

Diagnosis and Treatment of Those Diseases and Morbid Growths of Vertebral Column and Spinal Cord and Canal which are Amenable to Surgical Operations.'

ALTHOUGH detailed statistics for the production of gold during the last year are not yet available, Mr. Waldemar Lindgren, of the U. S. Geological Survey, has made some prognostications as to the distribution of the production among different classes of ore deposits. A preliminary estimate of the production of each state and territory was given out by the director of the Mint at the first of the year. According to this estimate, the production of gold in the United States during 1904 amounted to \$84,551,300. After a period of very rapid advance in the gold production from 1892 to 1900, inclusive, during which an increase from \$33,000,000 to \$79,000,000 took place, there were two years of nearly stationary output and one year of decided decrease. It is, therefore, very satisfactory to find that the production of gold has risen again to record figures, the estimate being \$84,551,300 against \$73,591,700 for 1903. Mr. Lindgren classifies the gold production according to its derivation from placers, dry or quartzose ores, copper ores and lead ores. He estimates the production of gold from placers at \$12,900,000, from quartzose gold and silver ores at \$62,754,000, from copper ores at \$4,300,000 and from lead ores at \$4,600,000, making a total production of \$84,554,000, a sum that practically agrees with the estimate of the director of the mint. Alaska is the largest producer of placer gold and should show a gain of at least \$200,000, the output being estimated at \$5,800,000. California will show an increase which may reach \$800,000, the production being estimated at \$4,800,000. The production of gold from quartzose gold and silver ores is subdivided by Mr. Lindgren into the production of pre-Cambrian quartz veins, \$5,454,000; of Mesozoic quartz veins in the Pacific coast belt, \$21,600,000; and of Tertiary gold quartz veins in the Rocky Mountains and Great Basin, \$35,700, making a total of \$62,754,000.

THE Belgian Royal Academy has, as reported in *Nature*, issued the following lists of

prize subjects for 1905 and 1906: for 1905, in mathematical and physical sciences, on the combinations formed by halogens; on physical, particularly thermal, phenomena accompanying dissolution; on linear complexes of the third order; and on the deviation of the vertical treated from the hypothesis of the non-coincidence of the centers of mass of the earth's crust and nucleus. In natural sciences, on the function of albuminoids in nutrition; on the reproduction and sexuality of Dicyemidæ; on the silicates of Belgium; on the formations of Brabant between the Bruxellian and the Tongrian; on certain Belgian deposits of sand, clay and pebbles; on the sexuality of the individuals resulting from a single ovum in certain dioecious plants; and on the development of *Amphioxus*. For 1906 the subjects in mathematical and physical sciences are: on critical phenomena in physics; on n -linear forms ($n > 3$); on thermal conductivity of liquids and solutions; and on the unipolar induction of Weber. In natural sciences, on the Cambrian series of Stavelot; on the effect of mineral substances on the assimilation of carbon by organisms; on the effects of osmotic pressure in animal life; on the tectonic of Brabant; on the soluble ferments of milk; and on the physiological action of histones. The essays for 1905 and 1906 are to be sent in by August 1 of the respective years, and the prizes range from \$120 to \$200 in value. In addition, prizes bequeathed by Edward Mailly and in memory of Louis Melsens are offered under the usual conditions for astronomy and applied chemistry or physics respectively.

UNIVERSITY AND EDUCATIONAL NEWS.

THE cornerstone of the library building of Leland Stanford Junior University was laid on May 15. The building will cost \$800,000. At the ceremonies an address to the students by Mrs. Stanford was read. In it she makes the amount realized from the sale of her jewels, which are estimated to be worth \$500,000, an endowment fund for the library.

GRADUATES of Yale University have arranged to purchase for the university the Hillhouse

estate, containing thirty acres and costing \$510,000. This purchase fixes definitely the direction of Yale's growth northward beyond the present site of the Sheffield Scientific School.

It was announced at the meeting of the Yale Corporation, on May 15, that a gift had been received by Yale from a Harvard graduate—whose name was withheld—for the purpose of cementing the good feeling between the two universities. The use of the fund was left entirely to the Yale Corporation, which has voted to expend it for securing from time to time lecturers from Harvard to speak before the students of Yale. President Eliot, of Harvard, has accepted the corporation's invitation to be the first lecturer.

THE University of Indiana has been granted \$100,000 by the state legislature for the erection of a new library.

WORK is about to be started on the new science hall of Colby University, which will be erected at a cost of about \$90,000.

DR. D. K. PEARSONS, of Chicago has made a gift of \$50,000 to Montpelier Seminary at Montpelier, Vt., which he attended, conditional upon the institution raising \$100,000 within a year.

AT the annual meeting of the National Academy of Design it was voted to accept the offer of Columbia University to form an affiliation. It is planned to collect \$500,000 for a building, which will be erected on a site furnished by Columbia University.

THE University of North Dakota will open a medical college in the autumn of 1905. Until the clinical advantages are adequate the medical course will extend only through the first and second years of the four years' curriculum. Students who have completed the work at the University of North Dakota will be received into the junior year of the medical schools with which articulation is arranged.

The Medical College at Bahia, Brazil, with its equipment and valuable library, has almost totally been destroyed by fire.

DUBLIN UNIVERSITY has recently opened its degrees to women, and the first result has

been somewhat curious. Students who have done their work at Oxford or Cambridge may receive the bachelor's degree at Dublin. As is well known, Oxford and Cambridge do not give their bachelor's degree to women, and eighty-four women who had completed the work for the degree at these universities have received the degree from Dublin on the payment of \$50 each.

PROFESSOR ASAPH HALL, JR., has resigned as professor of astronomy and director of the observatory at the University of Michigan. Professor W. T. Hussey, of the Lick Observatory, has been elected his successor. Professor Hussey was graduated from Michigan in 1889.

SAMUEL J. BARNETT, assistant professor of physics at Stanford University, has accepted the chair of physics at Tulane University, vacant by the resignation of Dr. Brown Ayres to accept the presidency of the University of Tennessee.

THE department of physics in the University of California has secured the appointment of Dr. A. S. King and Dr. A. W. Gray for the coming year, as instructors. Dr. King will continue the spectroscopic investigations on which he has published already a number of papers. Dr. Gray returns from the University of Leyden, where he has been working in the cryogenic laboratory, to a 'Research Instructorship on the Whiting Foundation,' supported from the income of the bequest of Harold Whiting, formerly associate professor of physics in the University of California.

AT Williams College, Mr. William E. McElfresh has been promoted to the Thomas T. Reed professorship of physics, and Mr. Herdman L. Clelland to a professorship in geology.

DR. E. B. HOLT has been appointed assistant professor of psychology at Harvard University.

DR. A. R. FERGUSON, senior assistant to the professor of pathology in Glasgow University, has been appointed professor of pathology in the Medical School, Cairo.

THE council of the Linnean Society of New South Wales has appointed Mr. Harald I. Jensen to be the first Linnean Maclay fellow.