Senator Elihu Root has been made chairman of the board of trustees, the other members of which are as follows:

Dr. Nicholas Murray Butler, president of Columbia University; Dr. Henry S. Pritchett, president of the Carnegie Foundation for the Advancement of Teaching; Joseph H. Choate, lawyer, ex-ambassador to Great Britain; Albert K. Smiley. Lake Mohonk, educator and humanitarian; Charles W. Eliot, president emeritus of Harvard University; James Brown Scott, solicitor of the State Department; John W. Foster, lawyer, ex-Secretary of State; Andrew J. Montague, lawyer, ex-governor of Virginia; William M. Howard, lawyer, congressman, Lexington, Ga.; Judge Thomas Burke, Seattle, Wash.; James L. Slayden, congressman, San Antonio, Tex.; Andrew D. White, ex-Ambassador to Germany; Robert S. Brookins, lawyer, St. Louis; Samuel Mather, banker, steel manufacturer, Cleveland; J. G. Schmidlapp, railroad man, Cincinnati; Arthur William Foster, regent University of California, San Francisco; R. A. Franks, banker, Hoboken, N. J.; Charlemagne Tower, ex-ambassador to Germany and Russia; Oscar S. Straus, ambassador to Turkey; Austen G. Fox, lawyer, New York; John L. Cadwalader, lawyer, New York; John Sharp Williams, senator-elect from Mississippi; C. L. Taylor, of Pittsburgh, chairman of the Carnegie Hero Commission; George W. Perkins, of New York, financier and philanthropist; Robert S. Woodward, of Washington, and Cleveland H. Dodge, of New York, the president and secretary, respectively, of the Carnegie Institution of Washington.

SCIENTIFIC NOTES AND NEWS

The American Association for the Advancement of Science holds its opening meeting at Minneapolis on the evening of Tuesday, December 27, at eight o'clock, when the retiring president, Dr. David Starr Jordan will give his address which is entitled "The Making of a Darwin." A list of the societies meeting at Minneapolis in affiliation with the association and of the societies meeting at Ithaca, New Haven, Pittsburgh, Providence and New York, is given elsewhere in this issue.

The Royal Belgian Academy of Arts and Sciences has awarded the Charles Lagrange Prize of 1,200 francs to Dr. L. A. Bauer, director of the department of terrestrial magnetism of the Carnegie Institution of Washington. This prize is awarded for the best printed or unprinted treatise which shall form a contribution of material value in geophysics. The prize was awarded on Dr. Bauer's publication, "The United States Magnetic Tables and Magnetic Charts for 1905" and for his general contributions to terrestrial magnetism.

Dr. ALEXANDER GRAHAM BELL has been elected an honorary member of the Royal Institution, London.

Professor J. C. Kapteyn, of Groningen, Holland, has been elected an honorary fellow of the Royal Society of Edinburgh.

Professor Raphael Meldola, F.R.S., professor of chemistry in Finsbury Technical College, London, has received the doctorate of science from Oxford University.

Captain R. E. Peary has deposited in the U. S. National Museum the series of sixteen gold and two silver medals that have been awarded to him. They include the great gold medal of the National Geographic Society of Washington, presented to him for his "discovery of the North Pole," and the great gold medal of the Royal Geographical Society of London, designed by Mrs. Scott, wife of the leader of the British South Polar Expeditions and presented to Captain Peary for "Arctic Exploration, 1896–1909."

Dr. George Bruce Halsted has been elected corresponding member of the Société des Sciences physiques et naturelles, Bordeaux, in whose *Mémoires* appeared his "La contribution non euclidienne à la philosophie."

Mr. Walter Campbell Smith, of Corpus Christi College, Cambridge, has been appointed to an assistantship in the mineralogical department of the British Museum.

THE Japanese Antarctic expedition, under Lieutenant Shirase, started on November 28 from Shinagawa Bay aboard the 150-ton schooner Kainan Maru.

PROFESSOR JOSIAH ROYCE, of Harvard University, has accepted the invitation of the trustees of Lake Forest University to deliver

the next course of Bross lectures at Lake Forest, Illinois, in November, 1911.

Dr. A. A. MICHELSON, of the University of Chicago, delivered the seventh lecture upon the J. C. Campbell Foundation of the Sigma Xi Society of the Ohio State University on the evening of December 2. His subject was "Metallic Colors in Birds and Insects." The lecture was amply illustrated by lantern and reflectoscope and was concluded by an explanation of the most probable cause as found by the lecturer as a result of his researches. Professor L. H. Bailey, director of the New York State School of Agriculture of Cornell University, will lecture on "The Country Life Movement" upon the Campbell Foundation on February 8.

WE regret to record the following deaths: Dr. Rudolf Fittig, emeritus professor of chemistry at Strasburg, at the age of seventy-five years; Dr. Stanislaus von Kostanecki, professor of organic chemistry at Berne, at the age of fifty years; Dr. Felix B. Ahrens, associate professor of agricultural chemistry at Breslau, at the age of forty-seven years, and Dr. Alexander Schenk, docent for anthropology at Lausanne, at the age of thirty-six years.

REDUCED rates on the "certificate plan" of one and three fifths fare for the round trip have been granted by the Trunk Line Passenger Association and the New England Passenger Association for the meetings of the Geological Society of America, the Paleontological Society and the Association of American Geographers in Pittsburgh, December 26–31.

The annual meeting of the council of the American Federation of Teachers of the Mathematical and the Natural Sciences will be held at the University of Minnesota, Minneapolis, on Wednesday and Thursday mornings, December 28-29 at 10 A.M. At the meeting on Wednesday, reports will be presented from the executive committee, the various local associations and the committees on bibliography, on logarithmic tables, on the chemistry unit, on a syllabus in geometry and on a mathematical journal. Any business

that should come before the council will be presented, and an opportunity will be given for the introduction of new business. The meeting on Thursday morning will be a joint session with Section L of the American Association for the Advancement of Science. At this meeting the report of the committee on the relations between the college and the secondary school will be presented and discussed, and Professor E. L. Thorndike, of Columbia University, will present a paper on methods of testing the efficiency of science and mathematics teaching.

Mr. Andrew Carnegie has agreed to give to the Maria Mitchell Memorial Association a sum of \$10,000 toward the establishment of a research fellowship in astronomy, on condition that the sum of \$5,000 required to complete the fund of \$25,000 be subscribed.

THE Naples Table Association for promoting Laboratory Research by Women calls attention to the fact that the year of the association begins in April and all applications for the year 1911-12 should be sent to the secretary on or before March 1, 1911. A prize of \$1,000 has been offered periodically by the association for the best thesis written by a woman, on a scientific subject, embodying new observations and new conclusions based on an independent laboratory research in biological, chemical or physical science. The fourth prize will be awarded in April. Application blanks, information in 1911. regard to the advantages at Naples for research and collection of material and circulars giving the conditions of the award of the prize will be furnished by the secretary, Ada Wing Mead (Mrs. A. D.), 283 Wayland Ave., Providence, R. I.

Mr. Alton, of the English Radium Institute, has bought from the Austrian ministry of works, on behalf of Sir Ernest Cassel, one gram of radium for the sum of \$75,000. The radium is a gift by Sir Ernest Cassel to the institute and is intended for use in cancer research.

THE United States steamer Fish Hawk, of the Bureau of Fisheries, is at present engaged in a survey of the public oyster grounds of Mobile Bay and Mississippi Sound. This work, undertaken by the division of scientific inquiry, is under the immediate charge of Dr. H. F. Moore, assisted by Mr. T. E. B. Pope, assistants of the Bureau of Fisheries. The survey has for its object the accurate charting of all areas of oyster growth, detailed examinations of such growth respecting quality, quantity and conditions of oysters located, and the determination of suitable but unutilized ground.

According to information printed in the Geographical Journal, the Austrian African traveler, Herr Otto Artbauer, set out in October with the intention of making his way into the Tibesti region between Fezzan and Wadai—the portion of Africa which best deserves the epithet "dark" in our own day. He is accompanied by an Austrian artillery officer, First Lieutenant Emil Kraft von Helmhacker. The leader is an Arabic scholar and is also master of a number of African dialects, besides possessing ethnographical and geological qualifications. His companion will undertake the cartographical work and meteorological observations. As is well known, the relatively fertile highlands of Tibesti are inhabited by the Tibbu-a race known to the ancient Romans-who have an evil reputation for wildness and barbarity. Nachtigal has been, so far, the only traveler who has come into contact with them and escaped with his life, though the opinion has been expressed, both by Slatin Pasha and by Oskar Lenz, that their country might be safely crossed by a traveler who could convince them of his peaceable intentions. new expedition is well equipped, and provided on the one hand with presents likely to be held in esteem in that region, and on the other with serviceable weapons. After completing their proposed examination of Tibesti, the travelers hope to cross Wadai by a route leading well east of Lake Chad, though should the state of affairs in that country make this impossible, they will take the easier way towards the Kamerun.

UNIVERSITY AND EDUCATIONAL NEWS

THE progress thus far made in ascertaining the approximate value of the Wyman bequest for the Graduate College of Princeton University confirms the original estimate of between \$2,000,000 and \$3,000,000. Erection of the buildings will be started in the spring, and will include, in a large quadrangle, the Thomson Graduate College, the Cleveland Memorial Tower and the Proctor Memorial Dining Hall. The faculty committee on the graduate school has been reconstituted with one member from each of the eleven departments of the university, as follows: Dean Andrew F. West, chairman; department of philosophy, Professor John G. Hibben; history, politics and economics, Dean Edward Elliott; art and archeology, Professor Allan Marquand; classics, Professor Frank Frost Abbott; modern languages, Professor W. U. Vreeland; English, Professor T. M. Parrott; mathematics, Professor L. P. Eisenhart: physics, Professor W. F. Magie; chemistry, Professor Fred Neher; geology, Professor W. B. Scott; biology, Professor E. G. Conklin.

As a memorial to her husband, Mrs. Edward H. Harriman, of New York City, has endowed with \$100,000 the chair in forest management in the Yale Forest School.

The foundation for the new \$50,000 science hall of Dakota Wesleyan University has been completed and work on the superstructure will be advanced as rapidly as weather conditions will permit. This building will consist of two stories and basement and will contain laboratories for physics, chemistry and biology besides class rooms and a large lecture room.

THE Massachusetts Institute of Technology will hold a Congress of Technology on April 10 and 11 next to celebrate the fiftieth anniversary of its establishment.

THE Oxford congregation has rejected the plan to make Greek optional in the entrance examinations by a vote of 188 to 152.

A DESPATCH from Munich says that the oath disavowing modernism, required of theological professors by the Vatican, has caused a schism in the faculty at the University of