been from the breeding grounds, old and young, males and females, being subjected to the strain of the process, the lack of proper oversight and care, rendering it destructive in the extreme. Adult females, young females and female pups were regularly killed. The driving was now limited to the hauling grounds, frequented only by the bachelors, or young immature males, and these animals alone were killed. The females, adult and young, were everywhere protected from driving and from killing. This was the condition of the industry at the time it passed into American control in 1868. The depleted herd of 1834 had been restored to a maximum condition of growth and for twenty years thereafter it yielded a fixed product of one hundred thousand skins annually.

That it has not continued to yield this product was due simply to the fact that there developed, after the year 1880, a new industry carried on at sea, which by 1894 had exceeded in its annual catch the maximum product taken on land. Indiscriminate in its nature, that is, including the females as well as the males and causing the destruction of the unborn and dependent young, male and female alike, the effect of pelagic sealing was necessarily to throw the herd again into decline and in the end to bring it to a state of collapse similar to that experienced in 1834. Neither land sealing as such nor pelagic sealing as such was the cause of this. It was due solely to the killing of females. Just prior to 1911 the killing of females occurred in the sea in connection with pelagic sealing. Prior to 1834 it occurred on land in connection with the undeveloped and unperfected Russian land methods.

As the cessation of the killing of females by the Russians after 1834 stayed the herd's decline and provided amply for its recuperation, so the suspension of pelagic sealing, effected by the treaty of July 7, 1911, is an adequate remedy for the recent decline in the herd and a guarantee for its restoration and future protection.

The suspension of land sealing, incorporated in the law giving effect to this treaty of 1911, was a wholly unnecessary measure—wasteful in the extreme, and certain in the end to be harmful to the breeding life of the herd.

GEORGE ARCHIBALD CLARK

## SCIENTIFIC NOTES AND NEWS

Dr. August Weismann, professor of zoology at Freiburg since 1867, died on November 6, at the age of eighty years.

The twenty-third annual meeting of the American Psychological Association will be held in affiliation with the American Association for the Advancement of Science, the American Society of Naturalists and the Southern Society for Philosophy and Psychology at the University of Pennsylvania, Philadelphia, Pa., on December 29, 30 and 31. Professor R. S. Woodworth, of Columbia University, is the president and Professor R. M. Ogden, of the University of Kansas, is the secretary.

THE American Phytopathological Society has selected the Hotel Walton as headquarters during its meeting in Philadelphia, December 29 to January 1. Members should make their reservations at once. Material for the pathological exhibition may be forwarded in care of Dr. Allen J. Smith, Room 214, Medical Building, University of Pennsylvania.

Martin G. Brumbaugh, Ph.D. (Pennsylvania), governor-elect of the state of Pennsylvania, was professor of pedagogy in the University of Pennsylvania from 1895 to 1900 and from 1902 to 1906, since when he has been superintendent of schools for Philadelphia.

At the meeting of the Association of Amerian Universities at Princeton University, on November 7, President George E. Vincent, of the University of Minnesota, was elected president; President Arthur T. Hadley, of Yale, vice-president, and Provost Edgar Fahs Smith, of the University of Pennsylvania, secretary. President John Grier Hibben, of Princeton, and President Thomas H. McBride, of the University of Iowa, were elected to the executive committee.

At the meeting of the Association of State University Presidents in Washington last week, President Benjamin Ide Wheeler, of the University of California, was elected president and Dr. P. P. Claxton, U. S. Commissioner of Education, and President Harry B. Hutchins, of the University of Michigan, vicepresidents.

On the evening of October 19 a testimonial dinner was tendered to Dr. McCormick by the faculty and trustees of the University of Pittsburgh, on the completion of his tenth year as chancellor of that institution.

At a largely attended dinner at the Sherman Hotel, Chicago, on November 9, the Chicago Pathological Society presented Dr. George Howitt Weaver with an appropriate testimonial of its appreciation of his efficient services as secretary of the society for twenty consecutive years. Short addresses were made by Dr. J. B. Herrick, Dr. Wm. E. Quine, and Dr. L. Hektoen; Dr. Weaver responded.

Dr. Simon Flexner has been in Chicago to study the hoof and mouth disease and will continue the investigation by cultures in the Rockefeller Institute for Medical Research.

Dr. Allen J. McLaughlin, formerly of the Public Health Service, assumed the duties of his office as health commissioner of Massachusetts, at the beginning of November.

Dr. Henry P. Walcott has been reappointed chairman of the Metropolitan Water and Sewerage Board of Boston.

Dr. Arthur Harmount Graves has resigned his position as assistant professor of botany in the Sheffield Scientific School of Yale University, and is at present engaged in research at the laboratory of Professor V. H. Blackman, professor of plant physiology and pathology, Royal College of Science, South Kensington, London.

Mr. F. B. Sherwood, B.S. (1912, North Carolina A. and M. College), has been appointed assistant chemist to the North Carolina Agricultural Experiment Station.

Dr. Jacob Eriksson has resigned the position of chief of the phytopathological experiment station at Stockholm, Sweden.

On account of the war it has been agreed by the University of Chicago and the ministry of public instruction in Paris to postpone the lectures arranged to be given at the Sorbonne by Professor James Rowland Angell, head of the department of psychology and dean of the faculties of arts, literature and science.

Professor William E. Lingelbach delivered his inaugural address as president of the Geographical Society of Philadelphia on November 4. His topic was "Geography in Russian History." He was presented to the society by Mr. Henry G. Bryant, whom he succeeds as president.

On October 19, Dr. C. E. Ferree, of Bryn Mawr College, lectured before the Section of Astronomy, Physics and Chemistry of the New York Academy of Sciences on the efficiency of the eye under different systems of lighting.

The Syracuse Chapter of the Sigma Xi has held two meetings this autumn. On October 2 Professor E. D. Roe reported on the meetings of the American Mathematical Society at Brown University and the American Astronomical Society at Chicago, while Professor F. A. Harvey reported on Professor Rutherford's Washington lectures. On November 6 an address was given by Dr. E. C. Day on "Electric Currents Generated in the Eye by Light" and another by Professor L. H. Pennington on "Studies in Forest Fungi."

At the twenty-fifth anniversary of the Johns Hopkins Medical School, tablets set in the walls of the hospital were dedicated to the honored dead. The Journal of the American Medical Association states that one of these tablets is in memory of Dr. John Hewetson who was assistant resident physician at the hospital from 1890 to 1894. Another in the lobby of the main hospital building is inscribed with the name of the late Dr. D. C. Gilman, first president of the university, one with that of Dr. James W. Lazear, who gave his life to study yellow fever and one with that of Dr. Rupert Norton who died a short time ago while assistant superintendent of the institution.

The German newspapers print obituary notices of four university professors killed in

the war. They are Heinrich Hermelink, professor of church history at Kiel; Ernst Heidrich, professor of art and history at Strassburg; Ernst Stadler, professor of German philology at Strassburg, and Professor Frincke, the head of the Hanover-Muenden Forestry Academy. Dr. Julius Liebmann, assistant in the Babelsberg Observatory, has also been killed in the war.

THE Swedish-English Antarctic expedition, headed by Dr. Otto Nordenskjöld, will start in September, 1915, and proceed to Graham Land. The expedition will include twelve members. The Swedish government has granted half the expenses, while the other half will be subscribed in England. This latter money has nearly all been guaranteed.

The Journal of the American Medical Association states that Surgeon Rudolph H. von Ezdorf, U. S. Public Health Service, has completed a malarial survey of Virginia, and reports that he has located breeding places of the malarial mosquito and has taken steps toward its eradication. The next step of the work is the determination of how many people are carrying malaria in their blood, while the third part of the work is educational. The State Board of Health proposes to do a considerable amount of educational and eradicatory work during the year.

STUDENTS in engineering schools are offered an opportunity to compete for \$1,000 in prizes for essays on highway construction offered by the Barber Asphalt Paving Company.

Associate Professor J. Paul Goode, of the department of geography at the University of Chicago, has in preparation a series of maps for colleges and schools, one of them being a large wall map of South America. In the making of the last-named map, all available official source maps were used, and all the special maps of recent exploration. But in a great area between the Madeira and Tapajos rivers it was necessary to put the legend "unexplored," until the results of Colonel Roosevent's expedition down the "River of Doubt" were published. This map of South America.

with the location of the new river approved by Colonel Roosevelt, is one of a series of eighteen wall maps for use in colleges and schools upon which Professor Goode has been at work for some years and which is now nearing completion. There is a map of each continent, of the United States, of the world on Mercator's projection, and the world in hemispheres. Each of these is presented as a physical map and also as a political map.

AFTER a period of several years' inactivity the Naturalist Field Club, of the University of Pennsylvania, is being reorganized by Dr. Colton, of the zoological department. Officers elected for the ensuing year are: President. R. Holroyd; First Vice-president, Miss Lensenig; Second Vice-president, S. Harberg; Third Vice-president, A. Kolb; Fourth Vicepresident, Miss Richardson; Secretary, Miss Jerdine; Treasurer, C. Keeley. The club was organized with the special object of studying natural history in the field. This was done by taking field trips from time to time to different sections of the surrounding country. Observations of birds, flowers, insects, trees and geological formations were made. It is planned to follow out the same plans in the future, the only difference of the reorganized club being in its officers. Formerly members of the faculty held all positions, but in the future the affairs of the club will be in the hands of students. A room in the zoological laboratory will be reserved for the club, and a dark room for the purpose of developing photographs has been arranged.

The quarterly return of the Registrar-General dealing with the births and deaths in the second quarter of the year, and with the marriages during the three months ending March last, is abstracted in the British Medical Journal. The annual marriage-rate during that period was equal to 11.1 per 1,000 of the population, and was 0.1 per 1,000 less than the mean rate in the corresponding quarters of the ten preceding years. The 226,013 births registered in England and Wales last quarter were equal to an annual rate of 24.3 per 1,000 of the population, estimated at 37,302,983 persons in

the middle of the year. The birth-rate last quarter was 2.3 per 1,000 below the average for the corresponding period of the ten preceding years, and 0.4 per 1,000 below the rate in the second quarter of 1913. The birth-rates in the several counties ranged from 16.7 in Rutlandshire and 17.1 in Cardiganshire, to 29.8 in Glamorganshire and 32.3 in Durham. ninety-seven of the largest towns the birthrate averaged 25.5 per 1,000, and ranged from 13.1 in Hastings to 34.4 in Middlesbrough; in London the rate was 25.2 per 1,000. The excess of births over deaths during the quarter was 101,879, against 105,808, 102,293 and 105,-620 in the second quarters of the three preceding years. From a return issued by the Board of Trade it appears that the passenger movement between the United Kingdom and places outside Europe resulted in a net balance outward of 7,030 passengers of British nationality, and a balance inwards of 13,566 Between Europe and the United Kingdom there was a net balance inward of 19,308 British and of 15,887 Thus the total passenger movements resulted in a net balance inward of 41,731 persons. The deaths registered in England and Wales last quarter numbered 124,134, and were in the proportion of 13.3 annually per 1,000 persons living; the rate in the second quarters of the ten preceding years averaged 13.9 per 1,000. The lowest county death-rates last quarter were 8.8 in Middlesex and 10.2 in Rutlandshire; the highest rates were 16.1 in Lancashire and 16.7 in Merionethshire. In ninety-seven of the largest towns the death-rate averaged 13.8 per 1,000; in London the rate was 13.1. The 124,-134 deaths from all causes included 3 from smallpox, 307 from enteric fever, 2,677 from measles, 645 from scarlet fever, 2,658 from whooping-cough, 1,122 from diphtheria and 1,428 from diarrhea and enteritis among children under 2 years of age. The mortality from whooping-cough and diphtheria was approximately equal to the average; that from scarlet fever was slightly below the average; and that from enteric fever and measles was about two thirds of the average. The rate of infant mortality, measured by the proportion of deaths among children under 1 year of age to registered births, was equal to 88 per 1,000, or 10 per 1,000 less than the average proportion in the ten preceding second quarters. Among the several counties the rates of infant mortality last quarter ranged from 45 in Buckinghamshire and in Rutlandshire to 110 in Merionethshire and 111 in Lancashire. In ninety-seven of the largest towns the rate averaged 93 per 1,000; in London it was 79, while among the other towns it ranged from 36 in Bath to 143 in Middlesbrough. deaths among persons aged 1 to 65 years were equal to an annual rate of 7.6 per 1,000, and those among persons aged 65 years and upwards to a rate of 79.8 per 1,000 of the population estimated to be living at those ages.

A SERIES of special lectures on chemical engineering will be delivered in the Mellon Institute of Industrial Research, University of Pittsburgh, as follows:

November 9—"Our New Knowledge of Coal," by Dr. H. C. Porter, chemist, U. S. Bureau of Mines, Pittsburgh, Pa.

November 16—''Recent Researches on the Combustion of Coal,'' by Henry Kreisinger, engineer in charge of fuel tests, U. S. Bureau of Mines, Pittsburgh, Pa.

November 23—"Some Applications of Pulverized Coal," by Richard K. Meade, consulting chemist, Baltimore, Md.

November 30—"Producer Gas," by Dr. J. K. Clement, physicist, U. S. Bureau of Mines, Pittsburgh, Pa.

December 7—"The Softening of Water for Industrial Purposes," by James O. Handy, director of research, Pittsburgh Testing Laboratories, Pittsburgh, Pa.

December 14—"The Classification of Clays," by Professor Edward Orton, head of the department of ceramics and dean of the College of Engineering, Ohio State University.

January 4—"The Effect of Heat on Clays," by Albert V. Bleininger, director, Technological Laboratory of the U. S. Bureau of Standards, Pittsburgh, Pa.

January 11—"'The Manufacture of Structural Clay Products," by Albert V. Bleininger.

January 18—"The Manufacture of Refractories," by Kenneth Seaver, chief chemist of the Harbison-Walker Refractories Co., Pittsburgh, Pa.

January 25—"The Manufacture of Porcelain," by Ross C. Purdy, chief chemist of the Norton Company, Worcester, Mass.

January 25—"Glazes and Enamels," by Albert V. Bleininger.

February 1—"Special Phases of the Glass Industry," a symposium, by Chas. H. Kerr, Pittsburgh Plate Glass Co., Pittsburgh, Pa.; Dr. S. R. Scholes, assistant director, Mellon Institute of Industrial Research, University of Pittsburgh, Pittsburgh, Pa.; Professor Alexander Silverman, professor of chemistry, University of Pittsburgh.

February 8—"Special Methods of Pyrometry," by Dr. H. S. Stupakoff, director of the Stupakoff Laboratories, Pittsburgh, Pa.

February 15—"The Present Status of the Chemical Technology of Vanadium," by Dr. B. D. Saklat-Walla, chief chemist of the American Vanadium Co., Pittsburgh, Pa.

February 22—"The Manufacture of Steel Tubing," by F. N. Speller, National Tube Company.

March 1—"The Manufacture of Steel in the Electric Furnace," by Professor Fred Crabtree, professor of metallurgy, Carnegie Institute of Technology, Pittsburgh, Pa.

March 8—"The Corrosion of Iron and Steel," by Dr. D. M. Buck, American Sheet and Tin Plate Co., Pittsburgh, Pa.

March 15—"Catalysis," by Dr. M. A. Rosanoff, professor of research chemistry, Mellon Institute of Industrial Research, University of Pittsburgh.

March 22—"Recent Developments in the Electrochemistry of Organic Compounds," by Dr. Harold Hibbert, research fellow, Mellon Institute of Industrial Research, University of Pittsburgh.

March 29—"Industrial Applications of the Phase Rule," by Dr. M. A. Rosanoff.

## UNIVERSITY AND EDUCATIONAL NEWS

By the will of Dr. George S. Lynde, of New York, Bowdoin College is left \$10,000, Phillips Exeter Academy \$20,000, as a memorial to Dr. Lynde's parents, and Yale University is made the residuary legatee. The value of the estate is not given.

THE E. H. Skinner Company, of Boston, are now at work constructing a new \$25,000 organ for Oberlin College, which will be located in Finney Memorial Chapel. The new organ is the gift of Frederick Norton Finney, of Pasa-

dena, California, and of Charles M. Hall, of Niagara Falls.

The University of Strassburg, like the other German universities, has opened the semester at the usual time.

A MEMBER of the faculty of the University of Louvain has been engaged to give courses at the University of Chicago during the winter and spring quarters, his salary to be paid by Chicago. The name of the lecturer and his field of work will be announced later.

THE master of Christ's College, Cambridge, states that the university is taking in Belgian students from all Belgian universities, and a committee is endeavoring to organize systematic teaching in French and Flemish, and also hospitality. There are already some fifty students and more than twenty professors in residence. Though the resources of the committee are limited, no student need be kept away by want of means. The master of Magdalen states that there are a number of Belgian professors at Oxford, including nine from Louvain, that a Belgian student's committee has been formed, and that it is intended to give facilities to professors and students for free admission to university institutions and lectures.

Dr. Sidney E. Mezes, president of the University of Texas and previously professor of philosophy at that institution, has accepted the presidency of the College of the City of New York, vacant since the resignation of Dr. John H. Finley to become state commissioner of education.

Dr. James Rowland Angell, professor of psychology and dean of the faculties of arts and literature at the University of Chicago, has been offered the presidency of the University of Washington.

Dr. F. M. Barnes, Jr. has resigned from the faculty of the medical school of the St. Louis University, to become associate in psychiatry in Washington University.

THE following additions have been made to the staff of the chemistry department of the North Carolina College: C. F. Miller, B.S.