

ticket or tickets for the return journey should be sold. No refund of fare can be expected because of failure to secure such certificates.

3. Tickets for the return journey will be sold at one-third the first-class tariff fare only to persons holding certificates of the standard form duly signed by the Permanent Secretary of the A. A. A. S., and signed by the special agent appointed for that purpose.

4. No certificate will be honored that was procured more than three days (Sunday not included) before the meeting assembles (except that when meetings are held at distant points to which the authorized transit limit is more than three days, the authorized transit limit will govern), nor more than two days (Sunday not included) after the first day of the meeting. No certificate will be honored for return ticket unless presented during the time that the meeting is in session, or within three days (Sunday not included) after adjournment.

5. Tickets for return journey will be limited to continuous passage on first train after purchase.

6. Certificates will not be honored by conductors; they must be presented to ticket agents.

7. Neither the certificates nor tickets furnished for this occasion are transferable, and if presented by any other person than the original purchaser, they will not be honored but will be forfeited.

Members desiring longer time than that allowed in connection with certificate reduction, viz., 3 days before the meeting assembles to 3 days after adjournment (Sunday not included), are advised to take advantage of the Colorado tourist fares or summer excursions, which, while costing a little more than the fare and one third, are good from July 10 to October 31.

If a sufficient number of passengers can be guaranteed, arrangements can be made for through Pullman service, to connect at Chicago or St. Louis, so that members from different sections of the country can make the trip to Denver together. The Permanent Secretary therefore invites all members who plan to attend the meeting and who wish to take advantage of this through Pullman service to

communicate with him at once, stating the name of the road over which they intend to travel and the date of their departure. If a sufficient number of replies are received, the arrangement will be made and members notified.

SCIENTIFIC NOTES AND NEWS.

THE Smithsonian Institution, having provisionally undertaken to represent the 'International Catalogue of Scientific Literature' in the United States, begs to bring this fact to the attention of men of science in the United States, and to request them to furnish the Institution with copies of all their writings which appear in separate form. It is intended to index all original scientific matter published since January 1, 1901.

THE position of State Geologist of New Jersey, vacant by the resignation of Mr. John P. Smock, has been offered to Professor I. C. Russell, of the University of Michigan. Professor Russell agreed to accept the office a year hence, and the board of managers has not yet decided whether to wait. In the meanwhile Dr. H. B. Kümmel is acting geologist.

PROFESSOR H. C. BEELER has been appointed state geologist of Wyoming.

PROFESSOR GEORGE E. HALE, director of the Yerkes Observatory, has been elected a foreign member of the Società degli Spettroscopisti Italiani.

THE Paris Academy of Sciences has elected M. Maupas, of Algiers, a corresponding member in the section of anatomy and zoology.

WE learn from *Nature* that Professor A. W. Rücker will resign the secretaryship of the Royal Society in consequence of his appointment as principal of the University of London.

PROFESSOR PASQUALE VILLERI has been elected president of the Reale Accademia dei Lincei, of Rome.

PROFESSOR E. B. POULTON, of Oxford University, will give one of the lectures at the Fifth International Congress of Zoology which meets next week at Berlin. His subject is 'Mimicry and Natural Selection.'

PROFESSOR WILLIAM B. SCOTT, of Princeton University, has arrived in La Plata, Argentina,

on his way to Patagonia where he will continue the paleontological studies that have been carried forward by several Princeton expeditions.

PROFESSOR OSBORN, accompanied by Professor Eberhard Fraas, of Stuttgart, has recently made a tour of the chief typical Jurassic exposures of Colorado, Utah and Wyoming, especially the beds of Cañon City, Green River, Como and the Black Hills. This is preliminary to a careful survey of these beds, which will be made for the monograph upon the Sauropoda. Valuable geological studies of the Jurassic have recently been published by Knight, Logan and especially by Loomis. Professor Fraas is very familiar with the Jurassic of Europe, having personally studied all the Jurassic exposures, and as a result of this trip he will undertake a careful correlation of the American and European Jurassic horizons which will be published by the American Museum. Messrs. Wieland and Loomis are also independently studying the Jurassic sections in the Black Hills region.

PRESIDENT DAVID STARR JORDAN has returned from the expedition to the Hawaiian Islands, sent by the U. S. Fish Commission.

DR. THEODORE GILL, of the Smithsonian Institution, has just returned from a European trip during which he enjoyed opportunities of examining ichthyological and other collections in various museums, and thus of materially advancing his comparative studies.

DR. HENRY S. PRITCHETT, superintendent of awards at the Pan-American Exposition, has announced as jurors in the department of electrical exhibits: Carl Hering, chairman; F. B. Crocker, A. V. Abbott, D. C. Jackson, W. S. Franklin, W. S. Barstow, W. E. Goldsborough, A. E. Kennelly, Henry S. Carhart and William L. Puffer.

CHIEF OFFICER HANS RUSSER, of the Baltimore and Hamburg liner *Batavia*, has been appointed captain of the German Antarctic expedition.

SIR NORMAN LOCKYER, having reached the age of sixty-five years, will at the end of the present year give up his duties as professor of astronomical physics in the Royal College of Science, London.

JUDGE ADDISON G. BROWN, of the United States District Court for the Southern District of New York, having served twenty years and having reached the age of 72 years, has resigned. Judge Brown is known among scientific men as a botanist. He was long president of the Torrey Botanical Club, and cooperated with Professor N. L. Britton in the publication of the illustrated 'Flora of the Northern United States and Canada.'

MEMBERS of the Indiana Forest Board, established at the recent session of the Legislature, have been appointed by Governor Durbin as follows: Professor William H. Freeman, of Wabash, secretary of the board; Professor Stanley S. Coulter, Purdue University, Lafayette; Finlay P. Carson, Michigan City, representing the Indiana Retail Lumber Dealers' Association; John Cochrane, Indianapolis, representing practical woodworkers; Albert Lieber, Indianapolis, representing the Indiana Forestry Association.

THE Executive Committee of the National Physical Laboratory of Great Britain have made the following appointments: *Superintendent of the Engineering Department*: T. E. Stanton, D.Sc., Victoria; *Assistants in the Physics Department*: J. A. Harker, D.Sc., Victoria; A. Campbell, B.A., Cambridge; H. C. H. Carpenter, M.A., Oxon., Ph.D., Leipzig; *Junior Assistants*: B. F. E. Keeling, B.A., Cambridge; F. E. Smith, Royal College of Science. It is expected that one or two more junior assistants will be appointed shortly. The London *Times* states that the alterations to Bushey-house and the new buildings for the engineering laboratory are well advanced, and it is hoped to begin work early in October. Of the staff, Dr. Stanton, after serving an apprenticeship with an engineering firm in the Midlands, has had a distinguished career at Manchester and Liverpool, and is now professor of engineering at University College, Bristol. His paper on 'Surface Condensers,' published in the *Philosophical Transactions*, is well known to engineers. Dr. Harker and Mr. Campbell have both done work of real value in thermometry and electric measurements; while Dr. Carpenter, who will have charge of the chem-

cal researches, after a successful course at Oxford, has gained further experience at Leipzig under Ostwald, and more recently at Owens College. Mr. Keeling obtained a double first in natural science and mechanical science respectively at Cambridge; while Mr. Smith was the most distinguished student of his year at South Kensington, and for two years has been one of Professor Rücker's assistants.

DR. CHARLES T. MOHR, the well-known botanist, died at Asheville, N. C., on July 17. He had been a resident of Mobile, Ala., for a number of years, but about a year ago moved to Asheville, N. C.

THE western press announces the death of Dr. Joshua Miller, of Arizona. Dr. Miller was an enthusiastic student of the archeology of the Territory, and was instrumental in creating the Arizona Antiquarian Association, of which he was made president; he was also instrumental in securing the enactment of a law for the protection of the antiquities of the territory from ruthless destruction.

GEORGE K. LAWTON, of the U. S. Naval Observatory, died at Washington on July 25.

THE death is announced of Felix Joseph Henri Lacaze-Duthiers, the eminent French naturalist. Born in 1821, he began the study of medicine, but soon turned to zoology, and was appointed professor at Lille at the age of thirty-three years. In 1865 he became professor of zoology at the Paris Museum of Natural History, and three years later he was appointed to a similar position in the faculty of sciences. He was elected a member of the Academy of Sciences in 1871. In 1875 he established a zoological laboratory on the coast of Brittany.

M. JOSEPH HIRSCH, professor at the Paris Conservatoire des arts et métiers and inspector of bridges and highways, has died at the age of sixty-five years.

DR. W. SCHUR, professor of astronomy and director of the observatory at the University of Göttingen, died on July 1, aged fifty-five years.

WE also regret to record the death of Dr. Antonio Piccone, professor of botany at Genoa,

and Dr. Otto Wiedeburg, professor of physics in the Institute of Technology at Hanover.

ON August 31, there will be a civil service examination for the position of instrument-maker, Coast and Geodetic Survey, at a salary of \$1,000. On September 3, there will be an examination for the position of computer in the Survey at the same salary.

MR. ANDREW CARNEGIE has presented the city of Winnipeg with \$100,000 for a free public library. The gift has been accepted by the City Council. Mr. Carnegie has also offered \$50,000 to build a library at St. Johns, Newfoundland.

WE learn from the *Astronomical Journal* that the government of the Republic of Ecuador has placed the Observatory of Quito at the disposal of the French Commission charged with the remeasurement of the Peruvian arc. M. Gonnessiat, astronomer of the Observatory of Lyons, has been entrusted with the direction of the establishment. The new director has taken possession of his post, and is actively engaged in organizing astronomical, meteorological and magnetic services.

THE Gutenberg Museum at Mayence was opened on June 23.

Two further tracts of land, together somewhat less than an acre in extent, have been purchased for the U. S. Naval Observatory at a cost of \$6,000.

Nature states that the biological station which had been kept on Lake Baikal for a year by the East Siberian Geographical Society, at Goloustnaya, on the west coast, has been closed. A rich collection of fishes, especially of *Cottus* species, and a great variety of *Gammarus* species have, however, been secured, and the latter are in the hands of Professor Sars, of Christiania.

PROFESSOR TODD's eclipse expedition to Singkep, an island of the Netherlands Indies, secured 28 photographs of the corona on May 18, partly through clouds. Mr. Percy Wilson, of the New York Botanical Garden, who went out as collector of the expedition, has obtained many valuable exhibits and living plants, among them numerous orchids. Mr. Wilson is

now in Java, making further collections in Buitenzorg, and will return home in August.

THE daily papers say that Dr. A. H. Doty, health officer of the port of New York, proposes to try to exterminate the mosquitoes of Staten Island. Men are said to be at work mapping all the marshes, stagnant pools, etc., and crude petroleum is to be released beneath the surface of the water. The marshes, etc., will also be drained.

UNIVERSITY AND EDUCATIONAL NEWS.

MR. A. C. BARTLETT has increased his gift for a gymnasium for the University of Chicago from \$125,000 to \$200,000.

MR. JOHN S. NEWBURY, of Detroit, has given Yale University \$25,000 for an organ, to be placed in Memorial Hall.

A NEW astronomical observatory with increased equipment, including the equatorial telescope which formerly belonged to the late Judge Knapp of New Jersey, is being erected at Lincoln University, Pa. This will be used mainly for purposes of instruction under the directorship of Professor Walter L. Wright, Jr. who has, for a number of years, been in charge of the department of mathematics at that institution.

THE General Purposes Committee of the Birmingham City Council has decided to recommend a grant of the proceeds of a half-penny rate which will provide the University with the sum of £5,000 annually.

FOUR members of the faculty of the Connecticut Agricultural College, Storrs, Conn., have been asked to resign, as a result, it is said, of their alleged opposition to the policy of President Flint. They are: Nelson S. Mayo, M.S., D.V.M., professor of anatomy, physiology and veterinary science; Henry A. Ballou, assistant professor of forestry, botany and military science; Thomas D. Knowles, instructor in English, mathematics, history and physical culture; Charles E. Myers, instructor in farm accounts and business methods, and secretary of the faculty.

WE learn from *The Botanical Gazette* that the regents of the University of West Virginia

have abolished the professorship in botany without notice to the present incumbent, Dr. E. B. Copeland. Dr. Copeland is spending the summer at the Cold Spring Biological Laboratory.

THE chair of pathology in the University of Sydney is vacant and applications for it are invited. The salary is £900 per annum and a pension of £400 per annum is allowed on certain conditions after twenty years' service. The sum of £100 will be allowed for passage expenses from Europe or America. The successful applicant is to begin his duties on March 1, 1902. Further particulars may be obtained from the Agent-General for New South Wales, 9 Victoria Street, London, S. W., to whom applications, stating applicant's age (which must not be more than forty years) and qualifications, and accompanied by four copies of each testimonial submitted, should be sent not later than September 14, 1901.

AT the July meeting of the Board of Regents, Mr. L. W. Hartman was elected to the professorship in physics at the Kansas State Agricultural College for the coming year. For the past year and a half Mr. Hartman has been on the staff of the department of physics at Cornell University.

KARL WILHELM GENTHE, PH.D. (Leipzig), has been appointed instructor in natural history in Trinity College.

THE following have been appointed assistants in histology and embryology at Cornell University: Arthur M. Bean, A.B., of Iowa College; Charles W. Bunker, B.S., of the University of Nebraska; Bert R. Hoobler, B.S., of Wabash College; William C. Thro, A.M., of Cornell University; Gersham F. White, B.S., of Ohio University, and William F. Wismar, A.B., of Rochester University.

DR. ALFRED KOCH, of Oppenheim, has been appointed associate professor and director of the Institute of Agricultural Bacteriology at the University of Göttingen.

DR. EDMUND LANDAU has qualified as docent in mathematics at the University of Berlin, and Dr. G. Senn as docent in botany in the University of Basle.