

The principal topics for discussion at the conference of delegates will probably include the following subjects: (1) Plans for cooperation in solar research, and the preparation of a general program of observations; (2) formation of an international committee to conduct this work; (3) adoption of a system of standard wave-lengths.

INVITATION TO THE INTERNATIONAL CONGRESS OF ARTS AND SCIENCE.

THE organizers of the congress, to be held at the universal exposition, St. Louis, on September 19-25, 1904, desire to invite the special attention of professors and men of science in the United States and Canada to the unexampled opportunity which it offers to meet and hear a great number of eminent men of learning. It is expected that more than three hundred eminent scholars of Europe and America will deliver discourses in the various departments and sections of the congress, and that several hundred shorter communications will be made by those present.

It is the desire of the directors of the fair and of all concerned in the organization that professors and instructors in our colleges and universities, and members of the learned professions generally, shall, so far as possible, do honor to our distinguished visitors by attending the congress. For this no fee is charged and no formality is necessary except enrolment on arrival. It is, however, desirable to apprise Mr. Howard J. Rogers, director of congresses, Universal Exposition, St. Louis, Mo., in advance, what departments of the congress one desires to attend. A program of its proceedings, with such other instructions as may be necessary, will be sent by Mr. Rogers on application.

NICHOLAS MURRAY BUTLER,

Chairman of the Administrative Board.

SIMON NEWCOMB,

Chairman of the Organizing Committee.

SCIENTIFIC NOTES AND NEWS.

THE nomination of Dr. George H. Darwin, Plumian professor of astronomy and experi-

mental philosophy at Cambridge, as president of the British Association for the Advancement of Science was confirmed by the general committee at the Cambridge meeting, and he will preside at the meeting to be held next year at South Africa. Dr. John Perry, professor of mechanics and mathematics at the Royal College of Science, London, was elected treasurer in succession to Professor Carey Foster. The association will meet in York in 1906. It held its first and its fiftieth meeting at York, and two years hence will celebrate its seventy-fifth anniversary.

ON the occasion of the meeting of the British Association at Cambridge the university conferred its doctorate of science on the following men of science: Johan Oskar Backlund, director of the Central Nicolas Observatory at Poulkovo; Henri Becquerel, professor of physics in the École Polytechnique, Paris; Julius Wilhelm Brühl, professor of chemistry in the University of Heidelberg; Adolf Engler, professor of botany in the University of Berlin; Paul Heinrich von Groth, professor of mineralogy in the University of Munich; Albrecht Kossel, professor of physiology in the University of Heidelberg; Henry F. Osborn, professor of zoology in Columbia University, New York; Nikolaas Gerard Pierson, sometime Prime Minister of the Kingdom of the Netherlands; Vito Volterra, professor of applied mathematics in the University of Rome; Sir David Gill, F.R.S., his Majesty's astronomer at the Cape of Good Hope; Alfred William Howitt; Sir Norman Lockyer, F.R.S., director of the Solar Physics Observatory, South Kensington; Major Percy Alexander MacMahon, F.R.S., late Royal Artillery, formerly professor of physics, Ordnance College, Woolwich; Sir William Ramsay, F.R.S., professor of chemistry, University College, London; Arthur Schuster, F.R.S., professor of physics in the Victoria University of Manchester; Sir William Turner Thiselton-Dyer, F.R.S., director of the Royal Botanic Garden, Kew.

THE Seventh International Zoological Congress will meet in Boston in 1907 under the presidency of Mr. Alexander Agassiz.

BELOIT COLLEGE conferred at its recent commencement the degree of doctor of laws on Professor George E. Hale, director of the Yerkes Observatory, and on Professor Rollin D. Salisbury, head of the department of geography of the University of Chicago.

THE gold medal of the American Geographical Society has been presented to Dr. Sven von Hedin by the United States Ambassador at Stockholm.

DR. N. L. BRITTON, director of the N. Y. Botanical Garden, and Dr. J. N. Rose, of the U. S. National Museum, have taken up the study of the Cactaceæ. They propose to gather large living collections both at New York and Washington, much as they have done with the Crassulaceæ, and to continue their studies for a series of years, basing descriptions largely on living plants. Extensive field work will be done, especially in Mexico, and the earnest cooperation of botanists traveling in the southwest is solicited. The National Museum will gladly furnish means for sending material to Washington.

At the meeting of the board of regents of the University of California held on August 9, 1904, Professor C. A. Kofoid, of the department of zoology, was granted leave of absence from the university until March 15, 1905. Professor Kofoid will have charge of the plankton work of the Tropical Pacific cruise of the *Albatross*, to be conducted by Mr. Alexander Agassiz during the coming winter.

MR. C. F. AUSTIN, of the Maryland Agricultural College, has been appointed agriculturist at the central Cuban station.

PROFESSOR F. KOHLRAUSCH has retired from the presidency of the German Reichsanstalt.

PROFESSOR W. FÖRSTER, who celebrated the fiftieth anniversary of his doctorate on August 5, will retire from the directorship of the Berlin Observatory on October 1.

DR. KARL VON VOIT, of the Physiological Laboratory at Munich, celebrated, on August 8, the fiftieth anniversary of his doctorate.

MR. S. A. McDOWELL, B.A., Trinity College, Cambridge, has been appointed assistant to the superintendent of the Museum of Zoology.

DR. H. C. MÜLLER, vice-director of the experiment station at Halle, has been appointed director of the chemical control station at the same place, to succeed the late Dr. L. Bühring.

DR. K. WINDISCH, of Berlin, has been appointed director of the agricultural institute at Hohenheim.

DR. TH. LOESNER has been appointed curator in the botanical museum of Berlin University.

At a recent meeting of the state board of agriculture an appropriation was voted for a geological survey of the mineral resources of Virginia. The survey will be conducted jointly by the state board of agriculture and the Virginia Polytechnic Institute. Dr. Thomas L. Watson, professor of geology in the Polytechnic Institute, was appointed geologist-in-charge of the survey.

THE museum of the University of Michigan has sent a party to the Porcupine Mountains and Isle Royale in Northern Michigan. The object of the trip is to make a preliminary ecological survey of the fauna and flora of the areas visited and to collect specimens for the museum. The field expenses of the party are met by the combined gifts of Mr. Bryant Walker, of Detroit, and the Hon. Peter White and Mr. N. M. Kaufmann, of Marquette. The party will spend about two months in the field.

WE credited last week to the daily papers the statement that Professor Frederick Starr, professor of anthropology at the University of Chicago, would resign and would make an extended expedition to Japan and China. We are informed that this statement is entirely incorrect.

DR. H. H. TURNER, Savilian professor of astronomy in the University of Oxford, gave six illustrated lectures on astronomical discovery, and Professor Hugo de Vries, professor of botany at the University of Amsterdam, gave four lectures on the mutation theory at the University of Chicago during the present summer.

STANFORD UNIVERSITY publishes the bibliography of its staff in zoology, professors and students to 1903. In the list are 127 titles of papers by Professor Charles Henry Gilbert, 4 by Associate Professor George Clinton Price,

7 by Associate Professor Harold Heath, 19 by Assistant Professor John Otterbein Snyder, 21 by Curator Edwin Chapin Starks, 3 by James Francis Abbott, 3 by Frank Cramer, 9 by Walter Kenrick Fisher, 13 by Henry Weed Fowler, 1 by Arthur White Greeley, 28 by Joseph Grinnell, 1 by James Alexander Gunn, Jr., 2 by Flora Hartley (Mrs. C. W. Greene), 4 by Edmund Heller, 1 by James Franklin Illingworth, 1 by Richard Crittendon McGregor, 1 by Charles James Pierson, 4 by William Weightman Price, 4 by Cloudsley Rutter, 2 by Norman Bishop Scofield, 3 by Alvin Seale, 4 by Robert Evans Snodgrass, 2 by John M. Stowell and 4 by John Van Denburgh. The publications of President Jordan comprise 433 titles. The publications of Professor V. L. Kellogg, of the separate chair of entomology, are not included in this list.

THE centenary of the discovery of morphine by Adam Serteurner has recently been celebrated at Paderborn in Westphalia.

A STATUE of Sir Thomas Browne, by Mr. Henry Pegram, will be erected at Norwich.

MR. FRANK GUSTAVE RADELFINGER, assistant professor of mathematics in George Washington University and a practising patent attorney, known for his work on differential equations, died at Washington on August 15 at the age of thirty-four years.

THE REV. DR. CHARLES W. SHIELDS, professor of the harmony of science and revealed religion at Princeton University since 1865, died at Newport on August 25, at the age of seventy-nine years.

PROFESSOR ANTONI DRASCHEQ, a member of the Austrian sanitary council, celebrated for his investigations in the disease of cholera, has died at Vienna.

THE death is also announced of Christof von Sigwart, professor of philosophy at Tübingen, and of the Rev. Dr. H. P. Gurney, principal of the Durham College of Science and professor of mathematics, who was killed by an Alpine accident on August 13.

As we have already announced, the Society of Chemical Industry will meet in New York, beginning on September 7. About one hun-

dred foreign members are expected. The meeting will open with a reception at the Chemists' Club on Wednesday, and the regular sessions will begin at Columbia University on the following day. Elaborate arrangements have been made for the entertainment of the visitors, who will be taken by special train to the chief centers of chemical industry of the country and to the International Congress of Arts and Science at St. Louis.

THE Belgian Academy of Sciences offers a prize of 1,000 francs for the best research on the development of *Amphioxus*.

THERE is being held this month at Paris an International Exposition of Hygiene.

A CHEMICAL laboratory for the examination of imported food products will be opened in the Appraiser's Stores Building of the Treasury Department in New York by the Department of Agriculture on September 5. Five expert chemists will be engaged.

THE Antarctic relief ship, *Terra Nova*, has returned to England, and the first instalment of the specimens of the National Antarctic Expedition has arrived at the British Museum. The British Museum will undertake the classification, description and publication of the biological and geological collections.

ACCORDING to the *Consular Reports* the board of directors of the German Colonial Society has appropriated \$7,140, to be paid in three yearly instalments, as an aid to the scientific experiment station which Dr. Hermann Meyer is soon to establish in the German colony of Neu-Würtemberg, Ria Grande do Sul, Brazil. This station is being organized for the purpose of making a large number of agricultural experiments. It is hoped that it will help the German colonists of the southern States of Brazil to secure better returns in the way of crops, which as yet, because of improper cultivation, have not been entirely satisfactory. About 250 acres, near the town of Elsenau, have been secured for the experiment station, and on this a number of houses will be erected, which will serve as workshops and dwellings for those engaged in conducting the experiments.

THE New York *Times* states that the Interstate Park, for which the people of New York and New Jersey have had to fight so hard, is now an assured fact. It will extend fourteen miles along the west bank of the Hudson. This is the result of the agitation against the blasting away of the Palisades, which tower to the height of from 300 to 600 feet from Fort Lee to Piermont. Already the commission has expended \$344,264 in laying out this park. In order to carry out the plans of the commission it will be necessary to acquire 175,000 acres, but there is a large sum still in the treasury, and the two states have agreed to bear an equal amount of the additional expense that will be necessary to make this park one of the most beautiful in the country. Work is just being begun on a boulevard that will extend the entire length of the park.

OUR consul at Frankfort writes to the Department of Commerce that there are 220 agricultural cooperative associations in Russia. Some of them receive subsidies from the government or the district council. These associations purchase, at wholesale, agricultural implements and machinery, seeds, breeding stock, etc., which are sold on credit or on the instalment plan to the individual farmers. Agricultural exhibitions are held and lecturers are employed who go from place to place instructing the farmers in all branches of husbandry. Grounds are also set apart for experimenting by cultivating new plants. In many other ways the cooperative associations result beneficially for the Russian peasant.

UNIVERSITY AND EDUCATIONAL NEWS.

WELLESLEY COLLEGE has received \$10,000 and a collection of paintings by the will of A. W. Stetson, of Braintree.

COLUMBIA UNIVERSITY will celebrate the hundred and fiftieth anniversary of its foundation as King's College on the last four days of October. There will be a public reception on the afternoon of Friday, October 28, with all the university buildings open for inspection, and receptions within the larger reception, at which the officers of the different departments will entertain. On Monday morning corner stones of four new buildings will be

laid: the university chapel, the School of Mines building, Hartley Hall and a second university dormitory; and if the completion of the building is accomplished, the new Thompson physical education building of Teachers College will be dedicated. On Monday afternoon there will be the formal university convocation with a commemorative address by President Butler. There will also be lectures by foreign guests, but the details have not yet been announced.

ACCORDING to the daily papers the treasurer of the Catholic University, Washington, has become financially embarrassed. It is said that he has invested \$876,000 of the university's funds for it, paying the university 6 per cent. interest. He gave on July 25 a deed of trust for this amount to the university, but several banks have filed a petition in bankruptcy against him and seek to set aside the deed of trust as void.

DR. EDMUND J. JAMES, president of Northwestern University, has been elected president of the University of Illinois, succeeding Dr. A. S. Draper, now superintendent of State Instruction in the State of New York.

ELIAS P. LYON, assistant professor of physiology in the University of Chicago, has accepted the professorship of physiology in St. Louis University. Other members of the staff will be C. H. Neilson, associate professor of physiological chemistry and O. H. Brown, instructor in physiology, both coming from the physiological department of the University of Chicago.

MR. CHANCEY JUDAY has been appointed instructor in zoology at the University of California.

MR. LOYE H. MILLER has been appointed teacher of biology in the State Normal School at Los Angeles, California.

DR. ROBERT E. MORITZ, of the University of Nebraska, has been elected professor of mathematics in the University of Washington to succeed Professor Arthur Ranum who has resigned.

DR. BÖTTGER, docent for physical chemistry in the University of Leipzig, has been called to the Massachusetts Institute of Technology.