

in the electrolytic reaction, it is possible that bythium may be formed by the decomposition of chlorin. An atomic weight determination will be looked for with interest.

J. L. H.

SCIENTIFIC NOTES AND NEWS.

THE committee on international mails of the postal congress has decided that natural history specimens and articles for scientific collections be admitted to the mails as samples. This will permit of their being sent at the rate of one cent for every two ounces, whereas at present it is necessary to pay five cents for each half ounce or fraction thereof. It will be remembered that this amendment to the regulations of the Universal Postal Union was proposed at the Leiden meeting of the International Zoological Congress at the instance of Dr. Charles Wardell Stiles, and its adoption has been urged by many men of science and scientific associations.

In the House of Commons, on May 27th, the President of the Board of Trade, Mr. C. P. Ritchie, introduced a bill to legalize the metric system of weights and measures.

Two fine specimens, male and female, of the rare West Indian seal (*Monachus tropicalis*, Gray) have been received at the National Zoological Park. They were captured on the 11th of May on Campeche Bank, southern part of the Gulf of Mexico.

On the occasion of a recent excursion of the geology classes of the University of Alabama, in charge of Professor Eugene A. Smith, the public spirit and liberality which are characteristic of the authorities of the Louisville and Nashville Railroad, were exemplified in placing at the disposal of the class a special train, by means of which the boys were enabled to visit all the mines, quarries and other places of interest along the mineral branch of this great system.

THE will of the late Judge John Lowell, of Newton, Mass., gives \$3,000 to the American Academy of Arts and Sciences.

It is reported that some of the heirs at law are contesting the will of the late Alfred Nobel,

and that this will delay the distribution of the great prizes established by him.

By the will of the late Charles F. Lawrence the town of Pepperell, Mass., receives \$100,000 for the establishment of a library and art gallery.

THE Council of the Royal Society has recommended for election the following fifteen candidates: Dr. Robert Bell, Assistant Director of the Geological Survey of Canada; Sir William Broadbent, a London physician and neurologist; Dr. Charles Chree, Superintendent of the Kew Observatory; Mr. H. J. Elwes, known for his contributions to ornithology and entomology; Dr. J. S. Haldane, lecturer in physiology at Oxford; Dr. W. A. Haswell, professor of zoology in the University of Sydney; Mr. G. B. Howes, professor of zoology in the Royal College of Science, London; Dr. F. S. Kipping, known for his researches in chemistry; Mr. G. P. Mathews, professor of mathematics in the University College of North Wales; Mr. G. R. M. Murray, the botanist; Mr. F. H. Neville, the physicist; Dr. H. A. Nicholson, professor of natural history in the University of Aberdeen; Mr. J. M. Thomson, professor of chemistry in King's College; Mr. F. T. Tranten, the physicist, and Mr. H. H. Turner, professor of astronomy at Oxford.

THE American Philosophical Society, of Philadelphia, has elected the following foreign members: Lord Lister; Professor H. C. Röntgen, Würzburg; Dr. Fridtjof Nansen; Professor Theodor Tschernyschew, of the Geological Survey of Russia, and Professor A. Karpinski, Director of the Geological Survey of Russia.

DR. A. FISCHER VON WALDHEIM, professor of botany in the University of Warsaw, has been appointed Director of the Botanical Gardens of St. Petersburg.

It is proposed to erect a monument to the late Professor Anatole Bogdanov, the eminent Russian anthropologist and naturalist, and at the same time to endow a prize for scientific work in Moscow University to bear his name.

At the annual meeting of the Brooklyn Institute on May 28th Professor Shaler, of Harvard University, made an address in memory of Agassiz.

PROFESSOR JOSIAH ROYCE, of Harvard University, has been invited to deliver next year the Gifford Lectures at the University of Aberdeen.

M. SOUILLART, of the University of Lille, has been elected a correspondent in the section of astronomy of the Paris Academy in the place of Dr. Gylden.

THE *Botanical Gazette* states that the Royal Swedish College of Agriculture has conferred a gold medal on Professor Jakob Eriksson in recognition of his studies of the life histories of grain rusts.

DR. FRANZ BOAS, of the American Museum of Natural History and Columbia University; Mr. Harlan I. Smith, of the Museum of Natural History, and Dr. Livingston Farrand, Columbia University, have left New York for an expedition to the North Pacific coast, the expense of which has been provided for by Mr. Morris K. Jessup and which was fully described in the issue of SCIENCE for March 19th.

Nature states that Mr. R. C. L. Perkins, of Jesus College, Oxford, who has been for several years engaged on behalf of the joint committee appointed by the Royal Society and the British Association in studying the zoology of the Sandwich Islands has now returned to England.

AT the annual meeting of the New York Electrical Society on May 20th Professor M. I. Pupin was elected President and Mr. George H. Guy, Secretary. There are now 397 members of the Society.

THE Russian National Health Society proposes to celebrate next year the 100th anniversary of the discovery of the mineral springs of the Caucasus by a conference on balneology and climatology.

THE 66th annual fair of the American Institute will open in Madison Square Garden on September 20th, and will continue for six weeks. Efforts will be made to secure the adequate representation of improvements in machinery made during the past year.

THE American Public Health Society will hold its twenty-fifth annual meeting at Philadelphia from the 26th to the 29th of October. Nineteen subjects have been suggested by the executive committee for special discussion.

THE American Academy of Medicine held its 22d annual meeting at Philadelphia, on Saturday and Monday, May 29th and 31st. The proceedings included a discussion on the relation of the College to the medical school, in which the Medical School was represented by Dr. Bayard Holmes, of the College of Physicians and Surgeons, of Chicago; the College, by President Warfield, of Lafayette College, and the University by Dr. William Pepper, lately provost of the University of Pennsylvania.

THE fourth meeting of the International Congress of Technical Education will be held in London, beginning June 15th.

WE have received the first two numbers of a *Natural Science Journal*, published by the Atlantic Scientific Bureau, New Bedford, Mass. We wish the *Journal* much success, but its contents so far are amateurish in character.

PROFESSOR H. KREUTZ, who, since the death of the late Professor Krueger, has been temporary editor of the *Astronomische Nachrichten*, has been appointed its editor by the Prussian Department of Education.

THE bill passed by the New Jersey Legislature establishing a commission to investigate the forests of the State has been vetoed on the ground that the work can best be done by the Geological Survey.

THE *New York Tribune* states that Mr. George W. Hammond, of Boston, has given to the Peabody Museum of Harvard University his private collection. It includes large numbers of stone implements from the European countries and many interesting relics of the Colorado cliff-dwellers, as well as specimens from various parts of the United States. It was understood that Harvard College could select all specimens desired for the Museum, and that those not wanted should go to Bowdoin College.

It is announced that a lady has given the sum of £70 towards the purchase of apparatus for the psychological laboratory in University College, London, to which we recently referred. Professor Carey Foster has offered temporary accommodation in the physical department and it is hoped that a lecturer will be secured in October.

WE have already called attention to the appointment of physicians to visit the New York schools. Mr. C. B. Hubbell, President of the Board of Education, advocates the appointment, under the Board of Health, of ten or twelve specialists to examine the eyesight and hearing of the children.

THE daily papers report that an earthquake shock of some severity was felt in Canada and in the northern parts of the State of New York at 10.15 p. m. on May 27th.

LIEUTENANT ROBERT E. PEARY has received leave of absence from the navy for five years. He will go this summer to Whale Sound, where he expects to find several families of Esquimaux who will form a colony further north and will spend the year collecting meat, furs, etc., which colony will be the base of supplies for a further northward advance. Lieutenant Peary will be accompanied as far as Melville Bay by several scientific parties, one under Professor G. H. Barton, of the Massachusetts Institute of Technology, and one under Professor C. H. Hitchcock, of Dartmouth College.

IT is announced that the Thomson Yates Laboratory of pathology and physiology of the medical department of University College, Liverpool, will be opened by Lord Lister next spring. Mr. Thompson Yates has made further donations for interior fittings and for apparatus, bringing the amount of his gift to \$125,000.

THE town of Dundee has decided to establish a bacteriological laboratory, thus granting the petition presented to the Town Council by the District Branch of the British Medical Association.

THE popular magazines for June contain a number of articles of scientific interest. Professor S. P. Langley contributes to *McClure's* an account of the successful working of his aërodome. The *Century* includes three illustrated articles: an account by Professor W. O. Atwater, of the experiments carried out under his direction regarding the use of food in the body; a description of the Harvard Observatory and its branch at Arequipa by Mrs. Todd, and a record of personal experience of home life among the Indians by Miss Alice C. Fletcher.

In *Harper's* Mr. H. S. Williams writes on the meteorological progress of the century; in the *New England Magazine* Mr. G. E. Walsh describes forest culture of to-day, and in the *Arena* President David Starr Jordan publishes an article on the Heredity of Richard Roe.

THE Philadelphia Commercial Museum was formally opened on June 2d, in the presence of President McKinley and a number of other distinguished guests. Under the directorship of Professor William P. Wilson the Museum has assumed much importance and now contains 50,000 exhibits of raw products and many manufactured articles. In addition to the collections of the Museum there is a library especially rich in statistical publications, consular reports, etc., and a Bureau of Information prepared to answer questions on all subjects germane to the scope of the Museum. The Museum is now occupying temporarily the old offices of the Pennsylvania Railroad on Fourth street, but the City of Philadelphia has set aside a site an appropriation of \$200,000 for a building. The primary object of the Museum is to bring before manufacturers, dealers and consumers the products of the world, so that they may know what to purchase and what to export. In cooperation with our consular service and with the governments of foreign countries, the Museum will undoubtedly fulfill an important mission, not only for commerce and manufactures, but also for science.

THE first of the two annual conversaziones of the Royal Society was held on May 19th. Among the exhibits described in the English journals were the following: The new process (Dansac-Chassagne) of producing photographs in color, still kept secret, was illustrated in a series of prints in the various stages of treatment by Sir H. Truman Wood. In regard to recent work with the X-rays Mr. A. A. C. Swinton showed his new focus tubes, in which the distance between the cathode and anticathode may be adjusted so as to allow the production of rays of a maximum penetrative value. Mr. Heycock and Mr. Neville showed photographs when the X-rays had been allowed to pass through a sodium gold alloy, showing separately the crystals of gold (opaque) and of

sodium (transparent) existing in the alloys which otherwise appear to be homogeneous. Interesting results of the application of photography were shown in a somewhat similar line of research by Professor Roberts-Austen, who, by means of a microscope and camera and a highly magnifying apparatus, demonstrated the existence of minute diamonds (carbon crystals) in steel. A series of photographs was shown by Professor Norman Lockyer, the diagrams affording testimony of the value of the spectroscope and photography in enabling a simple classification of the stars to be made based upon their ascertained chemical composition. Photographs of the moon were exhibited by the Astronomer Royal. M. Guillaume performed an experiment showing the practically non-dilatable character of nickel steel on heating; its application to pendulums is thus suggested. The diffraction kaleidoscope exhibited by Mr. C. P. Butler used the pure spectrum of white light, the colors being reflected at a great number of angles. The Marine Biological Association's exhibit included marine animals illustrating 'commensalism,' a term used to indicate the constant association of animals with one another often for mutual advantages. Professor Oliver Lodge gave a demonstration of Zeeman's discovery of the broadening of spectrum lines by the action of a magnetic field on the source of light. A sodium flame was placed between the terminals of a powerful magnet. On turning on the current the normal bands become double, triple, or even quadruple. Some excellently mounted preparations shown by Dr. Kanthack illustrated the mode of action of the Tsetse fly. Mr. E. Edser and Mr. H. Stansfield exhibited apparatus showing the phase change of light reflected at a glass-silver surface. The apparatus is a modification of Michelson's differential refractometer, the interfering rays being reflected at the back surfaces of the end mirrors. Mr. C. T. Heycock and Mr. F. H. Neville showed some experiments on the superficial color changes of a silver-zinc alloy. In the meeting room Professor W. E. Ayton gave an experimental demonstration of some electric and mechanical analogues, and Professor J. B. Farmer showed lantern slides

from microphotographs illustrating nuclear divisions in animal and vegetable cells.

UNIVERSITY AND EDUCATIONAL NEWS.

THE United States Supreme Court has dismissed the appeal in the Merritt suit, and the bequests left by Mrs. Catherine M. Garcelon in 1891 will now be paid. Bowdoin College, Brunswick, Me., will receive \$400,000 and a hospital will be established at Oakland, Cal., at a cost of \$600,000.

AN attempt is being made to break the will of the late William Lampson, who bequeathed nearly a million dollars to Yale University. It is to be hoped that the aged aunt and forty-two cousins of Mr. Lampson may be no more successful than were the contestants of the will of Mrs. Garcelon! It seems unfortunate that it is possible for distant relatives to delay and often even to annul public bequests, and that American courts should be so much more disposed than those of European countries to admit objections to the validity of wills.

THE Teachers' College of New York receives \$10,000 by the will of the late Mrs. Julia Augusta Kemp, and is also made her residuary legatee. It is now announced that Mr. Joseph Milbank was the donor who, in March, 1896, gave \$250,000 for enlarging the Teachers' College. The new building, now nearly completed, will be called Milbank Memorial Hall.

THE Building Committee of the University of Montana, at Missoula, has decided to erect a main building at a cost of \$47,500 and a science hall at a cost of \$12,500.

APPLICATIONS for the Savilian professorship of geometry at Oxford University, vacant by the death of Professor Sylvester, must be received not later than June 12th. The salary is about \$4,500 and the duties are confined to the delivery of forty-two lectures.

DR. E. G. JANEWAY, President of the New York Academy of Medicine, has been elected professor of medicine, and Dr. S. F. Dennis, professor of surgery in the faculty of the New York University Bellevue Hospital Medical College.