when our colleges will run with the uniformity of looms in a mill. Granting with Mr. Cooke that there is much that the administrators may learn from the mill manager, it is to be hoped that enlightened public opinion will never permit us to forget that in all matters that are really vital to education there is no "equivalent mechanism" in the industrial world. We are not making shoes or bricks or cloth, but are dealing with material of the utmost complexity and variety, with no two specimens quite the same and no two that need just the same treatment. Uniformity in the product is not only unattainable, it is not even desirable, and factory methods are entirely out of place. If we neglect the human factors in our education we are lost and we can not overlook the fact that, without such bulletins as this, there are already plenty of forces at work to give sufficient prominence to mechanical conceptions and mechanical tests. Nor does it require any special effort in this country to stimulate admiration for the "snap and vigor of the business administrator," while the value of snap in the domain of education may very easily be overestimated. Especially am I fearful of its effect on the teacher and the investigator. His path is not too smooth already and even now there are many forces drawing him from the educational sphere where best he can serve society. Think for a moment of the effect on men like Newton or Faraday of the "snap and vigor" treatment that Mr. Cooke suggests in his discussion of research. They must make frequent reports on the progress of their research and constantly justify the expenditure thereon. The superintendent of buildings and grounds, or other competent authority, calls upon Mr. Newton.

Supt. Your theory of gravitation is hanging fire unduly. The director insists on a finished report, filed in his office by 9 A.M. Monday next; summarized on one page; type-written, and the main points underlined. Also a careful estimate of the cost of the research per student-hour.

Newton. But there is one difficulty that has been puzzling me for fourteen years, and I am not quite . . .

Supt. (with snap and vigor). Guess you had better overcome that difficulty by Monday morning or quit.

R. C. MACLAURIN

MASSACHUSETTS INSTITUTE OF TECHNOLOGY December 24, 1910

SCIENTIFIC NOTES AND NEWS

At the recent annual meeting of the American Anthropological Association, held in Providence, R. I., officers were elected as follows: *President*, Dr. J. Walter Fewkes, Washington, D. C.; *Secretary*, Dr. George Grant MacCurdy, New Haven, Conn.; *Treasurer*, Mr. B. T. B. Hyde, New York, and *Editor*, Dr. John R. Swanton, Washington, D. C.

The following officers of the American Fern Society were recently elected for 1911: President, Dr. Philip Dowell, Port Richmond, N. Y.; Vice-president, Miss Nellie Mirick, Oneida, N. Y.; Treasurer, Mr. Harold G. Rugg, Hanover, N. H.; Secretary, Mr. L. S. Hopkins, M.A., Pittsburgh, Pa.

On December 20 the Paris Académie de médecine held its annual election, Professor Lannelongue, the vice-president, assuming the presidency and Dr. Gariel, professor of medical physiology at the Paris Medical School, being elected vice-president.

LORD AVEBURY has been elected a corresponding member of the Paris Academy of Sciences, in the section of anatomy and zoology.

THE section of chemistry of the Royal Academy of Science of Stockholm has elected Mme. Curie a foreign member in place of the late Professor Cannizzaro.

MR. ERNST LEITZ has received from the University of Marburg the honorary degree of doctor of philosophy on account of his services to science in having constructed for over fifty years instruments of scientific value.

A 450-acre forest reserve in Vermont has been named the "L. R. Jones State Forest" in recognition of the services of Lewis R. Jones, for twenty years associated with the

University of Vermont as professor of botany, and now professor of plant pathology in the University of Wisconsin.

Professor C. V. Piper, of the U. S. Department of Agriculture, sailed from San Francisco on January 7 for Manila. He goes to the Philippine Islands primarily to investigate the possibilities of growing hay there suitable for horse feed. Before his return he will make extensive investigations of forage crops in India.

Professor Charles I. Corp, assistant professor of mechanical engineering at the University of Kansas, has gone to the University of Wisconsin to do a year's research work in the hydraulic laboratory.

Under the auspices of the Harrison foundation, Dr. Arthur Gordon Webster, professor of physics in Clark University, will deliver at the University of Pennsylvania a series of lectures on "Sound in Speech and Music: Its Production, Reproduction, Transmission and Measurement."

Professor Charles E. Monroe, of George Washington University, read before the American Philosophical Society, on January 6, a paper on "The Investigation of Explosives at the Pittsburgh Testing Station."

A STATED meeting of the Geographic Society of Chicago was held on January 13, when a lecture was given by Professor Charles K. Leith, of the University of Wisconsin, on the subject "A Summer on Hudson Bay." A reception followed the lecture.

Dr. Francis Gano Benedict, director of the Nutrition Laboratory of the Carnegie Institution, formerly professor of chemistry at Wesleyan University, gave an illustrated lecture on "The Influence of Mental and Muscular Work on Nutritive Processes" before the Middletown Scientific Association on January 10.

On the evening of January 9, at the Brooklyn Institute of Arts and Sciences, Dr. Edwin F. Northrup, of Princeton University, delivered a lecture entitled, "New Devices for Electrical Measurements." The lecture was

illustrated with lantern slides and a collection of instruments for precision measurements in electricity.

At the fifth annual meeting of the American Society of Biological Chemists held in New Haven, Conn., December 28–30, 1910, the following resolutions were adopted by the society concerning the recent death of Dr. Christian A. Herter, one of its charter members:

Resolved, that in the recent death of Dr. Christian A. Herter, the members of the American Society of Biological Chemists, assembled at New Haven for the annual meeting of the society, desire to express their sorrow at the loss of an eminent colleague and their appreciation of the services rendered by him to the science which the society represents. By his own work, by the inspiration, encouragement and support which he so freely gave to others, he rendered inestimable service to the advancement of biological chemistry, and especially in its relation to the problems of practical medicine. His kindness of heart and his sympathetic interest in the work of his associates, coupled with modesty regarding his own achievements endeared him to all who came in personal contact with him. The spirit which animated his life and which guided his actions in the direction of service to others is expressed in material foundations which he has left for acquiring and diffusing knowledge. The same spirit is expressed in the influence he has exerted on the lives of his associates.

Resolved, that as a tribute to the memory of our late associate, these resolutions be inscribed on the permanent records of the society and a copy sent to his bereaved family.

(Signed) RUSSELL H. CHITTENDEN
JOHN J. ABEL
A. N. RICHARDS

Committee

THE American Breeders' Association will meet at Columbus, Ohio, from February 1 to 3, under the presidency of secretary James Wilson.

WE learn from the London *Times* that the new "Institut de Paléontologie Humaine," which Prince Albert of Monaco has promised to found in Paris, is to be placed under the patronage of the state. It will be administered by a council of six members, who are to

be of French nationality, and who will be assisted by a committee of French and foreign authorities. The new foundation will be installed in a building of its own which is to be erected in Paris, and in addition to a capital of over \$300,000 the institute will be presented with the Monaco collections.

THE five academies of the French Institute held their quarterly plenary sitting on January 5, when the meeting discussed the question of the eligibility of women candidates for the institute. The motion in favor of the admission of women, which was prompted by the candidature of Mme. Curie for one of the vacant seats in the Academy of Sciences, was rejected by 90 votes to 52. A resolution was adopted in which it was declared that, although the institute did not pretend to dictate to the separate academies, there was an "immutable tradition" against the election of women, which it seemed eminently wise to respect.

THERE has been presented to the American Museum of Natural History and placed on exhibition in the Morgan-Tiffany Gem Room a specimen of the new gem Morganite (rose beryl). It is a long oval stone of rich rose color and weighs 57½ carats. This gem was named by Dr. George F. Kunz, the honorary curator of gems of the American Museum, at a meeting of the New York Academy of Sciences on December 3, 1910.

According to the London Times the German Antarctic expedition, under the command of the Bavarian explorer, Lieutenant Filchner, will leave Germany early this year for Buenos Aires, and will proceed from there at the beginning of October via South Georgia and the Sandwich Islands to the Weddell Sea. The route has been chosen so as to allow of oceanographical research on the way. On arrival in the Weddell Sea it is proposed to establish a base station on the eastern coast as far south as possible, with the necessary equipment for a year's research. A party of ten men will be landed, of whom six—a geologist, a meteorologist, an astronomer, a doctor who is also a biologist, a cook and a sailor —will stay in the station, while the remaining four will undertake a long sledge expedition into the interior of the South Polar continent. Meanwhile the ship will return to the Atlantic Ocean to carry out coastal observations and oceanographical work.

A LETTER from Professor Frost received at the Harvard College Observatory states that Nova Lacertæ was observed at the Yerkes Observatory on December 31, 1910, and January 2 and 3, 1911. An excellent photograph of the spectrum was obtained by Frost with the 40-inch telescope which showed that the spectrum closely resembled that of Nova Aurigæ and Nova Persei, No. 2. The position of the Nova for 1911.0 was determined by Professor Barnard as follows: R. A. $22^{h} 32^{m} 11^{s}.79$; Dec. $+ 52^{\circ} 15' 19''.8$. in the exact position of the Nova, of about magnitude 14.0, was found on plates made on August 7, 1907, August 22, 1909, and August 24, 1909. From a photograph made with the 24-inch reflector, Parkhurst and Slocum suspect nebulosity about the Nova, and find the photographic magnitude on January 2 and 3 to be 7.12 and 7.21. Professor Campbell writes that very satisfactory observations of the Nova were obtained at the Lick Observatory on December 31 and January 1 and 2.

The Berlin correspondent of the Journal of the American Medical Association writes that on December 10 a mausoleum for Robert Koch was opened in the institute for infectious diseases of which he was director for many years. It was formed from some rooms of the institute. The funds for the rebuilding, amounting to about \$5,000, were contributed by his many pupils and friends. The mausoleum consists of two rooms, the first a small antechamber in which some of the scientific instruments used by Koch, his numerous domestic and foreign honorary diplomas, models of the medals awarded to him and other memorials of his life are placed. Here also is the so-called "golden book" of the Robert Koch Foundation for the War on Tuberculosis that contains in an artistic setting the history of the foundation and the autographs of the larger contributors to the fund. In the special memorial hall, in a niche that is closed with a white marble slab, is placed the urn that contains the ashes of Robert Koch. \mathbf{T} he walls and floors are all of marble. niche for the urn is a marble tablet on which is a portrait of Koch in relief, larger than life size, and on the opposite wall the chief dates of Koch's life are engraved. On December 11 the special memorial service took place in the new hall of the university. The large hall which seats about 1,500 persons was filled with a mourning throng which included many physicians, especially members of the Berlin medical faculty, representatives of the government and the chief German medical faculties and representatives of many medical societies as well as of foreign universities and societies. The memorial address was delivered by Professor Gaffky, who was for many years a pupil of Koch and is his successor as director of the institute for infectious diseases.

UNIVERSITY AND EDUCATIONAL NEWS

THE report of the tax appraiser on the Kennedy estate has now been published, showing that the bequests for educational and public purposes are even larger than had been anticipated. Columbia University receives \$2,358,000, New York University \$952,000 and Robert College, Constantinople, \$1,800,000; the bequests to the New York Public Library and the Metropolitan Museum of Art are in the neighborhood of \$2,800,000. Barnard College and Teachers College, Columbia University, each receive \$100,000, as do Hamilton College, Elmira College, Amherst College, Williams College, Bowdoin College, Yale University, Tuskegee Institute and the Hampton Institute. Lafayette College, Oberlin College, Wellesley College, Berea College and Anatolia (Turkey) each receive \$50,000. The bequest to hospitals and to the boards of the Presbyterian Church are very large.

Mr. Carnegie's latest gift of \$3,800,000 to the Technical Institute in Pittsburgh is to be used approximately as follows: \$2,300,000 for increase of present endowment, \$1,375,000 for new buildings, \$100,000 for additional equipment and \$25,000 on grounds.

THE residue of his estate, valued formally at "not more than \$50,000," is divided between Yale and the University of Leipzig by the will of Dr. Albert Seesel, a New York physician. With the income there is to be founded at each institution the "Theresa Seesel Fund" in memory of his mother, to be used for researches in biology.

A LECTURESHIP on the history and institutions of the United States has been established at Oxford, to be held by American scholars. The subject matter of the lecture-ship is to be the political, institutional, economic or social history or conditions of the United States.

THE trustees of the University College of Medicine, Richmond, Va., have awarded contracts for a new college building, to cost \$135,000, to replace the one recently burned.

THE University of Cincinnati sent as delegates to the meeting of the Ohio College Association and the Ohio Association of Medical Teachers at Columbus during the Christmas vacation, President Dabney, Dean Woolley, of the Medical School, and Professor Jones. President Dabney presented a resolution which was unanimously adopted, asking the Board of Medical Examiners of Ohio and the Ohio Medical Association to join with the Ohio College Association in memorializing the legislature to advance the standard for entrance to the medical colleges in Ohio, by requiring that the entering student shall have done two years of college work, including in this work chemistry, physics, biology (each of these with laboratory courses) and modern languages. The Medical College of the University of Cincinnati has already adopted this standard.

Dr. W. H. Howell has resigned as dean of the Johns Hopkins Medical School, and has been succeeded by Dr. J. Whitridge Williams.

Dr. Josiah H. Penniman, professor of English and formerly dean of the college department of the University of Pennsylvania, has been chosen vice provost.

Dr. David L. Edsall, professor of medicine in the University of Pennsylvania, has