

and 'Meteorology in the Colleges and Universities.'

#### INDIAN METEOROLOGY.

THE opening address in the subsection on cosmical physics at the recent British Association meeting in Cambridge was by Sir John Eliot, late meteorological reporter to the government of India. Sir John Eliot's address is published in full in *Nature* for August 25, and deals with Indian meteorology in relation to the general meteorology of the Indo-oceanic region, and with the abnormal features of the meteorology of that area for the unique period 1892-1902. It also suggests a coordination of the meteorological observations of the British Empire, and the creation of a central office for the investigation of problems of general meteorology.

R. DEC. WARD.

#### SCIENTIFIC NOTES AND NEWS.

THE last issue of the program of the International Congress of Arts and Science publishes the names of 301 speakers, of whom 64 are not teachers in universities or other institutions of learning, the rest being distributed as follows, only those universities represented by three or more being given:

- 23: Columbia.
- 22: Chicago.
- 21: Harvard.
- 11: California.
- 10: Berlin, Paris, Yale.
- 8: Cornell.
- 7: Johns Hopkins.
- 6: Vienna.
- 5: Cambridge, Wisconsin.
- 4: Heidelberg, Leipzig, Massachusetts Institute of Technology, Stanford, Michigan, Nebraska.
- 3: McGill, Tokio.

Fifty-seven institutions were represented by one or two speakers.

PROFESSOR ROBERT KOCH has recently returned from Detmond, where he was engaged in investigating an outbreak of typhoid fever for the German government, and has since been at Paris, where he was entertained by the Pasteur Institute. In the course of the winter he will proceed to German East

Africa in order to continue those studies of tropical and other diseases which he had not completed during his recent visit to Rhodesia. In particular he will continue to investigate the part played by ticks in conveying the infection of various cattle diseases.

SIR WILLIAM RAMSAY was entertained by the Physical Science Department of the Brooklyn Institute of Arts and Sciences at a banquet in Union League Club, on the evening of October 24. On the morning of the same day he spoke to the students of the College of Arts and Engineering of the Brooklyn Polytechnic Institute.

DR. JAMES WARD, professor of moral philosophy and logic, at Cambridge University, who gave a course of lectures at the University of California and one of the addresses at the International Congress of Arts and Science, has returned to England after giving addresses and being entertained at Princeton, Johns Hopkins, Wesleyan, Cornell and Columbia Universities.

COURSES of Lowell lectures are being given by Principal C. Lloyd Morgan, of University College, Bristol, on 'The Interpretation of Nature,' and by Dr. Pierre Janet, of the Collège de France, on 'Hypnotism and Allied Phenomena.'

DR. EWALD HERING, professor of physiology at the German University of Prague, has recently celebrated his seventieth birthday.

PROFESSOR I. C. RUSSELL, of the University of Michigan, has been engaged the past summer in examining the surface geology of the Northern part of Lake Michigan.

MR. G. V. NASH, of the New York Botanical Garden, accompanied by Mr. Taylor, sailed from New York to Inagua, on October 5, for the purpose of continuing the work on the flora of the Bahamas. Dr. H. H. Rusby returned from Kew in September, having spent several weeks at work in the herbarium of that institution and in the British Museum, making investigations on the flora of Colombia, South America. Dr. M. A. Howe has also returned from an extensive tour among European herbaria. Visits were made to the herbaria at Kew, British Museum, Lund,

Upsala, Copenhagen, Paris and elsewhere for the purpose of studying types of algæ. A large number of photographs and notes on critical forms were secured.

THE government of India has created an imperial sanitary commissioner, separate and independent from the director-generalship of the Indian Medical Service, as the first step towards the creation of a new sanitary department. Major J. T. W. Leslie, I.M.S., has been transferred from the secretaryship of the director-general to the new appointment.

DR. EUGENE ALBRECHT, of Munich, has been appointed director of the Senckenberg Institute of Pathology and Anatomy at Frankfurt-a-M.

THE opening paper of the approaching session of the Royal Colonial Institute, London, will be read by Dr. G. R. Parkin. It will embody the results and observations of his recent tour of the Empire as organizer of the Cecil Rhodes scholarships scheme.

A COURSE of lectures on evolution in the vegetable kingdom was given at Gresham College, London, by Dr. E. Symes Thompson, during the first part of the present month.

DR. A. C. LANE, state geologist of Michigan, will give a series of lectures on economic geology at the University of Michigan during the second semester.

PROFESSOR D. CLIFFORD ALLBUTT, of Cambridge, made one of the addresses on the occasion of the unveiling of the tablet in memory of Dr. Jesse William Lazear, in the new surgical building of the Johns Hopkins Hospital.

WE regret to record the death of Dr. Hermann Kortum, professor of mathematics at the University of Bonn, at the age of 68 years.

AT the recent Cambridge meeting of the British Association, the newly established Psychological Society held a special meeting in conjunction with the section of physiology. The section of physiology is now definitely to include in its title the two studies of physiology and experimental psychology.

THE next meeting of the Society of German men of Science and Physicians will be

held at Meran, Austria, under the presidency Dr. Franz von Winckel, professor of gynecology at the University of Munich.

THE St. Petersburg Institute of Experimental Medicine has sent an expedition to the shores of the Black Sea to inquire into the prevalence of malaria, especially in the neighborhood of Gagory.

ACCORDING to Reuter's agency the Duke of Orleans has applied to the Norwegian government for permission to hire Dr. Nansen's ship, the *Fram*, for the purpose of an Arctic expedition next year. The *Aftenposten* learns that the admiralty will propose as conditions of the arrangement that Otto Sverdrup shall captain the ship, that the plan for the expedition shall be sanctioned by the Norwegian authorities, and that the University of Christiania shall have the benefit, at least in part, of the scientific results of the expedition.

M. LÉON CLÉRY has bequeathed \$20,000 to the French Society for the Protection of Animals, the interest to be awarded annually to the schoolmaster or schoolmistress who shall have done most to cultivate among his or her pupils the spirit of compassion for their dumb fellow-creatures.

THE telescopes and general apparatus used for the production of the late Dr. Isaac Roberts's celestial photographs are to be sold, with the observatory house and grounds, situated 800 feet above sea-level. The telescopes and apparatus may be sold separately. For particulars Mr. W. S. Franks, F.R.A.S., Starfield, Crowborough, Sussex, may be addressed.

DR. BUCHAN, the secretary of the Scottish Meteorological Society, has sent to the London *Times* the following communication, dated Hamburg, September 30: "In acknowledging the much esteemed letter of the 23d of this month the German Seewarte take occasion to express their great regret at the closure of the important observatories on Ben Nevis and at Fort William. The stoppage of the observatory on the summit so exceptionally situated, and the low level station, will altogether be found to be a heavy loss to meteorological investigation. In view of the great importance of these observatories we confidently in-

dulge in the hope that we have only to do with a temporary interruption. As, similarly, the station on Sonnblick, in Austria, is rendered possible only through the cooperation of the Sonnblick Society, which places private means at the disposal of the observatory, so also may the observatory on Ben Nevis be kept in operation. The German Seewarte has the honor to express its best thanks for the very regular receipt of weather telegrams, and, in view of the outstanding results, to express the hope that these telegrams, whose loss will be found so heavy, will again appear at no distant date.—Herz.”

ON January 1 the Abbasia Observatory was transferred to its new site at Helwan, about fourteen miles south of Cairo. The site is on the desert plateau above the town, and the buildings have an open view across the desert to the north, east and south, while on the west is the Nile valley. A complete meteorological equipment and time-signal arrangement has been installed, and there is a transit house and an equatorial house, while a house for magnetic self-registering instruments is being constructed. The transit pillar is in lat.  $29^{\circ} 51' 33''.5$  N., long.  $31^{\circ} 20' 30''.2$  E., the latter value depending on that of the Venus station in the Mokattam hills ( $31^{\circ} 16' 33''.6$  E.). The altitude of the cistern of the barometer above mean sea-level at Alexandria is 377.4 feet.

THE Bureau of Animal Industry of the U. S. Department of Agriculture has assigned one thousand dollars of the recent congressional appropriation for experiments in animal breeding and feeding to the cooperative investigations with the respiration calorimeter now in progress at the Pennsylvania Station. Plans have been made for an investigation upon the influence of age and individuality upon the metabolism of cattle and two full-blood yearling steers, one an Aberdeen Angus and one a Jersey, have been purchased for use in the investigation. Careful records will be kept of the food consumed and the rate of growth of these animals. In addition, occasional digestion experiments will be made with them to determine the assimilability of the food and the actual production of

lean meat; while each winter there will be made, with the aid of the respiration calorimeter, scientifically accurate determinations of the actual gains of lean meat and fat respectively. It is expected to continue the experiment until the animals are mature. In this way it is hoped to secure more exact knowledge as to the actual points of difference in the feeding qualities of the dairy and beef types of cattle, while at the same time valuable data will be obtained as to the nature and economy of the growth made at different ages.

WE learn from the London *Times* that a new society has been formed, called the Ethological Society. The object of the society is the study of human nature, not through one department of science, but taking from all the different branches the most practical and useful to arrive at a knowledge of the intellect and character of man and the laws which govern their manifestation, and collecting all material that is available and applying it to the preservation of the mental health of the individual, to education, moral reform, and the solution of various sociological problems. The society will hold a series of *conversazioni*, at which authorities will be invited to deliver lectures on the relation of their branch of art, science or philosophy to human nature. The president is Dr. Bernard Hollander, and the preliminary list of vice-presidents includes the names of Mr. Oscar Browning, Dr. Stanton Coit, Mr. John Churton Collins, Mr. W. L. Courtney, Mr. Jerome K. Jerome, Mr. Henry Arthur Jones, Mr. George R. Sims, Dr. Alfred Russel Wallace, F.R.S., Mrs. St. Leger Harrison, Miss L. M. Faithfull and Mr. George Meredith. The inaugural meeting and first *conversazione* will be held at the Galleries of the Royal Society of British Artists, Suffolk Street, Pall-mall, S. W., on Wednesday, November 16, at 8:30 p.m., when the president will deliver an address.

THE University of London has issued its list of university extension courses, some seventy in all at various centers, for the coming session. ‘The Evolution of Mankind as seen in the Child and the Race’ will be given at University College on Monday evenings.

The first year's work will consist of five lectures by Dr. Chalmers Mitchell on general biology, to be followed by ten lectures on anthropology by Dr. Westermarck, and ten on animal psychology by Professor Lloyd Morgan. Among other courses will be 'Social and Industrial England,' at Ealing and Erith, by Dr. Holland Rose; 'Japan and China,' by Mr. Ernest Foxwell, at Streatham and Sutton. Professor Vivian Lewes will lecture at Balham, New-cross and Rotherhithe, on 'The Chemistry of Air, Fire and Water'; Dr. Fison, on 'Great Discoveries in Science,' at Gresham College; Professor Bottomley, at Hammersmith, on 'Recent Researches on Bacteria in Relation to Life'; Mr. Alfred Milnes, in 'Economics,' at the Regent Street Polytechnic, the City of London College and Battersea; and Mr. Chisholm and Mr. Andrews, at various centers on 'The Aims and Methods of Geographical Study.' Most of the courses will be in the evening.

#### UNIVERSITY AND EDUCATIONAL NEWS.

LORD RENDEL, president of the University College of South Wales, Aberystwith, has for the fifth time forwarded a cheque for £1,000 to the registrar of the college, £750 being assigned to the college for the increase of the stipends of the staff and £250 to the county schools of Cardiganshire, Merionethshire and Montgomeryshire for exhibitions and bursaries.

A DEPARTMENT of experimental psychology has been established in the Western University of Pennsylvania, under the charge of Edmund B. Huey, A.B. (Lafayette), Ph.D. (Clark). Two good-sized rooms and a dark-room are being fitted up for the new department, and an appropriation has been made to meet the initial needs for apparatus and books.

THE registration at the University of Michigan has reached 4,100, the largest in its history.

ACCORDING to the *Educational Times*, the buildings of the Metallurgical Department of the University of Birmingham have been opened. They form only a small portion of the scheme of building at present being undertaken at Bournbrook, which will not be completed for two or three years; but the cramped

state of the present university buildings in Edmund Street necessitated the pushing forward of the Metallurgical Department, which, in a large iron center like Birmingham, is one of the most important connected with the university. All the plant and machinery are of full working size. For instance, there is a two-ton Siemens furnace, with all the latest equipment necessary for a commercial undertaking, and capable, if necessary, of a large weekly output of steel. It is not, however, intended to produce steel for sale; the object is rather to familiarize the students with the various causes, chemical and other, which affect the quality of steel. Another portion of the department will be devoted to metals other than iron and steel.

PROFESSOR F. H. H. CALHOUN, Ph.D., a graduate of the University of Chicago, was recently elected professor of geology and mineralogy in Clemson Agricultural College of South Carolina. Dr. Calhoun has been engaged in practical work for the United States Geological Survey out west during the past year or so, and since his arrival at Clemson College, he has planned some important geological work in South Carolina. Dr. G. E. Nesom has resigned the professorship of veterinary science and the position of state veterinarian to accept the position of assistant commissioner of agriculture in the Philippine Islands. Dr. Nesom has been connected with the college for a number of years, and he has done valuable work for the State of South Carolina. Dr. Louis A. Klein, who is connected with the United States Bureau of Animal Industry, was recently elected to succeed Dr. Nesom in Clemson Agricultural College. Dr. Klein will report for duty on November 1. He is a graduate of the University of Pennsylvania in the veterinary department.

DR. EMIL WIECHERT, who recently declined a call to the University of Königsberg, has been promoted to a full professorship of mathematical physics in the University of Göttingen.

DR. ERICH KAYSER, district geologist at Berlin, has been appointed full professor and director of the Mineralogical Institute at the University of Giessen.