

President, Organizing Committee: W. H. Holmes, head curator, department of anthropology, U. S. National Museum.

Secretary: A. Hrdlička, curator, division physical anthropology, U. S. National Museum.

Auxiliary Resident Secretaries: Dr. Chas. W. Currier, Mr. F. Neumann.

Treasurer: C. F. Norment, president, The National Bank of Washington.

Head of General (honorary) Committee: Mr. Charles D. Walcott, secretary, Smithsonian Institution.

Head of Committee on Finance: Dr. George M. Kober, dean, Medical Department, Georgetown University.

Head of Committee on Arrangements and Entertainment: Professor Mitchell Carroll, general secretary, Archeological Institute of America.

Head of Committee on Printing and Publication: Mr. F. W. Hodge, ethnologist in charge of the Bureau of American Ethnology.

The sessions of the congress will be held, due to the courtesy of the authorities of the Smithsonian Institution, in the new building of the National Museum. The exact date for the meeting will be decided upon later, in accordance with the wishes of the majority of the delegates to the congress, but the month will, in all probability, be September. Active preparations for the session, which promises to be one of the most important ever held by the Americanists, will be begun without delay.

A. HRDLÍČKA,
*Secretary Committee
of Organization*

SCIENTIFIC NOTES AND NEWS

PRESIDENT TAFT has recommended to the congress that Colonel Goethals be appointed major general in the army as a recognition of his executive work in the construction of the Panama canal.

DR. REID HUNT, U. S. Public Health Service, has been appointed a member of the board created by the Bureau of Mines to study the hygiene and dangers in mines.

At its last meeting the Rumford Committee of the American Academy of Arts and Sciences made the following appropriations: to G. W. Ritchey, of Pasadena, \$500 for the con-

struction of a reflecting telescope employing mirrors with new forms of curves; to Professor Edward L. Nichols, of Cornell University, \$250 for the construction of a new form of electromagnet, to be used in an investigation by Mr. W. P. Roop, on the effect of temperature on the magnetic susceptibility of gases.

PROFESSOR L. A. CLINTON, who for the past ten years has been director of the Connecticut Agricultural Experiment Station at Storrs, has resigned and accepted a position with the Office of Farm Management of the U. S. Department of Agriculture. Professor Clinton's work with the department will be to have charge of the farm management investigations for the North Atlantic states.

PROFESSOR EDWARD M. FREEMAN, chief of the division of plant pathology and assistant dean and secretary of the faculty of the college of agriculture of the University of Minnesota, has declined the offer of the position of chief pathologist of the Kew Botanical Gardens. The position carries a salary of \$4,700.

DR. G. R. KRAUS, professor of botany at Würzburg, has retired from active service.

MR. FRANK MEYER, agricultural explorer for the United States Department of Agriculture, will sail for China where he will conduct botanical exploration in the interior for the next three or four years.

MR. CHAS. WILSON and Mr. Arthur Henn, seniors in Indiana University, will sail on December 21 for Buenaventura, Colombia. They will explore Pacific slope streams and the Atrato river in continuation of the work of Professor C. H. Eigenmann on these streams between January and March of the present year.

THE fifth of the present course of Harvey Society lectures was given at the New York Academy of Medicine on December 14, by Professor F. B. Mallory, Harvard University, on "Infectious Lesions of the Blood Vessels."

PROFESSOR C.-E. A. WINSLOW, of the department of public health of the American Museum of Natural History and of the College of the City of New York, opened the first semi-

nar of a series conducted by the department of biology, Trinity College, on the evening of December 5.

PROFESSOR A. P. CARMAN, head of the department of physics of the University of Illinois, lectured on November 19, before the Central Association of Science Teachers at their meeting at Northwestern University.

At the first meeting for the year of the Oregon Academy of Sciences on November 30, Dr. William T. Foster, president of the academy, gave a brief opening address on "The Scope of the Academy and the Exact Sciences in Daily Life." Dr. Frank L. Griffin, professor of mathematics in Reed College, spoke on "The Ever-present Limit Concept," a discussion of higher mathematics in the common thought of to-day.

THE Minnesota chapter of the Sigma Xi held the first of its scientific meetings on November 25. Two researches were presented: "The Enrichment of Sulphide Ores," by Professor William H. Emmons, and "The Scattering of Cathode Rays," by Dr. Louis W. McKeahan.

THE Royal Geographical Society is taking steps to celebrate the Livingstone centenary on March 17, when Sir Harry Johnston is to give an address, and it is expected that Sir John Kirk, the only surviving companion of Livingstone on his expedition of 1858-64, will be present. The society is also arranging an exhibition of Livingstone relics, including autograph maps, Livingstone's sextant, compass, etc., with portraits and views and a section of the tree under which Livingstone's heart was buried, with the rude inscription carved by his native followers.

EDWIN SMITH, connected with the U. S. Coast and Geodetic Survey since 1870, known especially for his work on determinations of the force of gravity, died at Washington on December 2, aged sixty-one years.

EBEN JENKS LOOMIS, for a half century (1850-1900) in the Nautical Almanac Office of the U. S. Navy Department, died on December 2 at Observatory House, Amherst, Mass., aged eighty-five years. Besides his

technical work, he was a close student and observer of nature, discovering in 1877 a very remarkable flexing frond-movement of one of the lesser ferns growing about Washington, which at the time excited the keen interest of both Gray and Darwin.

DR. WILLIAM A. BUCKHOUT, professor of botany and the senior professor at the Pennsylvania State College, died of heart disease on Tuesday, December 3, 1912. Dr. Buckhout was born in December, 1846, and was graduated from the Pennsylvania State College, in 1868. In 1871 he became professor of botany and horticulture in this college. In the changes brought about in agricultural sciences during recent years he became professor of botany. For many years he was botanist of the Pennsylvania State Board of Agriculture. In 1888 he was appointed to the Pennsylvania State Forestry Commission and was a prime mover in the state in creating and taking an active interest in forestry. He was a fellow of the American Association for the Advancement of Science. He was author of papers such as "The Chestnut as a Fruit and Food," "The Effect of Smoke and Gas on Vegetation," "A Microscopic Examination of State College Water Supply," "Forest Fires," and others, with annual reports as state botanist.

DR. EDWARD CURTIS, of New York, emeritus professor of materia medica and therapeutics in the College of Physicians and Surgeons of Columbia University, died on November 28, aged seventy-four years.

DR. ELIE DE CYON, formerly professor at the Academy of Sciences of St. Petersburg and the author of important contributions to physiology, has died, aged seventy years. He left Russia for political reasons and settled in Paris, where he devoted himself to literary work.

MR. WILLIAM FORSELL KIRBY, for many years a member of the zoological department of the British Museum (Natural History), the author of many publications on entomology, died on November 20, aged sixty-eight years.

DR. DAVID AXENFELD, professor of physiology at Perugia, has died at the age of sixty-four years.

MEMBERS of Section E, Geology and Geography, of the American Association for the Advancement of Science, are urged to send as soon as possible to Professor G. F. Kay, Iowa City, Iowa, the titles of papers to be read at the Cleveland meeting.

W. CAMERON FORBES, '92, governor-general of the Philippine Islands, has given to the Peabody Museum of American Archeology and Ethnology and to the Museum of Comparative Zoology some important collections of objects which illustrate life on those islands.

MR. AUSTEN CHAMBERLAIN has received £48,000 towards the £100,000 which he is raising for the London School of Tropical Medicine.

THE estimate of expenditure for the Bureau of Mines for the fiscal year beginning July 1, 1913, is as follows: for general expenses, \$70,240; for investigating mine accidents, \$347,900; for fuel investigations, \$135,000; for investigations into the treatment of ores and other mineral substances, \$250,000; for inspecting mines in Alaska, \$6,500; for books and publications, \$2,500; toward the erection of a suitable laboratory for the Bureau of Mines at Pittsburgh, \$115,000; for the collection of statistics concerning accidents in the mining industry, etc., \$25,000; for the purchase or lease of land for headquarters for mine safety cars, \$2,000. A total of \$954,140. The increases asked for include \$4,140 for general expenses, \$27,900 for investigating mine accidents, \$200,000 for investigations into the treatment of ores and other mineral substances, \$1,000 for the purchase of books and other publications, \$115,000 towards a new fire-proof laboratory and \$25,000, for the collection of statistics concerning accidents in the mining industry and other interests.

THE interesting region of the Arizona Petrified Forest was surveyed by the United States Geological Survey in 1910, and the resulting map has just been issued. The field work was done by Topographic Engineers

Pearson Chapman and J. G. Staack, under the direction of R. B. Marshall, chief geographer. The area covered by this survey is known as the Petrified Forest quadrangle, and the map will be of especial interest and value to visitors to this remarkable region. It includes the principal portions of the Petrified Forest National Monument, a reservation created by executive order to protect these natural wonders against commercial vandalism, which was making serious inroads into the petrified specimens. The map shows the location and topography of six separate forests, including the famous 'Petrified Natural Bridge. The fossil trees of these forests are hundreds of thousands if not millions of years old, the wood of the trees having been submerged beneath a heavy covering of soil and then silicified and turned to stone. This stone is exceedingly hard; in fact, it is an agate, of many colors—red, yellow, purple, blue and intermediate shades—and is susceptible of a very high polish. The Petrified Forest is just south of the line of the Santa Fe Railway, in Navajo and Apache counties, Ariz., and is reached by wagon road from the town of Adamana. The map is sold by the director of the Geological Survey at a nominal price.

THE surface of the United States is being removed at the rate of thirteen ten-thousandths of an inch a year, or 1 inch in 760 years, according to the United States Geological Survey. Though this amount seems trivial when spread over the surface of the country, it becomes stupendous when considered as a total, for over 270,000,000 tons of dissolved matter and 513,000,000 tons of suspended matter are transported to tidewater every year by the streams of the United States. This total of 783,000,000 tons represents more than 350,000,000 cubic yards of rock substance, or 610,000,000 cubic yards of surface soil. If this erosive action had been concentrated upon the Isthmus of Panama at the time of American occupation, it would have excavated the prism for an 85-foot level canal in about 73 days. The amounts removed from different drainage basins show interesting comparisons. In respect to dissolved matter, the southern Pa-

cific basin heads the list with 177 tons per square mile per year, the northern Atlantic basin being next with 130 tons. The rate for the Hudson Bay basin, 28 tons, is lowest; that for the Colorado and western Gulf of Mexico basins is somewhat higher. The denudation estimates for the southern Atlantic basin correspond very closely to those for the entire United States. The amounts are generally lowest for streams in the arid and semiarid regions, because large areas there contribute little or nothing to the run-off. The southern Pacific basin is an important exception to this general rule, presumably because of the extensive practise of irrigation in that area. The amounts are highest in regions of high rainfall, though usually the waters in those sections are not so highly mineralized as the waters of streams in arid regions.

THE first instalment of the vast works planned by Sir W. Willcocks for the irrigation of Mesopotamia by the storage of the Euphrates water is now nearing completion. Details as to the present position of the work, which is being carried out for the Turkish government by the engineering firm of Sir John Jackson, Limited, are quoted in the *Geographical Journal*. The part of the scheme first taken in hand has been the building of the great barrage at Hindieh, with associated works by which the water is to be distributed down the old branch of the river, past the site of Babylon, to Hilla. The barrage is being built to the east of the present bed of the Euphrates, and will be 250 meters long, with thirty-five arches fitted with sluice-gates. The piers of these arches are now completed up to the springing of the latter. This barrage will raise the level of the water by 7 meters, while a subsidiary barrage immediately below will provide for a further difference of $2\frac{1}{2}$ meters. Adjoining the upper barrage there will be a lock for the use of the river traffic, while the lower barrage consists of a lock and a huge shelf of masonry. Work has also been begun on the Hilla regulator, a little above the barrage, which will consist of five arches. The excavation for this has been

done, and the masonry begun. These works finished, an earthen dam will be thrown across the stream, which will thus be turned into its new bed between the barrage and the regulator. The old branch has been cleared out, and will be properly canalized, while at Habbania an escape is being constructed by which the flood-water will be carried off into the old Babylonian reservoir. It is estimated that 600,000 acres of land will be plentifully irrigated as a result of these works. The operations have involved a vast amount of excavation, concrete work, masonry, pitching, etc., but there has of late been a plentiful supply of local labor.

UNIVERSITY AND EDUCATIONAL NEWS

By the will of Mrs. Harriet D. Brown, who died in Worcester in November, the Worcester Polytechnic Institute receives a fund of some \$50,000, the income to be used for scholarships.

DR. JOHN C. HEMMETER, professor of physiology at the University of Maryland, at the celebration of academic day on November 12 made a gift of \$10,000 for the purpose of beginning the endowment of the chair for experimental physiology.

MRS. A. M. JONES, widow of Professor Tom Jones, of Manchester, surgeon, who died on October 30, left £1,000 to the Victoria University, Manchester, in augmentation of the endowment of the Professor Tom Jones memorial scholarship, and £500 to the University College of Wales, Aberystwith, as an endowment for promoting the study of surgery.

CAPTAIN R. W. SILVESTER, for twenty years president of Maryland Agricultural College, has resigned because of impaired health. He has been made president emeritus and librarian of the institution. Professor Thomas H. Spence, vice-president of the college, has been appointed acting president.

DR. HERBERT J. WEBBER has resigned from the department of plant breeding of the College of Agriculture of Cornell University, to accept the directorship of the College of Agriculture of the University of California.