ment of radium was brought into its vicinity, and in another experiment showed that it facilitated the passage of the electric spark. He went on to describe the different radiations given off by the substance and to distinguish them according to their power of penetration, absorptibility, behavior in a magnetic field, etc. He then explained that, in addition to these radiations, radium also gave off emanations which had the same properties as the substance itself—properties which were included in the term radioactivity. The salts of radium in solution gave off this radioactivity, and were able to render other objects of all sorts radioactive. In this emanation, for example, a charged electroscope was discharged, and a phosphorescent substance became luminous. The emanation behaved in many ways like a gas. It could be aspirated through a tube, it could be condensed by liquid air, and after being frozen out of a vessel would diffuse throughout it again when the temperature was allowed to rise. These phenomena were illustrated by a very pretty experiment, in which a vessel containing a weak solution of radium chloride was connected by a tube to another vessel containing some sulphide of zinc. So long as the stopcock on the tube connecting the two vessels was closed the sulphide of zinc did not phosphoresce, but as soon as it was opened the luminous effect appeared. Returning to the heat disengaged by radium, the lecturer proved the reality of the phenomenon by the aid of what he said was in fact a liquid air calorimeter. A small piece of glass was lowered into a carefully isolated vacuum-flask containing liquid air, and the amount of gas that boiled off in a given time was measured. The experiment was then repeated, but instead of the plain piece of glass a small vessel, identical in size, containing radium was substituted, with the result that in the same time the quantity of gas given off was seen to be more than doubled. Professor Curie concluded with a slight reference to some other properties of radium, its chemical effects, its place in the periodic table of the elements, its power of producing sores on the skin and even of inducing paralysis, and the character of its spectrum. He also gave a brief account of the studies which led Mme. Curie and himself to the recognition of it and other radioactive bodies, and touched on the speculations suggested by the phenomena it presented as to the evolution of matter and the gradual transformation of the elements.

UNIVERSITY AND EDUCATIONAL NEWS.

THE state appropriations for the University of Illinois this year reached the wholly unprecedented sum of $1,260,000. The sum of $150,000 was given for enlarging the engineering equipment. The College of Agriculture received $100,000 for equipment and instructional work, and the experiment station associated with the college received $170,000 for research work. The ordinary operating fund of the university was increased about $100,000 per year which will make this fund about $350,000 per year. The library fund was doubled, being made $20,000 per year. The sum of $80,000 was voted for a Woman's Building. The sum of $14,400 was given for the maintenance of the department of commerce. The smaller appropriations included $10,000 for cabinets, collections, apparatus, etc., and $10,000 for equipping the chemical laboratory.

AT the eighty-sixth commencement of Hamilton College, President Stryker announced a gift of $100,000 in U. S. Steel Corporation bonds from Mr. Andrew Carnegie, in recognition of the public service of Secretary Root, a graduate of Hamilton. Mr. Carnegie has also given $50,000 to Beloit College for a library building.

COLBY COLLEGE has received gifts amounting to $46,000, including $20,000 from the estate of S. S. Smith, D.D., the author of the hymn 'America,' and formerly trustee and professor of the college.

The board of regents have completed arrangements for creating a school of applied science in the State University of Iowa. A professorship in electrical and mechanical engineering was created. Professor C. S.

Magowan was elected professor of municipal and sanitary engineering—that chair being created. He will also be professor in charge of drawing in connection with civil engineering. Professor A. G. Smith was elected professor of mechanics in the department of mathematical engineering.

THE board of regents of the State University of Iowa during their recent session passed resolutions instructing the university architect to report plans at the September meeting for the erection of a building designed to give relief to the present crowded condition of the University Museum and Library. The plan which at present seems to meet with most favor is the erection of one wing of a large building that is to be ultimately used for a museum purpose only, but which would in part be used at first also for the accommodation of the general library, department libraries remaining for the time where these now are. The museum would at once obtain permanent quarters as far as the space thus provided would permit. By vacating the third floor of the present science building, through removal of the museum, space would be secured for the better accommodation of the remaining biological departments.

AT the annual commencement exercises of the University of Nebraska on June 11, degrees were conferred as follows: Bachelor of Arts, 132; Bachelor of Science, 38; Bachelor of Law, 84; Master of Arts, 6; Doctor of Philosophy, 2. No honorary degrees were conferred. Of the Bachelor of Science, four received the degree on the completion of the course in civil engineering, seven in electrical engineering, and three in mechanical engineering, the remainder having completed the general science course. Of the six Masters of Arts two, George T. Hargitt and Erle M. Stevenson were in zoology, one, Samuel R. Williams, in physics, and one, John W. Hilton, in philosophy. One of the Doctors of Philosophy, John Lewis Sheldon, took the degree in botany.

AT the June meeting of the board of trustees of the University of Illinois, the following new appointments were made: Oscar Adolph Leutwiler, assistant professor of machine design; Dwight T. Randall, assistant professor of steam engineering; Banus Hutson Prater, instructor in civil engineering; Amos William Peters, instructor in zoology; John Henri Walton, instructor in chemistry; John James Harman and Robert Hayden Kuss, instructors in mechanical engineering; Lester Abram Waterbury, instructor in civil engineering; William F. Schultz, instructor in physics; Edward O. Heuse and Edna D. Hoff, assistants in chemistry; Emery Roe Hayhurst, assistant in physiology; William S. Bullard, assistant in zoology; Ira Obed Schaub, assistant in chemistry in Experiment Station; Clifford Willis, assistant in soil physics.

PROFESSOR FOREST R. JONES, of the Worcester Polytechnic Institute of Technology, has received the appointment of professor of machine design at Cornell University.

PROFESSOR A. ROSS HILL, of the University of Nebraska has been elected professor of philosophy in the University of Missouri, and Professor F. C. French, of Colgate University, has been elected to the chair at the Universty of Nebraska.

PROFESSOR A. E. TAYLOR, M.A., of Owens College, Manchester, has been appointed to the John Frothingham chair of philosophy at McGill University.

A. D. SORRENSEN has been appointed associate professor of psychology and moral philosophy at Colby College.

DR. B. S. MERIGOLD, instructor in industrial chemistry at the Massachusetts Institute of Technology, has been elected assistant professor of chemistry at Clark College.

GEORGE A. HANFORD, Ph.D. (Yale), will next year have charge of the department of chemistry at the Medical School of Syracuse University.

MR. PERCY ELFORD has been elected secretary of the Technical Instruction Committee for the county of Oxford, at a salary of £600 a year. He retains his lectureship of chemistry at St. John's College, Oxford.