

under the conduct of fellows of the society conversant with the geology of the several selected districts. These excursions will begin on Wednesday, September 18, and the excursionists will all be back in London by the evening of September 25. The celebration of the centenary, which will extend over three days, will begin on Thursday, September 26, at 11 o'clock, in the Hall of the Institution of Civil Engineers, when the chair will be taken by Sir Archibald Geikie, who has been elected president of the society for the second time in order that he may preside on this occasion. The foreign members and foreign correspondents, and the delegates from institutions at home and abroad, will then be received by him, and will present their addresses. In the afternoon, at 3 o'clock, in the same hall, the president will deliver an address, while in the evening a banquet will be given by the society to its colonial and foreign guests.

Friday, September 27, will be chiefly devoted to visits to museums, galleries, etc., concluding with an evening reception. On Saturday, September 28, short excursions have been projected to places of geological interest within easy reach of London. On Monday, September 30, the visitors will be divided into two sections, one of which will go to Oxford, the other to Cambridge. It is understood that the universities will confer honorary degrees on some of the more distinguished geologists from beyond the seas, and that college hospitality will be as abundant and hearty as usual, while those visitors who may still have energy enough left for field-work will be taken on geological excursions from both the university towns. This well-planned combination of scientific intercourse with social pleasure can hardly fail to have a lasting effect in forming and confirming friendships by bringing the geologists of many different countries into close personal relations with each other.

*SIR JOSEPH HOOKER'S NINETIETH
BIRTHDAY*

SIR JOSEPH HOOKER has addressed the following letter to Sir Trevor Lawrence in reply

to the congratulations of the Royal Horticultural Society on the occasion of his ninetieth birthday:

THE CAMP, SUNNINGDALE,

July 15, 1907.

My Dear Sir Trevor: Your letter of the 25th June conveying the hearty congratulations of the President, Council, and Fellows of the Royal Horticultural Society on the approach of my 90th birthday has gratified me more than I can express.

It is not by many times the first instance I have experienced of the friendly and all too liberal estimate of my labors in the cause of horticulture that the society has entertained.

It has been a source of great regret that I was obliged, when resigning my post of chairman of the Scientific Committee, to abandon all hope of attending our meetings on account of having to devote my energies to the Directorship of Kew, and to the completion of labors on botanical works I have in progress.

I had also to endeavor to overtake arrears of work extending over many years, which are still far from being overtaken. As a botanist I have hereby lost much, for since the days of David Douglas, the Royal Horticultural Society has contributed more botanical science, as represented by collections, publications and experimental research, than any other establishment in Europe.

I have now to request you as their president to accept yourself, and convey to the council and to my fellow-members, my pride and gratitude for this most welcome evidence of their friendship and esteem.

With every good wish for the continued welfare and renown of the society,

Believe me, dear Sir Trevor, sincerely yours,

JOS. D. HOOKER

SCIENTIFIC NOTES AND NEWS

THE seventh International Zoological Congress opens its meeting under the presidency of Mr. Alexander Agassiz at Boston on August 19. An account of the general features of the program, including the visits to New York, Philadelphia and Washington, will be found in the issue of *SCIENCE* for May 17. The full program, so far as papers were announced up to that time, will be found in the issue of *SCIENCE* for August 2.

THE British Association for the Advancement of Science opened its annual meeting

at Leicester on July 31, when Sir E. Ray Lankester resigned the chair to Sir David Gill, who gave the address published in this issue of *SCIENCE*. The nomination of Mr. Francis Darwin to be president next year was confirmed.

DR. J. S. MURAT has been appointed director of the Meteorological Institute of Bucharest in the place of Dr. S. C. Herpites, who has retired from active service.

DR. OTTO WALLACH, professor of chemistry at Göttingen, and Dr. Karl Graebe, professor of chemistry at Frankfort, have been elected corresponding members of the Berlin Academy of Sciences.

PROFESSOR EUGENE S. TALBOT, professor of stomatology in the Woman's Medical School of Northwestern University, is one of the honorary presidents of the International Stomatological Congress that met in Paris last week.

DR. HUGO BÜCKING, professor of mineralogy and petrography at the University of Strassburg, has celebrated the twenty-fifth jubilee of his university professorship.

DR. FRIEDRICH HILDEBRAND, professor of botany at Freiburg, has retired from active service.

PROFESSOR J. S. KINGSLEY, of Tufts College, spends next year in Europe on leave of absence, sailing on August 31. His address for letters will be in care of Baring Brothers, Bishopsgate, London, England. Separata, etc., may be sent as usual to him at Tufts College, Mass.

PROFESSOR B. K. EMERSON, of Amherst College and the Geological Survey, is this summer continuing his studies in the geology of central Massachusetts. The Taconic Quinsigamond and Ware folios are practically ready for publication.

PROFESSOR JEREMIAH W. JENKS, of Cornell University, a member of the United States Immigration Commission, is on a tour of the Canadian northwest investigating the matter of American immigration into Canada.

PROFESSOR T. G. MASARYK, professor of philosophy in the Bohemian University of Prague, has arrived in New York. He will

make an address at the International Council of Unitarians, which meets in Boston in September, and will also make other addresses.

A MONUMENT to Bunsen is to be erected at Heidelberg.

DR. ERNST KAYSER, the astronomer, has died at Danzig, at the age of seventy-eight years.

DR. HEINRICH HOYER, emeritus professor of anatomy at Warsaw, has died at the age of seventy-two years.

THE death is announced of Dr. H. Kreutz, professor of astronomy at Kiel.

DR. WALTER VON KNABEL, docent for geology and paleontology at the University of Berlin, died while on an expedition to the interior of Iceland.

PROFESSOR WILLOUGHBY DAYTON MILLER died on July 27, after an operation for appendicitis, in the hospital at Newark, Ohio. Dr. Miller took his A.B. degree at Michigan in 1875. He studied dentistry at the University of Pennsylvania, where he graduated in 1879. He then went to Berlin, and became a professor in the dental department of the university of that city. He held this position until last month, when he resigned it to accept the deanship of the dental department of the University of Michigan. He returned to this country in June, and after a few days spent in Ann Arbor in arranging for the duties which he was to assume in September, he went to his old home in Ohio. Dr. Miller is well known, both among medical and dental men, on account of his most excellent and thorough work on dental caries. His great book entitled "*Die Bakteriologie des Mundholdes*" has been translated into several modern languages. His death will be greatly regretted both in this country and in Europe.

THE hygienic exhibition which is to be held in connection with the fourteenth International Congress of Hygiene at Berlin in September will be under the auspices of the Cultus-minister, the Imperial Health Bureau, and the medical departments of the army and navy, as well as leading representatives of

hygienic science in general. The president is Professor Radner.

THE eleventh International Navigation Congress is to be held at St. Petersburg in May, 1908.

THE third International Congress on Provision for the Insane will be held at Vienna from October 7 to 11, 1908, under the presidency of Professor Obersteiner. The general secretary of the congress is Dr. Alexander Pilcz, ix Lazarethhasse 14, Vienna.

It is stated in *Nature* that the *Nimrod*, in which Mr. E. H. Shackleton's expedition will proceed to the Antarctic regions, sailed from the Thames on July 30 with Lieutenant Rupert England in command. Lord Kelvin has presented to the expedition a standard compass and sounding instruments. The admiralty is lending a compass, chronometers, charts and sounding apparatus, as well as three Lloyd-Creak Dip instruments for the landing party. Watches are being supplied by the Royal Geographical Society, and, in addition, the vessel will be equipped with a liquid steering compass and a special pole compass. The members of the expedition on board of the *Nimrod* are Mr. James Murray, the biologist of the expedition; Mr. W. A. Michell, surgeon and zoologist; and Mr. A. F. Mackay, the junior surgeon of the landing party, who will also engage in zoological work. At Lyttelton, New Zealand, the remaining members of the expedition will join the ship. These include, besides Mr. Shackleton, Mr. E. Marshall, senior surgeon of the shore party and cartographer of the expedition; Lieutenant Adams, R.N.R., who will be in charge of the meteorological work; and Sir Philip Brocklehurst, for survey work and field geology. Dr. David, professor of geology in Sydney University, has arranged to accompany the expedition south to King Edward VII. Land.

ENGLISH journals state that of eight balloons sent up by the staff of the Manchester University in connection with the international movement to discover data in regard to the atmospheric phenomena of the clouds, three have been located. The balloons carried a recording apparatus, bearing instructions to

the finders to return them to Manchester, and the examination of the records, which were picked up at Macclesfield, Lincoln and Leeds, shows that the balloons reached an altitude of about ten miles. A temperature of 20 degrees below zero Fahrenheit is recorded.

ALTHOUGH diamonds have been found in at least thirty places in the United States, the only locality where they occur in place has recently been discovered and has been investigated by Mr. George F. Kunz, the gem expert, and Dr. H. S. Washington, petrographer. They occur in an igneous rock, similar to that of the South African mines, which forms a small stock near Murfreesboro, Pike County, Ark. The first two stones were found August 1, 1906, and since then many of them have been picked up, the total number found at last report being 130. Many are white and of good water, others are yellow and some are of brown bort. The two largest stones weigh $6\frac{1}{2}$ carats, one being exceedingly fine white and the other brown. They are found on the surface as well as within the greenish, friable, decomposed peridotite, a rock somewhat like the famous "blue ground" of Kimberly. The property is being actively prospected and developed.

Nature states that private enterprise has succeeded in founding, with the sanction of the Ministry of Education, confirmed by the Czar, an Institute of Archeology and Archeography in Moscow. The institute, which has just obtained its charter, ranks with a university, and is open to all graduates of Russian or foreign universities. Its aim is to prepare qualified archeologists and "archeographers." The latter term is applied to persons skilled in the preservation and use of historical archives, libraries, museums and other collections, public and private, demanding special knowledge. The Moscow Institute of Archeology is the first institution in Russia founded on autonomous principles; it has the right to elect its own staff of professors, and generally to conduct its own internal affairs, subject only to a possible veto of the minister of education in certain cases. The course is a three years' one, the final year of which

must be spent in practical work either in archeological expeditions and research among the monuments of antiquity as yet so little studied in Russia, or in similar special work at home or abroad. The institute grants the degree of doctor of archeology or archeography. Among those connected with the new institute whose names are favorably known outside Russia may be mentioned Dr. Uspensky, director of the institute, the author of fifty capital monographs in Russian; Dr. Fleischer, who was associated with English and American archeologists in recent excavations in Persia; Professor Grot, and other Moscow professors. Docent Visotsky has been appointed secretary to the institute.

UNIVERSITY AND EDUCATIONAL NEWS

The Kansas legislature appropriated for the state university at its last session \$250,000 for the erection of engineering buildings, work on which will be begun at once.

THROUGH the generosity of Mr. Arthur J. Cox, of Iowa City, an alumnus of the engineering department of the State University of Iowa, an annual prize of one hundred dollars has been established in the College of Applied Science of that institution for the best thesis submitted for the first degree in engineering. The prize is to be known as the "Thomas J. Cox prize in engineering," in memory of the father of the donor.

ACCORDING to Consul-General T. St. John Gaffney, of Dresden, during the winter 1906-7 the twenty-one universities of Germany were attended by 45,136 students, of whom 254 were women. He gives the following details: The increase over the corresponding term of last year is 2,740 students. In addition to these numbers, 5,509 persons availed themselves of the privilege of listening to lectures without matriculating as members. Of this class 2,105 are women. As regards the various courses, the figures give the total number of Protestant students of theology as 2,208 and of Catholic, 1,708. The number of students of law is given as 12,146, of medicine, 7,098; of philosophy, history and languages, 10,985, and of

mathematics and natural sciences, 6,234. The largest increase of students has taken place in medicine and philology, while there is a continued scarcity of Protestant theological students. The best attended university is that of Berlin, with 8,188 students; next to this comes Munich, with 5,567; Leipzig, with 4,466; Bonn, with 2,992; Halle, with 2,250, and then Breslau, Göttingen, Freiburg, Strassburg and Heidelberg. The two last have improved their position in the tabulated list of attendances, whereas Tübingen, Giessen and Erlangen, which are favorite universities in summer, take lower places in the list than formerly.

DR. JAMES E. TALMAGE has resigned his position as professor of geology at the University of Utah in order to devote himself to investigation in the field of mining geology. Professor Talmage has occupied the chair since its establishment as an endowed professorship thirteen years ago. In 1897 he retired from the presidency of the University of Utah to continue his work in geology. His successor in the department of geology is Dr. Fred J. Pack, who is one of his former students and a graduate from Columbia University, now professor at the Brigham Young College.

DR. FREDERICK HOLLISTER SAFFORD has been promoted to an assistant professorship in mathematics in the University of Pennsylvania, and Messrs. Maurice J. Babb and Louis O'Shaughnessy have been appointed instructors in mathematics.

DR. GUSTAV HELLMANN has been appointed professor of meteorology at the University of Berlin and director of the Meteorological Institute, in succession to Professor W. von Bezold.

DR. CORNELIUS DOELTER, of Graz, has been appointed professor of mineralogy in the University of Vienna, in the place of Professor G. Tschermak, who has retired.

M. H. LE CHATELLIER, of the Collège de France, has been appointed professor of general chemistry at the Sorbonne, in succession to Moissan.