

This great power can be set to work immediately in the interests of science and art and education, supplementing, reinforcing our defective and weak system of education. Every day its coming is delayed represents so much pure loss to the causes in which you are interested; to the welfare of this nation, and to civilization in general by all that it might contribute if it were now at work.

This institution, this national university, would be one of the most important elements in making this nation of ours in reality what it is in our dreams and hopes and fond anticipations, the leader of the world in art, in science and education, and in civilization.

EDMUND J. JAMES

UNIVERSITY OF ILLINOIS

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*SCIENTIFIC NOTES AND NEWS*

DR. ANTON FRITSCH, director of the zoological and paleontological division of the Museum at Prague, has celebrated his eightieth birthday.

SIR WILLIAM RAMSAY has been elected a foreign associate of the Paris Academy of Medicine.

DR. A. ENGLER, professor of botany in the University of Berlin, has been elected a corresponding member of the Paris Academy of Sciences.

GEORGE AMOS DORSEY, associate professor of anthropology in the University of Chicago, who has recently returned from a three years' tour of the world and investigations in his special field of research, was given a banquet in Chicago on July 30 by the directors of the Chicago Geographical Society, of which Dr. Dorsey was at one time president.

DR. JOHN K. SMALL, head curator of the museums and herbarium of the New York Botanical Garden, was given the honorary degree of doctor of science at the one hundred and twenty-fifth anniversary of Franklin College, Lancaster, Pa., on June 13.

DR. D. H. SCOTT, president of the Linnean Society of London, has been elected a foreign member of the Academy of Sciences at Copenhagen.

SIR PATRICK MANSON has retired from the position of medical adviser to the Colonial Office, and has been appointed a Knight Grand Cross of the Order of St. Michael and St. George in recognition of his eminent services in connection with the investigation of the cause and cure of tropical disease.

THE Moxon gold medal for research in clinical medicine has been awarded by the Royal College of Physicians, London, to Sir David Ferrier, F.R.S., and the Murchison memorial scholarship, founded in memory of Dr. Charles Murchison, has been awarded to Dr. W. Rees Thomas.

DR. JOSEPH H. WHITE, of the United States Public Health and Marine Hospital Service, has been asked to become a member of the Boston board of health to act as an expert in the health department.

At the recent annual meeting of the Imperial Cancer Research Fund in London Dr. William H. Woglom, of Brooklyn, was appointed first assistant in New York, a position maintained under the Crocker Fund for the Investigation of Cancer. Dr. Woglom was sent to London by the directorate of the Crocker Fund to pursue a course of studies under Dr. Bashford, director of the Cancer Research Fund.

DR. EDGAR W. OLIVE, professor of botany in the State College of South Dakota, has been appointed curator in the Brooklyn Botanic Garden.

MR. HERBERT E. IVES has resigned his position in the Physical Laboratory of the National Electric Lamp Association in Cleveland to accept the position of physicist of the United Gas Improvement Company of Philadelphia, where his work will consist of consultation and research in connection with the measurement and utilization of heat and light.

MR. E. H. TENNYSON D'EYNCOURT has been appointed director of naval construction to

the British Admiralty, Mr. W. J. Berry becomes assistant director and Sir Philip Watts is to be retained as adviser on naval construction.

WE learn from *Nature* that Professor L. E. Bouvier, of the Jardin des Plantes, has been appointed "Ray Lankester Investigator" for 1912-13, and will occupy the Ray Lankester table in the laboratory of the Marine Biological Association at Plymouth. At the request of the trustees, the nomination for this first appointment was made by Sir E. Ray Lankester, K.C.B., F.R.S.

DR. IRWIN SHEPARD, of Winona, Minn., for many years secretary of the National Educational Association, has resigned.

EDWIN BRANT FROST, professor of astrophysics in the University of Chicago and director of the Yerkes Observatory at William Bay, Wisconsin, has been granted leave of absence for a year by the trustees of the university.

PROFESSOR J. C. ARTHUR and Dr. F. D. Kern, of Purdue University, Lafayette, Ind., are spending July and August studying the plant rusts of Colorado, especially along the lines of the Denver and Rio Grande Railway in the southern half of the state, where the problems of association and distribution of species are unusually well presented.

DR. E. B. COPELAND, dean of the College of Agriculture, Los Baños, P. I., who has been visiting the United States, returned to the Philippines at the end of August.

COMMANDER EVANS, R.N., of the British Antarctic Expedition, has left England for New Zealand, where he will resume command of the *Terra Nova*, which will proceed to the south polar regions to meet Captain Scott and his party.

PROFESSOR C. JUDAY, of the University of Wisconsin, gave two lectures on the physics and chemistry of lake waters and their biological significance during the latter part of July, at the Indiana University Biological Station, Winona Lake, Indiana.

DR. GUY MONTROSE WHIPPLE, of the School of Education, Cornell University, has given

three lectures on "The Training of Memory," "The Psychology of the Marking System" and "The Supernormal Child" at the summer session of the University of Illinois.

PROFESSOR EUGENE LAMB RICHARDS, emeritus professor of mathematics of Yale University, died on August 5, aged seventy-four years.

DR. MAURICE HOWE RICHARDSON, Moseley professor of surgery at Harvard University, died on July 31, aged sixty-one years.

THE deaths are also announced of Professor Edmund von Neusser, known for his work on internal diseases, at Vienna, and of Dr. Monoyer formerly professor of ophthalmology in the faculty of medicine of the University of Lyons.

THE United States Civil Service Commission invites attention to the regular fall examinations for scientific assistants in the Department of Agriculture, to be held October 16-17, 1912. Examinations will be given in the following subjects: Agronomy, dairying, entomology, farm management, forage crops, horticulture, library science, nutrition of man and calorimetry, plant breeding, plant pathology, pomology, seed testing, soil bacteriology, soil chemistry, soil surveying. The commission also announces examinations on September 4, to fill vacancies in the dairy division of the Bureau of Animal Industry, Department of Agriculture, in the positions of assistant dairymen, qualified respectively in market milk investigations, dairy farming and butter making, at salaries of from \$1,500 to \$1,740 a year.

THE sixth Congress of the International Association for testing Materials will meet in New York City from September 2 to 7. The headquarters of the congress are at 29 West 39th St., New York City.

THE agricultural bill includes an appropriation of \$80,000 on behalf of the Pennsylvania Chestnut Tree Blight Commission for the investigation and suppression of chestnut tree bark disease. The government is authorized to cooperate with the states, in-

cluding Pennsylvania, which has already appropriated \$275,000 for the purpose.

DR. WILHELM PAUL GERHARDT, of Brooklyn, N. Y., has given a collection of books, numbering 275 volumes, to the sanitary and biological department of the College of the City of New York, and a geographical collection of about 150 text-books and atlases to Teachers College, Columbia University. A third collection of several hundred volumes has been presented to the Illuminating Engineering Society of New York City.

A DONOR who wishes for the present to remain anonymous, has given the Chancellor of the Exchequer a sum of £10,000, of which £3,000 is to be handed to the National Museum of Wales, Cardiff, £2,000 to the University College of Wales, Cardiff, and £5,000 to the National Library of Wales, Aberystwith.

UNDER the will of Sir James Inglis, a former president of the Institution of Civil Engineers, the institution has received a legacy of £5,000, to be applied to its new building which is now in course of erection in Great George Street, Westminster, and to which he had during his lifetime contributed liberally.

*Nature* states that in response to a joint appeal made by the Royal Society of South Africa and the South African Association for the Advancement of Science to the Union government, a sum of £500 has been voted during the current financial year as a grant-in-aid for the purpose of assistance in scientific work in or relating to South Africa. A scheme for the administration of this and future funds available for the same purpose on lines similar to that of the Government Grant Fund of the Royal Society has been prepared by a joint committee representing the two above-mentioned societies.

THE report of the American members of the commission appointed by the International Mathematics Congress, held in Rome in 1908, to study the subject of the teaching of mathematics in the several countries has been published for free distribution by the United States Bureau of Education.

A PERMANENT memorial of the recent celebration of the two hundred and fiftieth anniversary of the Royal Society in the form of a volume of collotype facsimiles of the signatures of the founders, patrons and fellows of the society recorded in its first journal-book and the charter-book from 1660 to the present time is to be issued shortly by Mr. Henry Frowde. The work will contain a preface by Sir Archibald Geikie. The third edition, revised and rearranged, of "The Record of the Royal Society of London," is also announced.

WE learn from the *Journal* of the American Medical Association that on June 1 the superior health magistracy of Saxony, the *Landesmedizinalkollegium*, was substantially extended and converted into a national health department. Its field includes the making of reports on matters of medical and veterinary interest, the advice of the government in the preparation and execution of sanitary laws, and the supervision and management of the scientific institutes subordinate to it.

PETROLEUM production in the United States in 1911 surpassed its own record made in 1910 by an increase of nearly 11,000,000 barrels. In 1910 the output was 209,557,248 barrels. The total production of the world also surpassed all previous records, amounting to over 345,000,000 barrels, and of this the United States produced more than 63 per cent. The value of this enormous output of oil in the United States for 1911 was \$134,044,752, the average price being 60.8 cents a barrel. Final figures have been compiled by David T. Day, the petroleum statistician of the United States Geological Survey, and have just been made public in a statement issued by the survey. The increase for the year was caused principally by the gain in California, which was by far the largest producer, its output being over 81,000,000 barrels. Another factor in the increase was the discovery of oil at Vinton, La., and the comparatively new Caddo field in Louisiana also grew in importance. A find of high-grade oil at Electra, in northern Texas, was another notable event of the year. With a gain in production of nearly

11,000,000 barrels and with an increase in price at the end of the year, it is evident that an unusual condition in the oil market existed. The three commodities of general market value to be considered in connection with crude oils are gasoline, kerosene and residuals, the last suitable for fuels in the west and for lubricants and wax in the east. In the trade "naphtha" is the name generally applied to oils lighter than kerosene as distilled from crude oil, but by the public the term "gasoline" is applied to the light fraction of the oil suitable for internal-combustion engines. In fact, when crude naphtha is redistilled it is for the most part separated so as to yield gasoline and lighter or heavier kerosene. The demand for gasoline has become so imperative that little or none is now allowed to lower the safety of lamp oils; the latter have therefore greatly improved in character. In the production for 1911 California led with 81,134,391 barrels; Oklahoma took second place, with 56,069,637 barrels; Illinois was third, with 31,317,038 barrels; and Louisiana was fourth, with 10,720,420 barrels. The prices of the different oils varied greatly, ranging from 47 cents to \$1.32 a barrel. Thus while the production in Pennsylvania was only 8,248,158 barrels, its value was \$10,894,074, whereas Louisiana, which produced 10,720,420 barrels, received for it only \$5,668,814. The greatest increases in production in 1911 were in California, 8,123,831 barrels; in Oklahoma, 4,040,919 barrels and in Louisiana, 3,879,025 barrels. The principal decreases were in Illinois, 1,826,324 barrels, and in Ohio 1,099,258 barrels. The following table of total production shows the general increase in production for the United States since 1901.

1901 .....	69,389,194
1903 .....	100,461,337
1905 .....	134,717,580
1907 .....	166,095,335
1909 .....	183,170,874
1911 .....	220,449,391

ACCORDING to *Terrestrial Magnetism*, preparations are being made, under the superintendence of Professor Tanakadate, to send out four parties for making a new magnetic sur-

vey of Japan, to be completed within two years. The same general scheme of work will be followed according to which the first survey of about eighteen years ago was successfully accomplished under Professor Tanakadate's direction. The issuing of the British Admiralty chart of lines of equal magnetic declination has been recently transferred from the Hydrographic Department of the Admiralty to the Magnetic and Meteorological Department of the Royal Observatory, Greenwich.

#### UNIVERSITY AND EDUCATIONAL NEWS

It is reported that Mr. P. A. B. Widener, of Philadelphia, has increased to one million dollars his gift to Harvard University for a library building in memory of his grandson, Harry Elkins Widener.

THE late Dr. John Dixon Mann, who occupied the chair of forensic medicine in the University of Manchester from 1892 until his death last April, bequeathed to the university the sum of £1,000. By resolution of the council, the money has been added to the special fund for the encouragement of medical research.

At the University of California work has begun on a laboratory for the Citrus Experiment Station at Riverside, funds for this building and for the site on which it stands having been appropriated by the last legislature. The new laboratory will be thoroughly equipped, and will become headquarters for some of the work for advancing the interests of the orange and lemon industries heretofore carried on by the university at Whittier. The United States Department of Agriculture will cooperate with the university at Riverside, stationing there agricultural experts to study the problems of the citrus industry. Professor J. Eliot Coit has been appointed director of the laboratory.

*Nature* states that the establishment of the new university in western Australia is progressing satisfactorily, and the senate is open to receive applications for the filling of eight professorial chairs. Parliament has