

the development and perfecting of means whereby waste in the consumption of fuel can be reduced.

The loss of human life through preventable mining accidents in North America is excessive. Much needless suffering and bereavement results therefrom. Accompanying this loss there is great destruction of valuable mineral property and enhancement of the cost of production. The best method of eliminating these known and admitted evils lies in the enactment and strict enforcement of regulations which will provide the greatest possible security for mine workers and mines. We therefore favor the scientific investigation of the whole subject of mine accidents by the governments participating in this conference, the interchange of information and experience and the enactment and enforcement of the best regulations that can be devised.

Mineral fertilizers should not be monopolized by private interests, but should be so controlled by public authority as to prevent waste and to promote their production in such quantity and at such price as to make them readily available for use.

Protection of Game.—We recognize that game preservation and the protection of bird life are intimately associated with the conservation of natural resources. We therefore favor game protection under regulation, the creation of extensive game preserves and special protection for such birds as are useful to agriculture.

Conservation Commissions.—The action of the President of the United States in calling this first conference to consider the conservation of the natural resources of North America was in the highest degree opportune, and the proceedings which have followed, and the information mutually communicated by the representatives assembled, have, we believe, been conducive to the best interests of the countries participating. To derive the greatest possible benefit from the work which has already been done, and to provide proper and effective machinery for future work, there should be established in each country a permanent conservation commission.

When such conservation commissions have been established, a system of intercommunication should be inaugurated, whereby, at stated intervals, all discoveries, inventions, processes, inventories of natural resources, information of a new and specially important character, and seeds, seedlings, new or improved varieties, and other productions which are of value in conserving or improving any natural resource shall be trans-

mitted by each commission to all of the others, to the end that they may be adopted and utilized as widely as possible.

World Conservation Conference.—The conference of delegates, representatives of the United States, Mexico, Canada and Newfoundland, having exchanged views and considered the information supplied from the respective countries, is convinced of the importance of the movement for the conservation of natural resources on the continent of North America, and believes that it is of such a nature and of such general importance that it should become worldwide in its scope, and therefore suggests to the President of the United States of America that all nations should be invited to join together in conference on the subject of world resources and their inventory, conservation and wise utilization.

GIFFORD PINCHOT,

ROBERT BACON,

JAMES R. GARFIELD,

Commissioners Representing the United States.

RÓMULO ESCOBAR,

MIGUEL A. DE QUEVEDO,

CARLOS SELLERIER,

Commissioners Representing the Republic of Mexico.

SYDNEY FISHER,

CLIFFORD SIFTON,

HENRI S. BÉLAND,

Commissioners Representing the Dominion of Canada.

E. H. OUTERBRIDGE,

Commissioner Representing the Colony of Newfoundland.

Attest:

ROBERT E. YOUNG,

THOMAS R. SHIPP,

Secretaries of the Conference.

WASHINGTON, D. C., February 23, 1909

SCIENTIFIC NOTES AND NEWS

THE centenary of the birth of Darwin was commemorated at Syracuse University on March 19, by a meeting held under the auspices of the Syracuse Chapter of Sigma Xi, the Onondaga Academy of Science, the Syracuse Academy of Medicine, the Syracuse Botanical Club, the University Biological Association and the University Geological Club. Addresses were made as follows: "Darwin and Zoology," by Professor Charles W. Hargitt; "Darwin and Botany," by Professor William L. Bray; "Darwin and Geology," by Dr. John M. Clarke, state geologist, Albany.

WASHBURN COLLEGE and the Kansas Academy of Science celebrated the centenary of

Darwin's birth on March 26, the program being: "Darwinism and Experimentation," Dr. D. T. MacDougal, director, department botanical research, Carnegie Institution of Washington; "Evolution of Organisms in Relation to Environment," Professor W. L. Tower, department of zoology, University of Chicago.

THE Wellesley College Science Club held its one hundredth meeting on March 9 in the Whitin Observatory, when the program was devoted to Charles Darwin. Dr. Robertson gave an account of the status of biology before Darwin's time and the changes wrought by him. Dr. Ferguson followed, giving an account of the influence of Darwin's work on botanical science. Dr. Wiegand then gave a paper on "Modern Theories of the Origin of Species and their Relation to Natural Selection." Professor Hayes was the last speaker.

DARWIN memorial exercises were held at the Michigan Agricultural College on March 4, with the following program: "Early Impressions of Darwinism," Dr. W. J. Beal; "Darwin, the Worker," Professor W. B. Barrows; "Darwin's Influence on Thought," Dr. R. M. Wenley.

THE daily papers state that it is proposed to offer the ambassadorship to Great Britain to President Eliot after his retirement from the presidency of Harvard University. Mr. Eliot, who is at present making addresses in the south, reached his seventy-fifth birthday on March 20.

A BANQUET in honor of President Angell was given in New York City on March 19 by alumni of the University of Michigan.

THE seventh annual meeting of the South African Association for the Advancement of Science will be held at Bloemfontein at the end of September under the presidency of Sir Hamilton J. Goold-Adams.

DR. SVEN HEDIN has lectured in the presence of Emperor William before the Berlin Geographical Society, which awarded to him its Humboldt medal. He has also lectured at the Sorbonne, Paris.

PROFESSOR W. M. DAVIS, of Harvard University, has finished his courses at Berlin and

has gone to Scotland to deliver a series of lectures on geology before Edinburgh University.

SIR E. RAY LANKESTER will deliver the Huxley lecture for the present session at Birmingham University.

PROFESSOR WM. T. SEDGWICK, of the Massachusetts Institute of Technology, expects to leave Boston in the middle of April to make a number of addresses in the middle west.

AT the meeting of the Society of Arts of the Massachusetts Institute of Technology on March 25, President R. S. Woodward, of the Carnegie Institution, was expected to lecture on the work of the institution. On April 5 Professor George E. Hale, director of the Solar Observatory of the Carnegie Institution, is announced to lecture on "Solar Cyclones and Magnetic Fields."

DR. A. M. STEIN will give a lecture under the auspices of the Royal Asiatic Society on Tuesday, March 30, on his recent explorations in eastern Turkestan.

MR. D. CARRUTHERS, who took part in the British Museum expedition to Ruwenzori as a zoological collector under Mr. R. B. Woosnam in 1906, is at present exploring central Arabia.

DR. CHEVALIER, who since the conclusion of his expedition to the upper Shari basin, has been on the Guinea coast, has started on a new expedition to west Africa.

THE National Society of Acclimatization of France has conferred on Mr. W. Percival Westell its bronze medal in recognition of his natural history writings.

WILLIAM STUART, for the past ten years professor of horticulture in the Agricultural Department of the University of Vermont, has received an appointment in the plant bureau of the Department of Agriculture, Washington, and will enter upon his new duties at the close of the college year.

MRS. TYNDALL, in pursuance of the wishes of the late Professor Tyndall, who was a member of the Royal Commission appointed in 1879 to inquire into the causes of explosions in coal mines and who took a deep interest in problems concerning the safety of miners, proposes to found a gold medal to be awarded

annually for inventions tending to diminish danger and preserve life among those engaged in mining operations. The adjudication of this "Tyndall Medal" is to be placed in the hands of the managers of the Royal Institution, where Professor Tyndall occupied the chair of Natural Philosophy from 1853 to 1887.

It is proposed to endow as a memorial to the late Dr. William T. Bull an institution for surgical research to be connected with the College of Physicians and Surgeons, Columbia University, from which Dr. Bull was graduated in 1872, and where he served for many years as professor of surgery. It is further stated that Mrs. Bull proposes to erect a memorial hospital for the treatment of tuberculosis.

PROFESSOR MARK VERNON SLINGERLAND, who held the chair of economic entomology at Cornell University, and was an authority on the injurious insects of the United States, died at Ithaca on March 10, at the age of forty-four years.

MAJOR EDMUND LEWIS ZALINSKI, U.S.N., retired, at one time professor of military science in the Massachusetts Institute of Technology, known for experimental work on high explosives, died in New York City on March 10, at the age of fifty-nine years.

DR. S. H. LAURIE, emeritus professor of education in the University of Edinburgh, died in Edinburgh on March 2 at the age of seventy-nine years.

DR. EMIL ERLÉNMEYER, formerly professor of chemistry in the Munich Technical Institute, has died at the age of eighty-three years.

THE deaths are also announced of M. Frédéric Rauh, professor of philosophy at Sorbonne, and Senhor Barbosa Rodrigues, author of several works on the Brazilian flora.

A RECENT list of the publications of the United States Geological Survey gives the titles of 977 volumes. This list does not include the separate chapters from the annual volume on mineral resources, which make up several hundred pamphlets.

It is now finally settled that the Forest Service Experimental Laboratory will be situ-

ated at the University of Wisconsin. Opportunity was given to Michigan and Minnesota to present the advantages of those institutions, but the original plan will be carried out. Work on the new laboratory, which is to be located on Camp Randall near the agricultural buildings and the new site of the engineering group, will be begun at an early date. The university provides the site and a \$30,000 building, while the forest service is to equip the laboratory at a cost of \$14,000 and to provide the entire staff of investigators, whose salaries will aggregate \$28,000 a year. The laboratory is to be available for students and faculty of the university for research work, and the members of the staff are to deliver lectures on forestry and allied subjects to students of the university. A course for forest rangers is to be provided by the university in connection with the experiment station as soon as it is completed. The work of the laboratory is to include tests of various kinds of wood for paper pulp, for building material, for the distillation of turpentine, alcohol and resin from wood waste.

APPROPRIATIONS FOR THE UNITED STATES BUREAU OF EDUCATION

THE estimates of appropriations for the United States Bureau of Education for the fiscal year ending June 30, 1910, as transmitted to Congress, included under the general head of salaries estimates for additional employees as follows: Expert in higher education, \$4,000; expert in industrial education, \$3,000; expert in the welfare of children, \$3,000; editor, \$2,000; additional clerks, \$12,100. Of the new employees requested, Congress made provision for an editor at \$2,000; one clerk at \$1,200; and one clerk at \$1,000. The salary of the Commissioner of Education was increased from \$4,500 to \$5,000, making a total increase in the appropriations for the general work of the Bureau of \$4,700 over the appropriations for the current fiscal year. The requests for a lump sum appropriation of \$40,000 for educational investigations; for an increase of \$1,500 in the appropriation for the library; for an increase of \$8,000 in the fund for collecting statistics; and of an ap-