

concerning the smoke nuisance, and into the history of the subject as a whole.

Recognizing the interest in the smoke problem manifested by a large number of American cities, and in response to inquiries that have been made, the department announces that the members of its staff are prepared to lecture on the following phases of this problem:

1. The Smoke Nuisance (a general presentation of the main phases of the subject).
2. Smoke and the Public Health.
3. Smoke and the Cost of Living.
4. Smoke and Plant Life.
5. Methods and Means of Smoke Abatement.
6. The Effect of Smoke on Buildings and Building Materials.
7. The Psychology of Smoke.
8. The Smoke Nuisance and the Housekeeper.

R. C. BENNER

DEPARTMENT OF INDUSTRIAL RESEARCH,  
UNIVERSITY OF PITTSBURGH

#### A SCIENCE LIBRARY FOR CHILDREN

IN association with the educational work which the Chicago Academy of Sciences has been conducting during the past few years a strong demand has arisen for a Children's Library and Reading Room. In response to this demand the trustees of the academy have furnished one of the rooms in the museum as a Children's Library and about seven hundred books have now been selected as a nucleus. Appropriate periodicals and a picture collection, in part for exhibition on the bulletin board and in part for study at the tables, will also be included. Stereoscopic views have been selected for their importance in geographic studies of foreign lands and for illustrating the agricultural and industrial activities of various parts of the world.

It is proposed to make this a carefully selected library of books suitable for children to read. A few of the books are of a somewhat technical nature, although most of them are in non-technical language. A few biographies of the great scientists, several historical sketches of the progress in pure and applied science, stories based, in part at least, on natural history studies and accounts of explora-

tions which are instructive along scientific lines have been selected. Miss Mary A. Hardman, a member of the academy staff who has been offering courses of instruction to children at the academy during the last two years, has been appointed librarian. This Children's Library will be open to the public on and after August 5, 1912.

#### SCIENTIFIC NOTES AND NEWS

AMONG the degrees conferred by the University of Michigan at its recent celebration was the doctorate of laws on Dr. William H. Howell, professor of physiology at the Johns Hopkins University, and the doctorate of science on Dr. John J. Abel, professor of pharmacology.

AT the annual commencement of Lehigh University, the honorary degree of doctor of laws was conferred upon Charles Leander Doolittle, professor of astronomy and director of the Flower Astronomical Observatory of the University of Pennsylvania.

DR. HARVEY W. WILEY received the degree of doctor of science from Lafayette College.

DR. HENRY PRENTISS ARMSBY, director of the Institute of Animal Nutrition of the Pennsylvania State College, has been elected a foreign member of the Royal Academy of Agriculture of Sweden.

A BANQUET in honor of Dr. J. A. Wither- spoon, president elect of the American Medical Association, was given under the auspices of the Nashville Academy of Medicine and the Nashville Board of Trade, on July 3.

THREE portraits were presented to the University of Pennsylvania at its recent commencement: one of Provost Edgar F. Smith, the gift of the class of 1902 college, painted by H. H. Breckenridge; one of the late Professor Henry W. Spangler, the gift of alumni and students of the mechanical and electrical engineering departments, painted by M. H. Kevorkian; one of the late Professor Joseph Leidy, the gift of his friends, painted by A. P. S. Haeseler.

DR. W. M. DAVIS has retired from the Sturgis Hooper professorship of geology at

Harvard University. He will continue to reside at Cambridge. Professor R. A. Daly, of the Massachusetts Institute of Technology, has been appointed to the chair vacant by the retirement of Professor Davis.

PROFESSOR MORTON PRINCE has retired from the active duties of the chair of neurology in Tufts College Medical School, and becomes professor emeritus. He is succeeded by Professor J. J. Thomas, now assistant professor of neurology.

AFTER thirty years of distinguished service in the University of California, Edward J. Wickson, professor of agriculture and director of the Agricultural Experiment Station, has been granted a year's leave of absence, which he will spend in Europe. At its expiration he will be entitled to claim a retiring allowance under the terms of the Carnegie Foundation.

OSWALD SCHREINER, Ph.D., and Elbert C. Lathrop, A.B., have been awarded the Edward Longstreth medal of merit of the Franklin Institute, Philadelphia, for their paper on "The Distribution of Organic Constituents in Soils" appearing in the August, 1911, issue of the *Journal* of the Franklin Institute, "a comprehensive account of important recent researches in agricultural chemistry."

THE Livingstone gold medal of the Royal Scottish Geographical Society has been awarded to Captain Roald Amundsen for his geographical discoveries on his recent expedition to the south pole.

MR. JAMES MURRAY has been awarded the Neill prize by the Royal Society of Edinburgh for his papers on the Rotifera and Tardigrada.

DR. H. H. RUSBY, dean of the College of Pharmacy of Columbia University, New York, has resigned to establish a pharmacognostical laboratory in the city.

PROFESSOR FRANCIS CARTER WOOD has been appointed director of cancer research under the George Crocker Research Fund of Columbia University.

MR. JEROME D. GREENE, general manager of the Rockefeller Institute for Medical Research, has resigned that position to enter the

office of Mr. John D. Rockefeller, where he will be a member of the staff in charge of Mr. Rockefeller's business and philanthropic interests. Mr. Greene will continue as a trustee his connection with the Rockefeller Institute for Medical Research. Mr. Henry James, Jr., of Cambridge, Mass., has been appointed to succeed Mr. Greene in the management of the Rockefeller Institute. He is a graduate of Harvard College, in the class of 1899, and of the Harvard Law School in 1904, since when he has been engaged in the practise of law in Boston. He is a son of the late Professor William James.

MRS. MARY SCHENCK WOOLMAN, professor of domestic arts in Teachers College, Columbia University, has been elected president of the Women's Educational and Industrial Union.

MR. EDGAR A. DOLL has been appointed associate psychologist in the department of research of the Vineland Training School, Vineland, N. J.

PRESIDENT HOWE, of the Case School of Applied Science, has been given a year's leave of absence for the purpose of rest and recuperation. Dr. F. M. Comstock, professor of drawing and descriptive geometry and senior member of the faculty, will be the acting president during the next college year.

PRESIDENT R. C. MACLAURIN, of the Massachusetts Institute of Technology, has gone to Europe, intending to visit the technological schools of Great Britain and the continent with reference to the plans for the new buildings of the Massachusetts Institute.

DR. L. O. HOWARD has been appointed as a delegate from the Entomological Society of Washington to the second International Congress of Entomology to be held in Oxford this coming August.

PROFESSOR O. D. KELLOGG, of the University of Missouri, is on leave of absence in Göttingen. He will attend the meeting of the International Congress of Mathematicians at Cambridge, England, and of the British Association for the Advancement of Science at Dundee, Scotland.

PROFESSOR FREDERICK H. SAFFORD, of the University of Pennsylvania, has sailed for Europe and will attend the International Congress of Mathematicians at Cambridge.

PROFESSOR GEORGE C. WHIPPLE, Mr. M. C. Whipple and Dr. J. W. M. Bunker, of Harvard University, are making a sanitary survey of Lake Ontario near the mouth of the Genesee River, in order to ascertain the effect of the sewage of the city of Rochester, N. Y., on the river and lake.

FREDERICK HAYNES NEWELL, director of the United States Reclamation Service, delivered the commencement address at the Case School of Applied Science on May 29, his subject being "The Engineer in Public Service." At the close of the address the honorary degree of doctor of engineering was conferred upon him.

DR. JOSEPH JASTROW, professor of psychology in the University of Wisconsin, has given three lectures on "The Sensibilities," "The Emotions" and "The Appraisal of Human Qualities" at the summer session of the University of California.

DR. E. F. BASHFORD, director of the Imperial Cancer Research Fund of London, has accepted an invitation to deliver the Middleton-Goldsmith lectures of the New York Pathological Society next October.

MR. R. W. C. SHELFORD, known for his work in entomology, formerly connected with the Oxford Museum, died on June 22, aged thirty-nine years.

DR. FERDINAND ZIRKEL, emeritus professor of mineralogy at Leipzig and eminent for his contributions to this science, died on June 12, aged seventy-four years.

DR. ERNST SCHULZE, professor of agricultural chemistry at the Zurich Technological Institute, has died at the age of seventy-two years.

PROFESSOR CHARLES ANDRÉ, director of the Lyons Observatory, well known for his astronomical publications, died on June 6, aged seventy years.

UNDER the will of the late Lord Wandsworth, a sum of £10,000 was bequeathed to Sir William Bennett, to be applied by him at his discretion for the promotion of medical research. Sir William has now decided to entrust the administration of the legacy to the London School of Tropical Medicine, under conditions which include the establishment of a research scholarship.

THE organization of the Canadian National Museum has recently taken a new impetus, due to the completion of its home, the Victoria Memorial Museum building at Ottawa. Lawrence M. Lambe, representing paleontology; Harlan I. Smith, representing anthropology; Percy A. Tavernier, representing zoology; Robert A. Johnston, representing mineralogy, and Reginald W. Brock, director, have been elected as the executive committee of the museum staff, Mr. Johnston serving as secretary. Several expeditions are in the field. Research work is also being carried on in the museum and popular educational work is not being neglected.

THE agricultural demonstration train, which the University of California sends out yearly, through the cooperation of the Southern Pacific Company, in the year just completed was visited by more than 102,000 persons, a gain of 24,000 over the previous year. It has proved useful in bringing to the attention of farmers improved agricultural methods and sources of information and aid in farming problems.

THE United States Weather Bureau has changed the cooperative station at the North Dakota State University to a special meteorological station. As such, it is known as the Grand Forks station. It is closely affiliated in its work with the university's department of geology with Assistant Professor Howard E. Simpson in charge as special meteorological observer, the work being carried on as a part of the geographical work of that department. A complete meteorological equipment is furnished by the United States Weather Bureau. Constant records are kept of temperature, pressure, wind velocity and direction, sunshine and rainfall. Regular observations are made

twice daily, at seven o'clock, morning and evening. The morning observations are telegraphed to St. Paul, where they enter a circuit reaching all important cities between Winnipeg, New York and Washington. The evening observations are reported monthly and are used in the compilation of climatological data.

THE production of anthracite in Pennsylvania in 1911, according to a statement just issued by Statistician E. W. Parker, of the United States Geological Survey, broke all previous records, exceeding the previous maximum output in 1907 by 4,700,000 long tons. The complete returns to the Survey show a production in 1911 of 80,732,015 long tons, valued at \$174,852,843. This was an increase over the 1910 output of 5,298,767 long tons in quantity and \$14,577,541 in value. In this increased activity and augmented production in 1911 the anthracite industry was in marked contrast to the bituminous industry, which showed decreases throughout most of the mining regions. Moreover, in most of the bituminous districts prices were generally lower, whereas the average price of anthracite in 1911 was 5 cents a ton higher than in 1910. Prices for the domestic sizes remained the same, but greater returns were received from pea coal and the smaller sizes. The greater production of anthracite in 1911 was probably due to increased activity in anticipation of a possible coal strike in April. However, the extremely severe weather of the winter practically exhausted any accumulated coal before the termination of the three-year period of wage agreements on March 31, 1912. It is an interesting fact, showing the highly organized condition of the anthracite industry—the so-called coal trust—that whereas in former years there was enormous mine waste in this industry, nowadays practically everything mined is utilized. Formerly enormous quantities of small coal and coal dust were thrown on to the waste heap, but now such "waste" is sold as it is mined, and the culm piles are being re-worked. In 1911 the recovery from the culm piles and the smaller sizes obtained from the

freshly mined coal constituted over 40 per cent. of the total quantity of anthracite marketed.

IN the early part of the year 1911, while engaged in the Smithsonian Biological Survey of the Canal Zone, and the adjacent parts of Panama, Mr. E. A. Goldman made a collection of 368 mammals. This collection, representing between 40 and 50 genera, includes 12 new species and sub-species, of which descriptions have just been published by Mr. Goldman (Smithsonian Miscellaneous Collections, No. 2073) in advance of the general report on mammals of this region. Nine of the new forms are from the Canal Zone, and the others were collected by the author when he was on a trip to the mountains near the headwaters of the Chagres River, Panama, in March, 1911. The new animals include: two opossums from near Gatun; two squirrels, of which one is known as a pigmy squirrel; four rice-rats; a yoke-tooth rat, which was found to be one of the most abundant rats in the grassy clearings of the Canal Zone; three spiny rats, including one known as an octodont, and named after Colonel George W. Goethals, U.S.A., chairman and chief engineer of the Isthmian Canal Commission. Among the birds collected by Mr. Goldman, while engaged on this survey, there are two new species of nun birds. These are described by Mr. E. W. Nelson, of the Department of Agriculture, Biological Survey, in a pamphlet published by the Smithsonian Institution, which forms the seventh paper on the results of this survey.

THE statistics of births and deaths in the German empire during 1911 show for Prussia an excess of births over deaths of 490,333, as compared with 581,465 in 1910. In Bavaria, where the returns have just been issued, the excess of births over deaths was 73,656, as compared with 84,682 in 1910. Thus the falling off in the growth of the population in Prussia and Bavaria together was more than 100,000. The Prussian ministry of the interior has issued a rescript to the provincial governors requiring them to obtain informa-

tion from doctors, clergy, teachers, lawyers and others regarding the cause of the fall in the birth rate. The main questions are whether the limitation of families is intentional and, if so, what are the principal social and economic causes, and whether the birth rate is falling among the working as well as among the middle classes.

THE production of salt in the United States in 1911 was 31,183,968 barrels of 280 pounds each, valued at \$8,345,692, according to W. C. Phalen, of the United States Geological Survey, in a report on salt and bromine, just issued as an advance chapter from "Mineral Resources for 1911." This is an increase compared with 1910 of 878,312 barrels in quantity and \$445,348 in value. In addition to the domestic production 1,014,926 barrels of salt was imported. This importation was partly balanced by the exports, 349,092 barrels, leaving an excess of imports over exports of 665,834 barrels. The United States is amply able, according to Mr. Phalen, to supply all the domestic demands, as the capacity of the active mines and plants is largely in excess of the present output. Moreover, there are many plants now idle that could easily resume operations should conditions warrant.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE Massachusetts Institute of Technology has received from Mr. Theodore N. Vail, president of the American Telephone and Telegraph Company, a gift of the valuable library on electricity and engineering of the late George Edward Dering, of England. The library is valued at about \$100,000, and Mr. Vail has made an additional gift for its maintenance.

THE estate of the late Dr. Francis Bacon is larger than had been anticipated, and the value of his bequest to Yale University will, it is said, reach \$500,000, of which about \$300,000 goes to the library, and \$200,000 to the college and the Sheffield Scientific School for the assistance of students.

By the death of the widow of the late R. N. Carson, of Philadelphia, the sum of six million dollars bequeathed by him to establish the

Carson College for Orphan Girls, is released for this purpose.

THERE are in course of construction at the University of Missouri a building for the department of physics at a cost of \$100,000 and another for the department of chemistry, mainly for agricultural chemistry, at a cost of \$60,000. The latter building has been named Schweitzer Hall in memory of Professor Paul Schweitzer who was for nearly forty years connected with the department.

THE Educational Fund Commission, to whom has been intrusted the interest of a quarter of a million dollars for the purpose of sending selected teachers of the public schools of Pittsburgh for summer studies, has this year arranged to send

- 33 teachers to Columbia University,
- 30 teachers to Carnegie Institute of Technology,
- 19 teachers to Chautauqua Summer School,
- 14 teachers to Harvard University,
- 6 teachers to Cornell University,
- 5 teachers to University of Pittsburgh,
- 4 teachers to University of Pennsylvania,
- 4 teachers to University of Colorado,
- 3 teachers to Vineland Training School, Vineland, N. J.,
- 2 teachers to School for Atypical Children, Plainfield, N. J.
- 2 teachers to Pennsylvania State College,
- 1 teacher to Dartmouth,
- 1 teacher to University of Chicago.

Three hundred and twenty-nine teachers have now enjoyed the benefit of this fund, given by an anonymous donor, and it has been productive of such excellent results toward greater efficiency in our schools that the commission has already arranged to send quite a large contingent in the summer of 1913. An efficient and helpful vocational bureau has also been organized by the commission.

THE Rev. Stephen Morrell Newman has been elected president of Howard University to succeed Dr. William P. Thirkield, who has become the Methodist Episcopal bishop of the diocese of New Orleans.

DR. WILLIAM LESLIE HOOPER, professor of electrical engineering, has been appointed acting president of Tufts College.