years, the percentage of the world's total coal produced by the United States has increased from 14.32 to 37, and this country now stands far in the lead of the world's coal producers. It has been only eight years since the United States supplanted Great Britain as the leading coal producer, yet the increase in this country has been so enormous that Great Britain can no longer be classed as a competitor. In 1906 the United States produced 43.7 per cent. more coal than Great Britain and 85 per cent. more than Germany. clusive of Great Britain the United States in 1906 produced more coal than all the other countries of the world combined. It may also be noted that more than 96 per cent. of the world's production of coal is mined in countries lying north of the equator, the countries south of the line contributing less than 20,-000,000 tons annually.

The Allahabad Pioneer Mail, as quoted in *Nature*, states that the programs of work of the various scientific departments for the current year, as settled by the Indian Board of Scientific Advice, have been published. following points are of general interest: (1) Schemes have been completed for the establishment of a central research station and agricultural colleges at Poona, Lyallpur, Cawnpor, Bhagalpur, Coimbatore, Nagpur and Mandalay, and a staff of three European specialists has been sanctioned for each; (2) new agricultural stations are to be started (a) at Aligarh for the improvement of cotton, (b) at Partabgarh for the study of rice and sugarcane, (c) at Jullundur, (d) at Bassein, and (e) at Bhagalpur and Bankipur (Bengal). The special investigations connected with the improvement of Indian cottons and wheats will be continued, but the scheme for the improvement of Indian tobacco will largely remain in abeyance until the appointment of a specialist for this purpose. The study of sugar-cane diseases and of practical measures for the suppression of cotton boll-worm in the Punjab will also be continued. The lead mines of the southern Shan States, the tin deposits in Mergui, Tavoy and Karenni, the oil beds in the Irrawaddy Valley and the Arakan districts, the volcano of Popa in the Myingyan district, Burma, the copper beds of Singhbhum, and the manganese mines in the central provinces, are all to be the subject of geological investigation.

## UNIVERSITY AND EDUCATIONAL NEWS

By the will of the late D. Willis James, of New York City, the sum of one million dollars divided into ten portions of \$100,000 each, is bequeathed to educational and charitable institutions, the former being: Columbia University, Yale University, Amherst College, Union Theological Seminary, Cooper Union and the Hampden Institute.

Miss Anna T. Jeanes has bequeathed practically all her estate, said to be of the value of \$5,000,000, for public purposes, including the establishment of a hospital. A bequest of certain property, estimated to be between \$500,000 and \$3,000,000 in value, has been bequeathed to Swarthmore College on condition that it abandon intercollegiate sports. A committee of the board of managers has been appointed to report on the question.

The buildings of the Barnard, Medical College and the Centenary Hospital, St. Louis, valued at \$300,000, have been transferred to the University of Missouri, which expects to provide the two final years in medicine at St. Louis, after 1908.

A CABLEGRAM from Tientsien states that an imperial edict decrees compulsory education for everybody in China, and adds, furthermore, that the people are to be taught the principles of constitutional government, in order that they may be better fitted to elect representatives when a parliament is created. The throne expresses anxiety to establish parliamentary institutions, but adds that the success thereof depends upon the education and knowledge possessed by those called upon to govern.

A New university library, to cost one million Marks, will be erected in Tübingen.

The name of the high school in Münster was changed on August 22, to "Wilhelms Westfalian University." A school of medicine will be established.

THE University of Cincinnati has established two new chairs of full rank since the beginning of the last academic year; the chair of political and social science, not yet filled, and that of geology and geography, filled by the selection of Professor Nevin Melancthon Fenneman, Ph.D., lately professor of geology in the University of Wisconsin. The successor of Professor Thomas Evans, head of the department of chemistry, whose death occurred in the early summer, is Professor Lauder William Jones, Ph.D., lately instructor in chemistry in the University of Two professors have been retired Chicago. on the Carnegie Foundation: Edward Miles Brown, English, and Wayland R. Benedict, philosophy. The former's successor has not been chosen and Associate Professor George Morey Miller is in temporary charge of the department. The new professor of philosophy is H. Heath Bawden, Ph.D., lately of Vassar The following appointments of assistant professors have become effective: John J. Porter, M.E., assistant professor of metallurgy; Alice C. King, M.A., assistant professor of elementary education; Frank W. Ballou, B.S., assistant professor of the history and principles of education. Professors Louis Trenchard More, physics, and Marco F. Liberma, Romance languages, have returned from leaves of absence of one year, spent in Europe.

At the University of Missouri, F. W. Liepsner, assistant in chemistry, has resigned to accept an instructorship in chemistry at the University of Virginia, and Philip L. Gile, assistant in agricultural chemistry, has resigned to accept a position in the new government laboratory in Porto Rico. Dr. Herman Schlundt has been promoted to be professor of physical chemistry. The following new appointments have been made in chemistry: Dr. P. F. Trowbridge, assistant professor of agricultural chemistry; Norman D. Hendrickson, C. R. Moulton and L. F. Shackel, assistants in agricultural chemistry; J. A. Gibson, instructor in analytical chemistry; Merle Randall, assistant; R. M. Smith, student assistant in organic chemistry; Clarence Estes, problem reader. Dr. R. B. Gibson has been appointed instructor in physiological chemistry (department of physiology).

Professor Lewis E. Young, formerly professor of mining and metallurgy at the University of Colorado, has succeeded Professor Geo. E. Ladd as director of the Rolla School of Mines.

Dr. Franklin Hamilton, pastor of a methodist episcopal church at Boston, has been elected chancellor of the American University at Washington.

Dr. H. D. Senior, associate in anatomy in the Wistar Institute, Philadelphia, has been appointed professor of medicine at Syracuse University.

Professor Douglas W. Johnson has resigned his assistant professorship in the Massachusetts Institute of Technology, to accept an appointment as assistant professor of physiography in Harvard University. The latter appointment was made a year ago, but during the past year Professor Johnson continued to give instruction in the geological department of the institute, his resignation taking effect September 1 of the current year.

Bertram G. Smith has resigned his position as instructor in biology in Lake Forest College to accept an appointment as instructor in zoology in Syracuse University. Arthur B. Clawson, formerly assistant in zoology in the University of Wisconsin, will succeed Mr. Smith at Lake Forest.

GRADUATES of Harvard University in zoology have accepted appointments as follows: A. M. Banta, Ph.D. ('07), professor of biology at Marietta College, Marietta, O., to succeed Professor T. D. Biscoe, retired; H. S. Davis, Ph.D. ('07), professor of biology in the University of the State of Florida, at Gainesville, Fla.; Calvin O. Esterly, Ph.D. ('07), professor of biology in Occidental College, Los Angeles, Cal.; W. M. Barrows, S.M. ('06), assistant in zoology at the New Hampshire State Agricultural College and Experiment Station, Durham, N. H.; Donald W. Davis, A.B. ('05), associate professor of biology at Sweet Briar Institute, Sweet Briar, Va.; W. G. Vinal, S.M. ('07), instructor in biology at Marshall College, Huntington, W. Va.