Parker (heavy chemicals), J. B. F. Herreshoff (sulfuric acid), Karl Langenbeck (ceramics), G. E. Barton (glass), Ernest B. McCready (cement, mortar and building materials), Clifford Richardson (asphalt and petroleum), A. D. Little (cellulose and paper), Francis I. du Pont (explosives), E. G. Bailey (fuels), J. D. Pennock (destructive distillation), John Alden (textiles, bleaching and dyeing), P. C. McIlhiney (pigments, resins and varnish), W. C. Geer (rubber), Ernest Twitchell (fats, waxes and soaps), W. D. Horne (sugar and starch), W. K. Alsop (leather), G. R. Underwood (glue), Edward Mallinckrodt (fine chemicals), M. C. Whitaker (gas), W. F. Hillebrand (pure and analytical chemistry), W. H. Walker (engineering chemistry), Wm. Campbell (metallography), W. C. Ebaugh and F. H. Thorp (miscellaneous industrial chemistry).

The Committee on the Qualifications of Chemists made a preliminary report on the establishment of an Institute of Chemistry, which has been under consideration for the past two years and it was decided on account of its great and far-reaching importance to refer this matter again to a representative committee of fifteen for further consideration to report back to the council.

The committee appointed to consider the training and education of chemists and chemical engineers made its report and as a result a movement is under way to establish a Section or Division of Chemical Education within the society, which shall especially appeal to teachers and shall study more particularly the existing standards and methods of instruction throughout the country and the possibility of improving them.

The society adjourned after one of the pleasantest meetings in its history.

SCIENTIFIC NOTES AND NEWS

The medal struck by the Linnean Society to commemorate the fiftieth anniversary of the reading of the papers on natural selection by Darwin and Wallace was, on July 1, awarded to Dr. Alfred Russel Wallace, Sir Joseph Dalton Hooker, Professor Ernst Haeckel, Pro-

fessor Eduard Strasburger, Professor August Weismann, Dr. Francis Galton and Sir E. Ray Lankester.

On the occasion of King Edward's birthday, baronetcies were given to Sir T. Lauder Brunton, F.R.S., and Dr. W. W. Cheyne, F.R.S., and the knighthood to Professor A. G. Greenhill, F.R.S., and Colonel David Bruce, F.R.S.

M. Henri Becquerel has been elected permanent secretary of the Paris Academy of Sciences for the physical sciences.

Dr. WILLIAM OSLER, regius professor of medicine at Oxford, has been selected as an independent candidate for the lord rectorship of Edinburgh University.

At the eighty-third annual commencement of Hobart College the address before the Phi Beta Kappa Society was delivered by Professor A. G. Webster, of Clark University, who received the honorary degree of LL.D.

Dr. William J. Holland, director of the Carnegie Museum, has returned from his visit to Germany and France to present on behalf of Mr. Andrew Carnegie life-size plaster casts of the Diplodocus. In recognition of his services to science, the German emperor conferred upon Dr. Holland the Order of the Crown, while President Fallières bestowed upon him the Cross of the Legion of Honor.

THE Rumford Committee of the American Academy has made the following grants in aid of researches in light and heat: To Professor N. A. Kent, of Boston University, an additional appropriation of \$400 for a set of echelon plates for use in his research on the conditions influencing electric spark lines. To Professor Joel Stebbins, of the University of Illinois, an additional appropriation of \$100 for his research on the use of selenium in stellar photometry.

A gold medal was recently struck and presented to Professor Ramón y Cajal, in the name of his friends and admirers throughout Spain. Professor Cajal refused to permit a public ceremony, and the medal was presented informally at his home on May 27.

Professor H. H. Turner, F.R.S., has been elected correspondent of the Paris Academy of Sciences in the section of astronomy.

The prize of £50 of the Gordon-Wigan fund, Cambridge University, for a research in chemistry has been awarded to Mr. L. A. Levy for his research entitled "Investigations on the fluorescence of platinocyanides."

Dr. O. HOFFMAN-BANG, director of the Copenhagen Agricultural Experiment Station, Denmark, is visiting the stations in this country.

Dr. Bertram H. Buxton, professor of pathology in the Medical College and director of the department of experimental pathology of Cornell University, is on his way to London, where he will remain until September.

The Roosevelt, Commander Peary's Arctic exploring ship, left the pier at East Twenty-fourth Street, New York City, on the afternoon of July 6. Commander Peary, his crew and invited guests, including members of the Arctic Club, were on board the vessel, which was convoyed by a government tug to City Island, whence it proceeded to Oyster Bay, where President Roosevelt inspected it.

News has been received to the effect that Dr. Sven Hedin, the Swedish explorer, left Gartok, a town in Tibet, on the headwaters of the Indus, early in November of last year, with the intention of spending the winter at Khotan, in Chinese Turkestan. He planned to return to Leh, in the valley of the Indus, this summer.

Colonel David Bruce, who will be in charge of the new commission to proceed to East Africa to investigate the sleeping sickness, will be accompanied by Captain A. E. Hamerton.

Dr. Guillermo Patterson, Jr., has resigned an assistantship in pathological and physiological chemistry in Cornell University, and is on his way to the Isthmus of Panama, where he will collect samples of medicinal herbs for analysis and will continue his studies on local climatology. His address will be: Apartado No. 116, Panama City.

Mr. Herbert J. Spinden, of the Peabody Museum, Harvard University, has been commissioned by the American Museum of Natural History to spend the summer among the Nez Percé Indians and other tribes speaking dialects of the same linguistic stock, for the purpose of securing data on such phases of their culture as he has not previously investigated. The museum has received permission from the U. S. government to send the Rev. G. L. Wilson to Fort Berthold Reservation, North Dakota, in order that he may procure additional information regarding the traditions and tribal history of the Mandan Indians.

Professor W. M. Davis's summer school of geology has opened successfully. He has studying under him foreign as well as American students. By the time he reaches Grenoble in July he will have at least fifteen in his party.

The executive board of the International Botanical Society has appointed Edward W. Berry, of the Johns Hopkins University, American editor for paleobotany of the Botanisches Centralblatt.

THE following are among the pensions which were granted during the year ended March 31, 1908 (amounting in all to £1,200), and which are payable under the provisions of the British Civil List: Sir Edwin Ray Lankester, K.C.B., £250, in consideration of his eminent services to science; Dr. John Hall Edwards, £120, in recognition of his devotion to the furtherance of radiography in its application of medical and surgical science; Mrs. Sarah Elizabeth Tichborne, £60, in consideration of the useful discoveries of her husband, the late Dr. C. R. C. Tichborne, in chemistry and pharmacology, and of her inadequate means of support; Mrs. Theodora Copeland, £60, in recognition of the services rendered to astronomical science by her husband, the late Dr. Ralph Copeland, and of her inadequate means of support; Mrs. Jessie Wilhelmina Blyth, £60, in consideration of the eminent attainments of her husband, the late Professor James Blyth, in physical science.

We learn from *Nature* that a monument to the memory of Boucher de Perthes was unveiled at Abbeville on June 8. Boucher de Perthes, who made important discoveries in prehistoric anthropology in the neighborhood of Abbeville, died there in 1868. In 1832 he found at Thuison, near Abbeville, the first stone engravings, and in 1863, in the Moulin Quignon cave, the remains of Quaternary man with flint axes. The collections made by Boucher de Perthes were bequeathed to the state, and are preserved in the Museum of Saint-Germain-en-Laye.

W. R. Cassie, professor of physics at the Royal Holloway College for Women and secretary of the Physical Society, died on June 22, aged forty-seven years.

Mr. George Sim, the Scottish naturalist, died at Aberdeen on June 15, at the age of seventy-three years.

The annual visitation of the Greenwich Royal Observatory took place on June 3, the board of visitors being constituted as follows: Lord Rayleigh, Mr. H. F. Newall, Professor W. G. Adams, Professor J. Larmor, Professor Sir J. Norman Lockyer, Lord Rosse, Principal Sir A. W. Rücker, Captain Sir W. de W. Abney, Professor Sir R. S. Ball, Professor R. B. Clifton, Dr. J. W. L. Glaisher, Sir W. Huggins, Mr. E. B. Knobel, Professor H. H. Turner, Professor Sir G. H. Darwin, Rear Admiral A. Mostyn Field (hydrographer of the navy) and Mr. W. D. Barber (secretary). A large number of gentlemen interested in astronomy were present by invitation of the astronomer royal, and took part in the inspection of the observatory and instruments.

WE learn from the London Times that the proposals for the formation of a new institute on the lines of the Iron and Steel Institute in connection with the nonferrous metals are taking definite shape. A further meeting was held in London on June 10, and it is understood that the movement has the cooperation and approval not only of copper smelters, copper wire drawers, copper and brass founders and other metal manufacturers, but also of boiler makers and marine engineers. The leading firms of shipbuilders have also announced their intention of supporting the proposed institute, and of course shipbuilders are among the largest consumers of brass and

copper. The new institute is to be founded on an international basis, and it is stated that the manufacturers and metallurgists in France, Germany, Sweden, the United States, and other countries have announced their intention of supporting the proposed society.

THERE will be held in Berlin from October 3 to 18, inclusive, 1908, an exhibition under the auspices of the Brewers' College and Institute for Experimental Research on the occasion of its twenty-fifth anniversary. management of the exhibition is undertaken by Professor M. Delbruck and Professor E. Struve. The offices are in the Institute for Brewing and Allied Trades, Seestrasse, Berlin A copy of the regulations governing this international exhibition may be had by addressing Dr. Harvey W. Wiley, Washington, D. C., also an entry form for a description of samples of hops and barley which any one may desire to exhibit. Samples of barley should consist of not less than 30 kilograms and of hops 4 kilograms. Prizes will be awarded and a jury will be appointed for that purpose. It is hoped that the growers of hops and barley in this country will take an active part in this exhibit. Full instructions will be found in the regulations referred to above.

An International Congress of Historical Science is to be held this year in Berlin from August 6 to August 12. The work of the congress will be carried on in general and sectional meetings. There are eight sections, as follows: (1) Oriental History; (2) History of Greece and Rome; (3) Political History, medieval and modern; (4) History of Civilization and the History of Thought, medieval and modern; (5) Legal, Social and Economic History; (6) Ecclesiastical History; (7) History of Art; (8) Sciences subsidiary to History (Archives, Libraries, Chronology, Diplomatic, Epigraphy, Genealogy, Historical Geography, Heraldry, Numismatics, Paleography, Study of Seals). At the general meetings lectures will be given by Professor Maspero, Professor Cumont, Sir Frederick Pollock, Sir William M. Ramsay and Professor Monod. Copies of the program can be obtained from the secretary of the congress, Dr. Caspar, Kaiser-Allee 17, Berlin W. 15.

THE Royal medals and other awards given annually by the Royal Geographical Society for the encouragement of geographical science and discovery have, as we learn from Nature, been distributed as follows: The founder's medal was presented to Lieutenant Boyd Alexander, for his African explorations and careful trigonometrical survey of the region between the Benue and Lake Chad. Lieutenant Boyd Alexander devoted a considerable time to the exploration of Lake Chad, and added materially to our knowledge of that constantly shifting lake. A careful study was made of the hydrography of the various river systems, the Niger, the Congo and the Nile, through which the expedition has passed. Detailed maps were made of the more unknown parts of the region, such as the Bamingi, Kibali and the Yei rivers. Much information was gathered concerning the physical features of the region passed through; careful studies were made of several of the types of natives, and important additions were made to our knowledge of the natural history of the extensive region. The patron's medal was awarded to H.S.H. the Prince of Monaco, for his work in oceanography. Among the notable additions to scientific knowledge made on board the Princess Alice are: (1) the results of using the deep-sea traps invented by the Prince, which threw a new light on the life on the floor of the deepest parts of the ocean; (2) successive seasons' exploration on the coast of Spitzbergen and in the adjacent seas; and (3) studies of the conditions of the upper air by means of meteorological kites in mid-Atlantic. Other awards were as follows: Murchison award to Colonel Delmé-Radcliffe, for his work when as resident in the Nile province of Uganda he mapped the whole province, and for the work which he did afterwards when in charge of the English section of the Anglo-German Boundary Commission, between Victoria Nyanza and Mount Ruwen-The Gill memorial to Dr. T. G. Longzori. staff, for his exploring work in the western Himalayas and Tibet, and especially on his last expedition in the Garhwal Himalayas, when he ascended the summit of Trisul. The Back bequest to Lieutenant George Mulock,

for his long-continued work, mostly during his own time, in preparing the six sheets of the Antarctic charts, showing the results of the Discovery expedition. The Cuthbert Peek grant to Rai Sahib Ram Singh, a native Indian surveyor, who has done excellent surveying work on the expeditions of Captain Deasy, Dr. Stein, Captain Rawling and Major Ryder.

UNIVERSITY AND EDUCATIONAL NEWS

THE Drapers' Company has undertaken to give Oxford University £22,000 for a new electrical laboratory and £1,000 toward its equipment.

QUEEN'S UNIVERSITY, Ontario, has received from Dr. J. P. Thomson, Brisbane, a valuable collection of specimens for its museum.

THE graduating class of the Forest School of Yale University disbands on June 13, at the conclusion of their work in Alabama. Twenty-eight men out of a class of thirty-two will take the federal civil service examinations in forestry and nearly all of them will enter the government service.

Dr. Wallace Craig, of the University of Chicago, has been appointed to the chair of philosophy and psychology in the University of Maine.

Dr. Fred W. Thyng, teaching fellow at Harvard University and in charge of the courses in biology at Tufts College the past year, is to be assistant in anatomy at the Northwestern University Medical School.

AT Cornell University appointments have been made as follows: Mr. David A. Molitor, who is now working on designs of the locks of the Panama Canal, professor of topographic and geodetic engineering; Dr. Sutherland Simpson, of the University of Edinburgh, professor of physiology; Dr. Andrew Hunter, of Leeds University, assistant professor of biochemistry; Dr. Dennie Hammond Udall, professor of veterinary medicine in Ohio State University, acting professor of the principles and practise of veterinary medicine, to succeed Dr. James Law; H. N. Ogden and V. Karapetoff, promoted to professorships of sanitary engineering and electrical engineering,