish a series of meteorological stations extending through western Anatolia and Mesopotamia, situated at Marash, Urfa, Mesereh, near Kharkut; Kalat Shergat and Babylon. It is expected that these stations will supply information concerning the meteorological conditions of the high plateau and mountain land of the Taurus system and of the plateau and steppes as well as the alluvial region of the Euphrates and Tigris.

Captain Benard, the commander of the Jacques Cartier, a vessel now being equipped for a Polar expedition which is expected to leave France at the end of March, has given some particulars of the enterprise to the press. It appears that the expedition has been organized by a group of French students of oceanography, the object being the observation of facts belonging to that branch of science, as well as maritime meteorology, the discovery of new fishing grounds, and the exploration of

territory believed to contain valuable mineral deposits. There is no intention to break the Polar record, but merely to explore an almost unknown region, opening up a new field of action to the owners of fishing fleets and to the French mining industry. Scientific observations will be made in the bays of Novaya, Zemlya, the Matotchkin Shar, and the Kara Sea, which will benefit not only France but all Europe.

The Royal Meteorological Society, in order to encourage the teaching of facts regarding weather and climate in schools, are inviting elementary teachers and others to send in essays in the form of an original nature-study lesson on weather or climate (not exceeding 1,500 words in length), together with a brief synopsis of five other lessons to cover the whole subject of climate and weather. If essays of sufficient merit are received, three prizes will be awarded of £5, £3 and £2, respectively.

WE take the two following notes from the Journal of the American Medical Association: "The Vienna papers announce that forty-five grains of radium have been extracted from ten tons of ore given the Vienna Academy of Sciences by the government. The Austrian government refuses to sell the ore to foreigners." "The German railroads have ordered that the vision of employees must be tested henceforth with the colored plates originated by Professor W. Nagel, of Berlin, in place of the Holmgren skeins and yarns, hitherto used for the tests."

According to the London Times the British Weights and Measures Association has presented to the Chinese Minister in London a petition signed by 100 British firms doing business in China. By an imperial edict issued in Peking on October 9 the Board of Revenue and Commerce was ordered to introduce a uniform system of weights and measures throughout the Chinese empire and to fix the standards within six months. The petition asks that the standards to be adopted as the base of the new uniform system should be uniform with or multiples and sub-multiples without fractions of, the English standards,

on the ground, among others, that the trading relations between the Chinese and the British empires are now based on these standards, which are, the petitioners contend, those in most general use in the commerce of the world.

WE learn from the London Times that the general purposes committee of the Birmingham Chamber of Commerce, having instituted an inquiry relative to the proposed compulsory adoption of the metric system, reports that opinion is divided on the question. The strongest opposition to compulsory adoption so far as the Birmingham and Midland district is concerned is to be found in the engineering trades. "It is stated," the committee reports, "that practically all engineering standards are based upon the inch, and it follows that all British-made ships, rolling stock, machinery gauges and tools, etc., are constructed according to these standards, the equivalents of which it is impossible to specify accurately in metrical measure. made machinery now in use in every part of the world made to our standard gauges on the interchangeable principle can have spare parts sent out of stock, but if any other standard is set up it would be necessary for the user of such machinery when ordering spare parts to specify whether the machinery was made before the passing of the proposed act, and would cause endless confusion and annoyance with customers at home and abroad." Whilst recognizing that the metric system is now much more widely used by traders in foreign transactions than was the case a few years ago, the committee seriously urge every trader interested in foreign trade to make use of the metric system wherever it may appear to be to his interest to do so. They are convinced that the commercial interests of the country will be much better served by gradual and voluntary adaptation than by legislation of a compulsory character.

UNIVERSITY AND EDUCATIONAL NEWS

Trinity College, Cambridge University, benefits to the extent of \$2,000,000 by the death of Lady Pearce. Her husband, Sir

William George Pearce, chairman of the Fairfield Shipbuilding and Engineering Company, died on November 2 last. By his will his fortune was bequeathed to Trinity College on the death of Lady Pearce.

Lord Newlands has given £20,000 to Glasgow University for the establishment of scholarships to be held by students going from Glasgow University to Balliol College, Oxford.

M. Théodore Vautier has given 100,000 francs to the University of Lyons for research work in experimental physics.

Mr. W. F. King, boundary commissioner of Canada, has given to the geological laboratories of the Massachusetts Institute of Technology a valuable collection of rocks. The institution has further received from the estate of Caroline Whitney a seismograph, which for the present at least will be installed at the Blue Hill Observatory.

The Administration Hall of the Oklahoma State University, erected about four years ago at a cost of \$85,000, was totally destroyed by fire on the afternoon of December 20. flames started from the explosion of a gasoline stove in use on the roof by some workmen engaged in painting the dome. Arrangements are complete for the distribution among the other buildings of the classes affected, so that no recitation will be omitted on account of the The records were saved and the loss on equipment was slight. By hard work the library building, and more especially Science Hall were saved without damage except slightly from water. The hall was insured for \$67,000, and rebuilding will begin at once.

THE Edward Davies Chemical Laboratories at Aberystwyth University College, the gift of the Llandinam family, have been opened by Mr. Asquith.

A CHAIR for photography is to be established in the Technical Institute at Dresden.

Dr. WILLIAM H. WELKER, assistant in biological chemistry at Columbia University, has been appointed demonstrator of physiological chemistry at the University of Pennsylvania, where he succeeds Dr. P. B. Hawk.