future of education in this country. Incidentally, it would be of great advantage to each of the cooperating institutions, but it would be especially significant in the emphasis that it would give to the fact, so often overlooked, that educational institutions do not exist for themselves and that their sole duty is to make the best provision that can possibly be made for those who are rising to manhood and for their successors. Under the scheme of cooperation here proposed, it would be possible to maintain a much stronger school of applied science than either institution alone could furnish, and it would be possible to keep that school practically unrivalled in Americaand indeed. in the world.

SCIENTIFIC NOTES AND NEWS

DR. BENJAMIN OSGOOD PEIRCE, since 1888 Hollis professor of mathematics and natural philosophy in Harvard University, died from disease of the heart at his home in Cambridge on January 14.

DR. HERMAN M. BIGGS has been appointed by Governor Glynn to be commissioner of health for the state of New York.

DR. ERNEST RUTHERFORD, Langworthy professor of physics in the University of Manchester, has been made a knight.

In the Academy of Sciences of St. Petersburg, Sir William Ramsay has been advanced from a corresponding to an honorary member.

AT the annual meeting of the Federation of American Societies for Experimental Biology, an organization which includes the Physiological Society, the Society of Biological Chemistry and the Society for Pharmacological and Experimental Therapeutics, held in Philadelphia, the following officers were elected: *President*, Dr. Graham Lusk, New York City; *Vicepresident*, Dr. Carl Alsberg, Washington, D. C.; Secretary, Dr. P. A. Shaffer, St. Louis; *Treasurer*, Dr. D. D. Van Slyke, New York City, and councilors, Professor J. J. Abel, Baltimore, and Professor A. B. Macallum, New York, and Dr. T. B. Osborne, New Haven, Conn. PROFESSOR W. B. CANNON, of Harvard University, was elected president of the American Physiological Society at the meeting in Philadelphia.

AT the thirtieth session of the American Association of Anatomists held in Philadelphia at the University of Pennsylvania the following officers were elected: *President*, Professor G. Carl Huber, University of Michigan; *Vice-president*, Professor Frederic T. Lewis, Harvard Medical School; *Secretary-treasurer*, Professor Charles R. Stockard, Cornell Medical College.

AT the meeting of the American Phytopathological Society recently held at Atlanta the following officers were elected: *President*, Dr. Haven Metcalf, Washington, D. C.; *Vicepresident*, Dr. Frank D. Kern, State College, Pa.; *Counsellor*, Professor H. R. Fulton, West Raleigh, N. C.

A DINNER in honor of Dr. Livingston Farrand, professor of anthropology in Columbia University, who has accepted the presidency of the University of Colorado, was held by his colleagues at the Faculty Club, Columbia University, on January 18.

THE following new appointments of members of the gardening staff at Kew are quoted in *Nature* from the *Kew Bulletin*: Mr. G. S. Crouch, to be assistant director of horticulture in the Egyptian department of agriculture; Mr. T. H. Parsons, to be curator of the Royal Botanic Gardens, Peradeniya, Ceylon, in succession to Mr. H. F. Macmillan, who has been appointed superintendent of horticulture in the department of agriculture, Ceylon; Mr. C. E. F. Allen, to be curator of the Botanic Garden, Port Darwin, Northern Territory, South Australia, in succession to Mr. N. Holtze, deceased.

MRS. AGNES CHASE, assistant in systematic agrostology, U. S. Department of Agriculture, has returned from Porto Rico where she has been collecting and studying grasses for about two months. Of the 123 species of grasses known from the island she obtained all but three, and about 40 additional species. Arthrostylidium sarmentosum Pilger, a climbing bamboo, known only in the sterile condition, was obtained in flower.

An alumni chapter of the Sigma Xi has been planned in Washington, D. C., which will be known as the "D. C." Chapter. An organizing committee consisting of Marcus Benjamin (Columbia), *Chairman;* M. W. Lyon (Brown), *Secretary;* Paul Bartsch (Iowa), B. W. Everman (Indiana), Edmond Heller (Stanford), L. O. Howard (Cornell), F. J. Katz (Chicago), W. R. Maxon (Syracuse), T. S. Palmer (California), J. E. Pogue (Yale) and B. H. Ransom (Nebraska) are about to apply for a charter. As there are over 200 members in Washington it is expected that a large and flourishing chapter will be formed.

THE Norman W. Harris Lectures for 1913– 1914 will be delivered by Dr. Edwin Grant Conklin, professor of zoology at Princeton University, on the subject, "Heredity and Environment in the Development of Men," February 9 to 14 inclusive, Northwestern University, Evanston.

AT the annual meeting of the Washington Academy of Sciences held at the Cosmos Club on January 15, the retiring president, Dr. O. H. Tittmann, delivered an address on "Our Northern Boundaries."

PROFESSOR EDWARD KASNER, of Columbia University, on January 17 gave a lecture at Princeton University on "Elements of Infinite Order and the Geometry of Divergent Power Series."

AT an open meeting of the Sigma Xi Society at Case School of Applied Science, Cleveland, Ohio, on January 14, Dr. O. P. Hay, research associate of the Carnegie Institution of Washington, D. C., lectured on "The Ice Age of North America and its Remarkable Animals."

THE first of a series of lectures on practical conservation and industrial questions, given under the auspices of the Ohio State University for the benefit of citizens of the state, was delivered January 8 by Professor C. E. Sherman, of the department of civil engineering. His theme was the regulation of streams, with special reference to floods. ON January 6 Associate Professor Frederick Starr, of the department of sociology and anthropology in the University of Chicago, begins a course of five illustrated lectures on the general subject of "Japan: The Land of the Rising Sun" at the Abraham Lincoln Center of the University Lecture Association in Chicago. The subjects of the individual lectures are as follows: "The Life of the Japanese," "Japanese Religion," "The Hairy Ainu of Japan," "Korea: The Land of the Morning Calm," and "Far Eastern Questions."

PROFESSOR ALBION WOODBURY SMALL, head of the department of sociology and anthropology in the University of Chicago, delivered on December 27, at the eighth annual meeting of the American Sociological Society in Minneapolis, his address as the retiring president of the society. The address, which was on "Problems of Social Assimilation," was given at a joint meeting of the American Sociological Society and the American Economic Association.

MR. W. POPPLEWELL BLOXAM, formerly professor of chemistry in Presidency College, Madras, and the author of papers on the production and chemistry of indigo, died on December 26, aged fifty-three years.

DR. GEORGE WILLIAM PECKHAM, librarian of the Milwaukee Public Library, known for hisimportant contributions to entomology, died on January 11, aged sixty-eight years.

EDMUND B. HUEY, PH.D., died in Connell, Washington, on December 30, 1913. Dr. Huey had been in the west for a year trying to regain his health. He had previously been associated with Dr. Adolf Meyer, at the Johns Hopkins Hospital. He was the author of a book on "The Psychology of Reading" and another on "Mentally Defective Children," and was one of the foremost leaders in the more recent study of mentally defective children. He spent a year studying defective children at the State Home for the Feeble-minded at Lincoln, IR., and had previous to this spent two years with Janet in Paris. He was preparing a book on clinical psychology, but about six months before his death the notes and what

manuscript he had prepared, the accumulation of perhaps ten years, were completely destroyed by fire.

As the result of infection by glanders bacilli while working in the laboratory, Mr. A. M. Jansen, instructor in the veterinary college of Ohio State University, died on January 4.

THE United States Geological Survey is in receipt of a cablegram from St. Petersburg in which "the Geological Survey, of Russia, announces with profound grief the unexpected death of its director, Theodosie Tchernycheff, in the fifty-seventh year of his life."

A MEMORIAL fund raised by the friends of the late Humphrey Owen Jones, F.R.S., fellow of Clare College, who, with his wife, was killed in the Alps in August, 1912, has been gratefully accepted by the university, and a Humphrey Owen Jones lectureship in physical chemistry has been established.

THE U. S. Civil Service Commission announces a competitive examination for research chemist, to fill two vacancies in this position in the Bureau of Animal Industry, Department of Agriculture, Washington, D. C., at salaries of \$1,800 a year.

THE completion of the 30-inch photographic refractor of the Allegheny Observatory has been long delayed by the difficulty of manufacturing suitable glass disks. These have now been delivered by Schott and Co., of Jena, Germany, and it is expected that the telescope will be in use early next fall.

AT a recent meeting of the board of trustees of the University of Illinois, Mr. R. Y. Williams was appointed director of the miners' and mechanics' institutes, which are to be established under the direction of the department of mining engineering. Authority for the establishment of these institutes was granted by an act of the state legislature in 1911, but no appropriation was made to carry out the authorization until the latter part of the recent sesion of the legislature, at which time an appropriation of \$15,000 per annum was made. The purpose of the miners' and mechanics' institutes is somewhat similar to that of the farmers' institutes, but their specific purpose is to assist men who are preparing themselves to pass the tests required by the state before they can hold official positions about the mines. Mr. Williams graduated from Princeton University in 1901.

IT is stated in the British Medical Journal that Dr. L. W. Sambon, who left England in August last to investigate pellagra in the West Indies, returned to London at the beginning of January. By invitation he first proceeded to the United States of America, and in Spartanburg, Columbia and Charleston he met several of the men who have recently devoted themselves to the study of pellagra, and delivered addresses before medical societies in these cities. Dr. Sambon found that in the United States the interest in the disease was very keen, owing no doubt to the evidences of the existence of pellagra to a serious extent in many parts of the country. As is well known, Dr. Sambon's opinion is that pellagra is not due to the consumption of maize. whether diseased or sound, but that it is caused by an infection brought about most probably by a fly. His investigations in southern and eastern Europe suggested that the intermediary was a simulium, an insect closely allied to the group represented by the sandfly. In the United States Dr. Sambon found many men ready to accept this hypothesis, and was greatly impressed with the work which was being carried out by the Thompson-MacFadden Pellagra Commission in South Carolina. After leaving the North American continent he proceeded to the West Indies, where he visited Jamaica, Antigua, Barbados, Trinidad, Grenada, St. Vincent and other islands. In the hospitals, asylumns and rural districts he met with many cases of pellagra, and proved the existence of the disease in several areas in which its presence had previously been unknown. Dr. Sambon also visited British Guiana, and found pellagra along the coast from the Demerara to the Berbice rivers. In part of his trip Dr. Sambon was accompanied by Captain Siler, U. S. Army, chief of the American Pellagra Commission, and by Mr. Jennings, of the Entomological Bureau, Washington, D. C.

SEVENTY-FIVE per cent. of a highly valuable fertilizing material in the form of tankage and blood from the country slaughter of food animals is being wasted throughout the country districts, according to a recent bulletin of the Department of Agriculture. Tankage, a product of slaughter houses consisting of such waste material as bones, horns, hoofs, hair, etc., contains a large percentage of nitrogen and other products used in commercial fertilizer and in the larger packing houses is carefully saved. In country killing, however, only 25 per cent. of the tankage and blood are saved for fertilizer. The nitrogen content of tankage is said to vary from 5 to 8 per cent. and its phosphoric acid content between 5 and Dried blood is perhaps the 12 per cent. richest in nitrogen of all the organic materials used in the fertilizing industries. Unadulterated blood when quite dry contains 14 per cent. of nitrogen, but as obtained on the market its content varies from 9 to 13 per cent. From the figures estimated by the Bureau of Animal Industry, Department of Agriculture, as representing the total slaughter of cattle, calves, swine, and sheep in the United States, in 1912, it has been calculated that if all the materials rendered available by this slaughter had been saved and converted into tankage and dried blood, they would have produced 222,535 tons of tankage and 79,794 tons of dried blood. The introduction of a cooperative system among American farmers undoubtedly would result in an increased utilization of blood and tankage for fertilizing purposes. In Denmark country killing is being practised on a cooperative basis in small country abattoirs, and the blood is carefully preserved.

UNIVERSITY AND EDUCATIONAL NEWS

A NEW art building to cost \$125,000 is now guaranteed for Oberlin College. The names of the donors are at their request withheld.

MR. F. W. BRADLEY has offered a gift of \$1,000 a year for at least ten years to endow a loan fund for students in the college of mining of the University of California. Both principal and income of the gift are to be available for these loans.

HARVARD UNIVERSITY has received the sum of \$7,500 with which to establish a scholarship in memory of the late Francis Hardon Burr, '09. This fund is to be known as the Francis H. Burr 1909 Fund, and the yearly income therefrom is to be used in helping deserving undergraduates who combine as nearly as possible Burr's remarkable qualities of character, leadership and athletic ability. The fund was raised principally from the members of Burr's class, but some of his older friends also contributed.

By the will of the late Miss Emily M. Easton £10,000 are bequeathed to the Durham College of Medicine, Newcastle, and £5,000 to Armstrong College.

THE dedication at the winter convocation of the University of Chicago of the new addition to the Ryerson Physical Laboratory marks a great increase in the research facilities of the university in the field of physics. The new addition is connected with the original building by corridors and consists of a basement and three floors. It contains the liquid air and refrigerating plants, the dynamos and motors, the machine and instrument shops, and the switchboard for distributing electric currents of all kinds to all parts of both buildings. It has besides two large student laboratories, a lecture room and four research rooms. The old Ryerson Laboratory has been renewed by the installation of a modern electric light and power system of unusual completeness, by the insertion of new steelconcrete floors in all the ground-floor rooms, and by the remodeling of the entire basement into a series of special research rooms, of great value where freedom from vibration and constancy of temperature are required.

THE associates of Radcliffe College have elected Miss Bertha May Boody to succeed Miss Mary Coes as dean of the college. Miss Boody is a native of Brookline and received the A.B. degree from Radcliffe in 1899 and the A.M. degree from Columbia in 1912. She has