J. A. Udden, professor in Augustana College, geologist.

W. W. Atwood, of the University of Chicago, geologist.

Dr. Stuart Weller, of the University of Chicago, geologist.

Mr. Ross C. Purdy, of the State School of Ceramics, ceramist.

Not all of the men appointed will be able to devote their full time to the survey work, but assurances have been received that all will give some time to it. Professor Rolfe and Mr. Purdy, assisted by Mr. Fox, will devote particular attention to the clay resources of the state beginning their work probably with a study of paving brick and the clays used in its manufacture.

Professor Parr, Mr. Grout, Mr. Van Horn and the director of survey, Mr. Bain, will devote their time largely to a study of the coal fields. It is proposed to take samples of the various seams and to study their qualities as well as their distribution in the field. In the latter work Dr. Weller and Mr. Atwood will assist.

Professor Udden will devote his time to a study of the underground waters of the state with a view to the determination of the limits of the various artesian basins and the depth to which it is necessary to go to obtain good water for municipal and other purposes. In this work he will be assisted by Dr. Bartow and the State Water Survey, which will make the necessary analyses and laboratory tests.

Dr. Grant, with such assistance as may be necessary, will take up the study of the lead and zinc fields found near Galena continuing the work done by the state of Wisconsin.

Professor Salisbury, assisted by various others yet to be appointed, will prepare a series of bulletins for use in the schools, descriptive of the geography and the geology of important type localities within the state. So far arrangements have been made for such bulletins covering the lake shore from Evanston north, the Illinois Valley near Peoria, and the Mississippi Valley between Savanna and Rock Island, and at East St. Louis. The first of these bulletins is now being prepared by Mr. Goldthwaite, of Northwestern University, and Mr. Atwood, of Chicago.

THE MEMORIAL OF MAJOR WALTER REED, U. S. A.

The executive committee of the Walter Reed Memorial Association, consisting of Daniel C. Gilman, George M. Sternberg, Chas. J. Bell, A. F. A. King, J. R. Kean, W. D. McCaw and Calvin DeWitt, has issued, under date of February 1, the following letter:

You are doubtless aware that to Major Walter Reed, surgeon U. S. Army, is due, in a very large degree, the demonstration that yellow fever is propagated by a mosquito. By this demonstration the spread of the pestilence has been averted, and, when proper precautions are taken, the danger is almost annihilated. The immense benefits which have come to humanity from this discovery can hardly be estimated.

Under these circumstances, a general desire has been shown to honor this great benefactor, and likewise give to his widow some recognition of his service to mankind. An incorporation has been formed in Washington which is endeavoring to raise a fund of \$25,000, the income to be paid to his widow and the principal to be reserved for a permanent memorial in the city of Washington. The amount now subscribed is somewhat over \$16,000; by far the largest number of contributors are of the medical profession. There is one subscription of \$2,000, two of \$1,000, two of \$250, several of \$100, and many of less amount. The association in charge of this movement considers that the time has now come to appeal to a wider circle than has yet been reached and to ask their subscriptions.

Your support is respectfully solicited, and any amount that you may be disposed to contribute may be sent to the American Security and Trust Company of Washington, D. C., the president of which, Mr. Charles J. Bell, is treasurer of the fund. To complete the fund and cover incidental expenses, including a marble bust of Major Reed, \$10,000 is needed. The desire of the committee is to close the subscription before the end of this month. Communications should be addressed to the secretary at No. 1707 21st Street, N. W., Washington, D. C.

SCIENTIFIC NOTES AND NEWS.

AT a meeting of the Royal Astronomical Society at Burlington House, London, on February 9, Ambassador Reid received the gold medal for 1905 conferred by the society

on Professor William Wallace Campbell, of the Lick Observatory.

It is announced that Major-General A. W. Greely, who was advanced to that rank by the promotion of General Bates to be lieutenant-general and chief of staff, will be sent to command the southwestern division, with head-quarters at Oklahoma City.

PRESIDENT W. G. TIGHT, of the New Mexico University, Albuquerque, has been seriously injured by an explosion of gasolene while experimenting in his laboratory.

Professor J. J. Thomson, of Cambridge; Mr. Oliver Heaviside, of London; M. Henri Becquerel, of Paris, and Professor P. Zeeman, of Amsterdam, were made honorary doctors of the University of Göttingen, on the occasion of the dedication of the new physical laboratory.

Dr. Paul Drude, professor of physics in the University of Berlin, has been elected a member of the Berlin Academy of Sciences.

Professor Karl von den Steinen, of Berlin, has been made an honorary member of the Anthropological Institute of Great Britain and Ireland.

Dr. Konrad Pressel, the engineer-in-chief of the Simplon tunnel, has been made an honorary professor in the Technological Institute of Munich.

Professor Josian Royce, of Harvard University, has given during the last two weeks, at the Johns Hopkins University, a series of lectures upon 'Aspects of Post-Kantian Idealism.'

Professor T. H. Morgan, of Columbia University, will deliver the ninth of the Harvey Society lectures, on February 17, at 8:30 o'clock in the hall of the New York Academy of Medicine. The subject will be 'The Extent and Limitations of the Power to Regenerate in Man and Other Vertebrates.'

Mr. Benjamin Kidd delivered at the Royal Institution, on February 1 and 8, lectures on 'The Significance for the Future in the Theory of Evolution.'

The Court of St. Andrews University has appointed Mr. Andrew Carnegie, rector of the

university, to attend, as a representative of the university, the celebration to be held under the auspices of the American Philosophical Society, in Philadelphia, in April, of the two hundredth anniversary of the birth of Benjamin Franklin, who in 1759 received from St. Andrews the honorary degree of LL.D.

The triennial Rinecker prize given by the medical faculty of Würzburg, Germany, was awarded this year to Dr. E. Overton, assistant at the Würzburg Institute of Physiology. His researches have been on the osmotic properties of cells, the mechanism of narcosis and the importance of the mineral elements for the functions of the cells.

Dr. Otto Nordenskjöld and Capt. Mikkelsen were the guests of honor at a dinner given by the Arctic and Explorer's Clubs in New York City, on February 7. It was announced that Dr. Nordenskjöld would sail on the 8th inst. for his home in Sweden, to arrange for another voyage in search of the south pole. Capt. Mikkelsen is getting ready an expedition to the Beaufort Sea, an unexplored Arctic area west of the Parry archipelago.

The Electrical World says: "The city of Brantford, Canada, has, it is said, determined to set a good example to those cities that wait to honor a distinguished son until he is dead. The town's recognition of Alexander Graham Bell's services to humanity in inventing the telephone will take the shape of a memorial to be erected some time this year. To arrange details a committee has been formed. It has been suggested that the old Bell property at Brantford should be bought and maintained as a park. Dr. Bell's father went from Edinburgh to Brantford in 1870 and some of the very earliest experiments of a telephonic nature by Bell are said to have been made from his father's house to that of the Rev. T. Henderson in June, 1875."

Dr. WILLIAM OSLER, who is at present in Canada, expects to return to England at the end of the month.

Professor Angelo Heilprin, who has now in preparation his final report upon the phenomena of the Pelée eruptions, sailed from New York on the tenth of this month on his fourth journey to Martinique.

Dr. George Byron Gordon, of Philadelphia, and Dr. Charles Peabody, of Cambridge, have been appointed delegates from the American Anthropological Association to the International Congress of Anthropology and Prehistoric Archeology to be held at Mocano, April 16, 1906. Mr. David I. Bushnell, Jr., who is in Europe making a special study of the American collections in the museums of Italy, France and England, has been appointed a delegate from the Peabody Museum of Harvard University to the congress.

On February 6 Dr. Wm. E. Ritter, professor of zoology in the University of California and scientific director of the Marine Biological Station of San Diego, sailed from San Francisco on a journey around the world. He will spend a month in the Hawaiian Islands, two or three months in Japan, and will attend the Congress of Oceanography and Fisheries at Marseilles, France, as a representative of the oceanographic and marine biological investigations being carried on by the University of California through the San Diego Marine During Dr. Ritter's ab-Biological Station. sence from America, Professor C. A. Kofoid will be acting-director of the San Diego work. Inquiries concerning the laboratory may be addressed to him at Berkeley, Cal., until May After this date, during the summer, his address will be La Jolla, California.

The Philosophical Institute of Canterbury, Christchurch, New Zealand, has opened a fund with the object of establishing a memorial to the late Captain F. W. Hutton, F.R.S., president of the New Zealand Institute. It is proposed to devote the fund to the encouragement of original research in natural science in New Zealand by making grants for original research, and by the award of a bronze medal, to be called the 'Hutton medal.'

EMPEROR WILLIAM, of Germany, celebrated his forty-seventh birthday on January 27. In honor of the birthday a Leibnitz medal has been established to be awarded annually by the Berlin Academy of Sciences for notable scientific achievements.

Dr. John Slade Ely, professor of the theory and practise of medicine in the Yale Medical School since 1897, died on February 7, as a result of a fracture of the skull due to a fall from his horse. Dr. Ely was born in New York City, in 1860. He had been assistant in pathology in the College of Physicians and Surgeons, Columbia University, and professor of pathology in the Woman's Medical College.

Professor Karl von Koristka, formerly professor of geodesy in the Technical Institute of Prague, has died at the age of eighty years.

MISS ELLEN B. SCRIPPS, of La Jolla, California, has addressed a letter to President Benj. Ide Wheeler and Professor Wm. E. Ritter, of the University of California, signifying her intention of giving \$50,000 to the board of regents of the university for the Marine Biological Station at La Jolla. gift is in recognition of the need of buildings, equipment and endowment for the station, to the support of which Miss Scripps and her brother, Mr. E. W. Scripps, of Miramar, California, have previously contributed consider-Miss Scripps expresses the wish able sums. that a laboratory building be erected somewhere in the vicinity of San Diego to be known as the George W. Scripps Laboratory.

It is hoped that the Cancer Institute, in the foundation of which Professor Czerny has taken a leading part, will be opened at Heidelberg on the occasion of the Cancer Congress which is to be held there in the middle of September next. Already a sum of \$175,000 has been contributed towards the cost, and the government of the Grand Duchy of Baden and the University of Heidelberg have between them undertaken to maintain the institute for at least fifty years.

The Hamburg Institute of Marine Pathology and Tropical Diseases is about to be enlarged. Both the teaching staff and the accommodation for workers will be increased; the course of study for medical officers of the army, navy and colonies will be extended, and the library enlarged. It is proposed to offer

the post of scientific assistant in zoology to Dr. Schaudinn.

The Edison medal committee of the American Institute of Electrical Engineers, Mr. John W. Howell, chairman, has issued a circular to the educational institutions of the United States, calling their attention to the fact that funds are available for the award of the medal this year and pointing out the conditions under which students can enter in competition for it.

THE commission for the methods of examining and methylating alcohol, appointed by the French government, has decided to offer the following prizes for open competition, irrespective of the nationality of the competitors: (1) a prize of 20,000 francs for a method of methylating alcohol, which shall be preferable to that now in vogue in France, and which at the same time shall prevent any defrauding of the revenue; and (2) a prize of 50,000 francs for a system which shall permit of the use of alcohol for illuminating purposes under the same conditions as those for the use of petroleum.

UNIVERSITY AND EDUCATIONAL NEWS.

At the last meeting of the trustees of Columbia University gifts amounting to \$318,000 were announced, including \$150,000 from Mrs. Marie H. Williamson to establish a fund in memory of Edward R. Carpentier, the income of which is to be used for a professorship or lectureship on the origins and growth of civilization, and \$100,000 from Mr. George Blumenthal for the endowment of a chair of politics.

The fund collected by the alumni of the Massachusetts Institute of Technology for current expenses within the next five years amounts to \$211,000. There are eleven hundred subscribers.

Colonel I. H. Wing, of Batfield, Wis., an alumnus of Bowdoin College, has given the college \$50,000 to endow the chair of mathematics.

Mr. Andrew Carnegie and Mr. Bartlett Doe have each given \$50,000 to Bates College.

Mr. Carnegie has also offered to give Swarthmore College \$50,000 for a library building, on condition that an equal sum be raised from other sources.

By the will of the late Dr. S. Stanhope Orris, formerly professor of Greek at Princeton University, the institution receives a bequest of \$25,000 to found ten new scholarships for undergraduates.

By the will of Mrs. Mary C. Daniels, of Litchfield, Conn., the sum of \$6,000 is bequeathed to Trinity College, Hartford, for a scholarship.

Syracuse University will erect at once a three-story chemical laboratory, 150×100 feet, and expects to have it ready for occupancy by September, 1907.

A BILL has been prepared for presentation to the New York legislature establishing a university in Brooklyn.

McGill University is to establish an affiliated college in Vancouver, British Columbia, to be known as the University College of British Columbia.

The mechanical engineering building of the University of Pennsylvania was completely destroyed by a fire which broke out the night of February 6, the loss sustained being nearly \$100,000. Most of this amount was covered by insurance. As the new engineering building is almost completed, the faculty has decided to transfer the department to it.

Yuan Shi Kai, viceroy of Chi Li province, has discharged Professor C. D. Tenney, the foreign director of education, who organized the new school system in this province.

The trustees of Rutgers College have elected Dr. W. H. D. Demarest president of the college, to succeed Dr. Austin Scott. Dr. Demarest has been acting president for several months.

Upon the nomination of the Prussian Ministry of Education, the trustees of Columbia University have appointed Dr. Hermann Schumacher, professor of political economy in the University of Bonn, to be honorary professor in Columbia University for the year 1906–7.