ing, concerning which there was a general discussion.

After discussion of certain other matters concerning which no action was taken the committee adjourned at 4 P.M.

L. O. Howard,
Secretary.

Washington,
October 23, 1904.

SCIENTIFIC NOTES AND NEWS.

A scientific session of the National Academy of Sciences will be held at Columbia University, beginning on Tuesday, November 15, 1904.

Dr. Charles Baskerville, head of the department of chemistry in the College of the City of New York, has been presented with a loving cup, designed by Tiffany and Company, by his former colleagues and students at the University of North Carolina, on the occasion of the tenth anniversary of his doctorate.

We learn from the *Journal of the American Medical Association* that Dr. George M. Sternberg, Surgeon-General, U. S. A. (retired), has accepted the position of director of the Wills Mountain Sanatorium, situated near Cumberland, Md. The present efficient house staff will be retained. Dr. Sternberg will spend a considerable portion of his time at the sanatorium, which is a health resort for chronic invalids and convalescents.

The department of botany, Columbia University, recently held an informal reception in honor of Professor K. Goebel, of the University of Munich, and Professor Hugo de Vries, of the University of Amsterdam, immediately before their departure for their homes.

At the meeting of the International Association of Academies held in London last May the following special committee was appointed 'to consider as to the best methods of making accurate magnetic observations at sea with a view to carrying out a magnetic survey around a parallel of latitude': Professor von Bezold (chairman), Professor Mascart, Professor Pallazzo, Sir Arthur Rücker, Lord Kelvin, Dr. Bauer, Professor Liznar, General Rykathew, Professor Wiechert, Dr. Paulsen.

Professor Pierandrea Saccardo, of the University of Padua, has been elected a corresponding member of the Reale Accademia dei Lincei of Rome.

Dr. Georg Gaffky, of the University of Giessen, who recently succeeded Dr. Robert Koch as director of the Berlin Institute for Infectious Diseases, has been made an honorary citizen of Giessen in recognition of his services to the public health of the city.

The French Association for the Advancement of Science will hold its annual meeting at Cherbourg in 1905. The officers elected at the recent meeting at Grenoble are as follows: *President,* M. Giard, professor of the theory of evolution at the University of Paris and member of the Institute of France; *Vice-President,* M. Lippmann, professor of physics at the University of Paris and member of the Institute of France; *Secretary,* M. Gaston Saugrain, of the Court of Appeals, Paris; *Vice-Secretary,* M. Carlo, Bourlet, professor of mathematics at the Lycée St. Louis; *Treasurer,* for four years, M. Emile Galanté.

M. Gaston Bonnier, professor of botany at the University of Paris, has been elected a member of the Royal Microscopical Society of London.

Professor Wm. B. Alwood, for sixteen years a member of the faculty of the Virginia Polytechnic Institute, has resigned owing to dissatisfaction with the conditions of scientific work at Blacksburg. He will pursue special investigations at Charlottesville, Va., under direction of the Bureau of Chemistry, U. S. Department of Agriculture.

At the recent celebration of the seventy-fifth anniversary of McGill University, Principal Peterson delivered an address in which he sketched the history of the university and the progress it had made. The lecture served also to honor the anniversary of the birthday of the late Hon. James McGill, its founder.

According to *The Botanical Gazette,* the Imperial Academy of Sciences at Vienna has granted 4,000 Kroner to Professor Julius Wiesner for his journey to the Yellowstone National Park, where he expects to study the light relations of the flora.

THE Royal Society of Sciences at Göttingen has made grants, aggregating 5,600 Marks, to Dr. Brendel to assist in the publication of his edition of the works of Gauss; to Dr. Riecke and Professor Wiechert for the continuation of their researches on atmospheric electricity; to Professor Wiechert for seismological work in the Alps, and to Dr. Wagner for a catalogue of ancient maps.

THE International Surgical Congress, recently in session at Paris, has appointed a committee of specialists to examine the claims of Dr. Doyen that he has discovered a serum curing cancer.

A COMMITTEE has been formed at Copenhagen to collect fund for the erection of a monument to Professor Niels Finsen.

JOHN LIVINGSTON DINWIDDIE BROTHWICK, chief engineer in the United States Navy (retired), died from nervous prostration, at Florence, on October 22, at the age of sixty-four years.

The British Medical Journal states that the legacy of £25,000 left by the late Professor Puschmann, of Vienna, to the University of Leipzig, is to be applied to the study of the history of medicine. It is proposed to found a historical museum of medicine, and a special seminary for training persons in medico-historical research and in historiography, with a salaried director and assistant. The names of Dr. Sudhoff and Dr. von Oefele have already been suggested, both eminent in the science of the history of medicine. Professor Puschmann was professor of the history of medicine at Leipzig until 1879, when he accepted a call to a similar chair at Vienna. He died in 1899, and his will was at first contested, but the money has now been paid to the university.

THE annual meeting of the British Iron and Steel Institute is being held in New York City this week. About 350 members and guests were expected to be present.

The British Medical Journal states that the foundation of a German Physiological Society is one of the outcomes of the meeting of German Men of Science and Physicians recently held at Breslau. Professor Schenk, of Marburg is president and Professor Hürthle, of Breslau, treasurer of the new society. The first meeting of the society will be held at Marburg at Whitsuntide, 1905.

WE learn from the *Bulletin of the American Mathematical Society* that an effort is being made to establish a society for the study of the history of the natural and technical sciences. The subject was presented at the Third International Congress of Mathematics, at Heidelberg last August, and at the International Congress of Philosophy at Geneva in September and attracted favorable attention. Those who are interested in the founding of such a society are asked to communicate at an early date with Ingenieur F. M. Feldhaus, Rohrbach, Heidelberg, Germany.

THE University of Washington proposes to establish a permanent marine station at a point, yet to be decided on, at Puget Sound. During the present summer a temporary station was established at Friday Harbor, in charge of Professor Trevor Kincaid and Dr. T. C. Frye.

DR. ALEXANDER F. CHAMBERLAIN, of Clark University, Worcester, Mass., and William Wallace Tooker, of Sag Harbor, Long Island, are engaged upon a work to be entitled, 'The Proverbs of Solomon, King of Israel. From Eliot's Indian Bible. With Introduction, Notes and Vocabulary.' This is the first attempt to make accessible to scholars and to the public in general any considerable portion of this famous book. The tercentenary of Eliot's birth occurs in 1904 and the 'Book of Proverbs' in this dress will be one of the many tributes to the memory of the 'Indian Apostle.' The difficulties of the work are such that no date of publication can be fixed.

THE London *Times* states that it never uses the same type twice. Every day a new supply is delivered at its offices by the Wicks Rotary Type-Casting Company, amounting on the average to as many as a million letters; and the whole of it is removed on the following day to be put into the melting-pot. Such lavishness could only be possible with type made at extraordinary speed and with exceptional cheapness, and the invention that first

realized these aims was the work of Mr. Wicks, who, curiously enough, is not an engineer by profession, but a journalist, and was formerly a member of the gallery staff of *The Times*. His original invention has been vastly improved in the course of years, and the members of the Civil and Mechanical Engineers' Society, who, headed by the honorable secretary, Mr. A. S. E. Ackermann, paid a visit on August 4 to the works at Willesden where the type-casting wheels are made, spent a couple of very interesting hours among machines and contrivances which strike laymen as little short of magical, but can only be properly appreciated by engineers. Under the guidance of the firm's engineer, Mr. E. G. Tottle, they inspected every process of the manufacture of the punches, the matrices, and the type-casting wheel itself; and, though the actual casting is done at the works in Blackfriars, arrangements had been made by which the operation of one of the finished wheels could be exhibited. Before the invention and perfection of this wheel a type-making machine which could turn out 6,000 types an hour was considered rapid; the Wicks rotary wheel casts 60,000 with ease, and 40 per cent. more cheaply than the old machines. The firm's engineer explained that, after buying the best and most expensive machine in the market, they invariably set to work to alter it until it reached their own standard accuracy. All the calculations (and they are peculiarly complicated, since, to comply with the traditions of printing, the unit is 1-72 part of an inch) are carried out to six places of decimals, and the men who grind the punches or make the wheels work to 1-10,000 part of an inch. The care taken and the quality of the machinery employed may be gauged by the fact that the little punch-cutting machines, which each cost nearly £1,000, are bedded, to avoid vibration, on a depth of 16 feet of concrete, which in its turn is laid on oak piles 5 feet long.

According to foreign papers several parts of Paris are so infested with mosquitoes that the matter of their suppression has been considered by the Conseil d'Hygiène et de Salubrité de la Seine, which recently adopted certain conclusions of which the following is a summary: In the first place stagnant water where their eggs are hatched and localities where the insects collect, such as cellars, sewers and dark places, ought to be kept under observation. Drains and sewers of all kinds, and the openings of the pipes which supply water in the streets, should be regularly inspected to avoid collections of stagnant water, and insects assembling in numbers should be destroyed either by a burning torch or by lime-washing. Roofs and rain-water gutters ought to be examined, and water ought not to be allowed to lodge in the gutters. Nothing capable of holding water should be placed in front of windows, and places which are the haunts of mosquitoes should be well ventilated. Stagnant water should not be allowed to remain in gardens and courtyards. Fountains and basins in public places should be emptied and cleansed at least once a week, and plenty of fish should be kept in large sheets of water. In basins and casks standing on private ground there should be a layer of petroleum oil on the surface of the water (about a gram per square meter), or if the water contains fish a layer of salad oil. The public should be advised to use mosquito curtains. Mosquito bites should be treated with a drop of tincture of iodine or with a drop of a solution of guaiacol of one per cent. strength.

Reports received by the United States Geological Survey for 1903 show that many springs that were formerly used as sources of table waters were commercially abandoned during the previous year. The reports also show a decided loss in the number of gallons of water sold and also in the value of the product—losses ascribed mainly to the fact that many important springs failed to report for the year 1903, although they sent in returns for the previous year. These losses occur in all sections except one. The list of mineral springs reported for 1903 is slightly increased over that of 1902, including now 725 springs instead of 721 as in 1902. The list has been lengthened by the addition of 42 new names. The number of springs dropped from the list, because commercially abandoned, is 38. The springs actually reporting sales for 1903 number 522, which is

127 less than the number reporting in 1902. The springs not heard from number 167, and these, with few exceptions, reported sales in 1902. In addition there are 36 springs which report that no sales were made in 1903, thus increasing the number of delinquents to 203. The average price for a gallon of mineral water is about 16 cents for 1903, as compared with 13.7 cents for 1902. The total production for 1903, including the figures estimated for the delinquent springs, is 50,575,746 gallons, at a valuation of $8,074,096. This is a loss in quantity of 14,283,715 gallons and in value of product of $719,655, as compared with the production of 1902. When the 522 springs actually reporting are alone considered, the figures are 37,707,647 gallons, as compared with 63,174,522 gallons in 1902, a loss of 25,466,905 gallons; and a valuation for 1903 of $6,382,726, compared with $8,634,179 in 1902, a loss of $2,251,453. It is probable that a loss would be shown even had all the springs now delinquent sent in returns. The survey report from which these figures are taken is an extract from the forthcoming volume 'Mineral Resources of the United States, 1903,' and may be obtained, free of charge, from the Director of the United States Geological Survey, Washington, D. C.

THE new number of the quarterly *Bulletin* of the Imperial Institute contains, according to the London *Times*, a number of valuable reports by the scientific and technical department on recent investigations of various British products, undertaken with a view to ascertain their present or potential applicability to commercial needs. An examination of sisal, banana and pineapple fibers from southern Rhodesia, and their submission to commercial experts, has led to the conclusion that they would sell freely in the London market, at remunerative prices, if imported regularly in bulk. Another report shows that Bermuda is capable of becoming a competitor with the foreign countries, chiefly Syria and Caucasian Russia, on which we now depend almost exclusively for our imports of liquorice root. The Bermuda product would occupy an intermediate position between the coarse Syrian and the fine Caucasian root. Leathers from Pemba tanned with local mangrove barks have been found to be suitable for the manufacture of cheap boots, and it is suggested that a remunerative expert trade might be initiated at Zanzibar, in competition with the lower grades of American and Australian leather in demand in this country. Cacao, cotton and honey samples from Trinidad have been favorably reported on, the cacao being quite equal to the highest qualities in the English market. Though found to be incompletely soluble in 70 per cent. alcohol, lemon-grass oil from Montserrat would, it is stated by dealers in essential oils, find a ready sale here and on the continent. There would also be a continental demand, though probably not a home demand, for seeds of the 'physic-nut' tree (*Jatropha Curcas*) of Lagos, as the oil extracted could be employed for soap making. Five of the reports relate to the rubber production of the Empire. One of them gives the results of analyses of rubbers and rubber vines received from Takaunga, the Kamasia Hills and Rabal, in the East Africa Protectorate, while another deals with the *Urceola esculenta* of Burma. The conclusion in respect to the plant is that it will yield marketable rubber of good quality, and the shipment of a trial consignment to this country is recommended. A sample of 'pontianac' obtained from the state forests of Patiala was found to correspond closely with the 'pontianac' extensively used in the United States, and to be equally suitable for utilization in this country in the manufacture of low-grade rubber goods. In addition to the reports referred to, various general notices are given respecting economic products and their development, together with a detailed description of the eucalyptus oils of New South Wales, as illustrated by an extensive exhibit now open to the public and presented to the institute by the Technological Museum of Sydney.

UNIVERSITY AND EDUCATIONAL NEWS.

THE will of Mr. James Callanan, of Des Moines, makes bequests for educational institutions as follows: Talladega College, Alabama, $100,000; Casenovia College, New York, $5,000; Penn College, Oskaloosa, Iowa, $10,-