

ence points for Greenwich time and for terrestrial longitudes, indicate a state of constant vibration while the engines are running, which will be greatly increased if the full proposals of the London County Council are carried out. By the invitation of the Astronomer Royal, I paid a special visit to Greenwich on Tuesday and was able to compare for myself the state of matters during the running of the engines and after they had been stopped (*i. e.*, after midnight). The observations left no room for doubt as to the seriousness of the disturbance."

Nature states that Messrs. R. B. Woosnam, D. Carruthers and A. F. R. Wollaston, three members of the zoological expedition sent to Africa under the auspices of the Natural History Museum, South Kensington, have made the following ascents in the Ruwenzori range. On April 1 they ascended Duwoni, the peak rising to the northeast of the Mubuku Glacier. This peak has two tops of apparently equal altitude; the southern top, which was reached, was found to be 15,893 feet. On April 3 they ascended Kiyanja, the peak at the western end of the Mubuku group of peaks. The altitude was found to be 16,379 feet. (The altitudes were taken by aneroid and by the boiling-point thermometer.) Both these peaks have been thought by different explorers to be the highest points in Ruwenzori, but from the summit of Kiyanja a still higher peak with two tops was seen in a northwesterly direction. The weather at this season of the year is very unfavorable, the mountains being almost constantly buried in clouds with frequent snowstorms, which prevented the party from making further explorations.

THE advance made during the last five years in the manufacture of various forms of apparatus for lighting purposes has developed a use for metals and metallic oxides such as tantalum, cadmium, zirconia, thoria, yttria, and cerium, lanthanum and didymium oxides. With the exception of cadmium, all these materials are now used commercially in the manufacture of different lamps and are obtained from the following minerals: monazite, zircon, gadolinite, columbite and tantalite. A

brief report on the production of these minerals during 1905 has been written by Dr. Joseph Hyde Pratt and will be published in the forthcoming volume of the U. S. Geological Survey, entitled 'Mineral Resources of the United States, 1905.' Monazite is the mineral which contains the oxides used in the manufacture of mantles for the Welsbach and other incandescent gaslights. Although monazite has been found sparingly at many localities throughout the United States, the Carolinas are still the only states that are producing this mineral commercially. During 1905, however, a probable new source of supply of this mineral has been worked out by the investigations that have been carried on at the concentrating plant of the United States Geological Survey at Portland, Ore., which has been testing systematically the black sands of the Pacific slope as to their mineralogical contents. The results of this investigation have shown the presence of some monazite and more zircon in many of these sands, especially in those from Oregon and Idaho. By using the Wetherill magnetic separator an almost perfect separation can be made of both the zircon and the monazite. The production of monazite, zircon and columbite during 1905 amounted to 1,352,418 pounds, valued at \$163,908, as compared with 745,999 pounds, valued at \$85,038 in 1904, an increase of 606,419 pounds in quantity and of \$78,870 in value. From one sixth to one fourth of the monazite mined in 1905 was exported to Germany.

UNIVERSITY AND EDUCATIONAL NEWS.

At the commencement of Brown University it was announced that \$162,000 had been subscribed for the John Hay memorial library, thus securing the additional gift of \$150,000 by Mr. Andrew Carnegie.

MR. D. W. GOODSPEED, secretary of the board of trustees of the University of Chicago, has announced a gift of \$260,000 from Mr. John D. Rockefeller for current expenses for the year beginning July 1.

At the recent commencement of Olivet College gifts aggregating \$265,000 were an-

nounced. Of this amount \$215,000 applies toward the Carnegie endowment, leaving only \$35,000 to be raised to ensure receiving Mr. Carnegie's gift of \$250,000.

By the will of the late Professor George A. Wentworth, of Phillips Exeter Academy, \$10,000 is bequeathed to the academy.

THE New York *Evening Post* states that Sir William Macdonald has completed his arrangements for transferring to the governors of McGill University all the property of the new Macdonald College at St. Anne de Bellevue, near Montreal, valued at between \$2,000,000 and \$3,000,000. It is the founder's wish that Macdonald College shall rank as a college of McGill University. The funds, apart from the lands and buildings, amount to \$2,000,000.

LIVERPOOL UNIVERSITY has formally accepted from Miss Isabella Gregson, of Bournemouth, formerly of Liverpool, the gift of the Gregson Memorial Institute and Museum situated in Garmoye street. The gift is to be utilized for university extension purposes, and represents in money value, with an endowment of £5,000 added by the foundress, about £300,000.

THE Goldwin Smith Hall of Humanities of Cornell University was dedicated in connection with the recent commencement exercises. Professor Goldwin Smith, who is in his eighty-third year, made one of the addresses.

THE University of Greifswald will celebrate in August the four hundred and fiftieth anniversary of its foundation.

THE University of California announces the establishment of two Flood fellowships in economics, of an annual value of four hundred dollars each. These fellowships are open to all properly qualified university graduates wishing to engage in economic study and research at the University of California.

By vote of the president and fellows, confirmed by the board of overseers on June 13, the ninth statute of Harvard University has been amended as follows: For the degree of 'civil engineer' is substituted the degree of 'bachelor in civil engineering'; the following new degrees are established: bachelor in mechanical engineering, bachelor in electrical

engineering, bachelor in architecture, bachelor in landscape architecture, master of science in forestry, master of science in chemistry, master of science in physics, master of science in zoology, master of science in geology.

THE daily papers state that Professor George E. Fellows, of the University of Maine, has been offered the presidency of the Pennsylvania State College.

At Cornell University, Mr. E. E. Haskell, chief engineer of the U. S. Lake Survey, has been elected director of the College of Civil Engineering. Professor T. Littleton Lyon, of the University of Nebraska, has been elected to a chair of agriculture in the experiment station. Dr. W. W. Rowlee has been promoted to a full professorship of botany.

DR. GEORGE BLUMER has been appointed to the chair of the theory and practise of medicine in Yale University to succeed the late Dr. John S. Ely. Dr. Blumer was formerly director of the Bender laboratory at Albany, and professor of pathology at the Albany Medical College, and was subsequently professor in the medical department of the University of California.

IN the botanical department of the Ohio State University the following new appointments have been made: Robert F. Griggs has been promoted from fellow to assistant professor; Miss Freda Detmers, recently acting as assistant, in place of Walter Fischer, who resigned to take up work in the United States Department of Agriculture, has been made instructor in botany; Miss Opal I. Tillman, fellow in botany, resigned to accept a position as teacher of botany in the University of Arizona, and as her successor for the year 1906-7 Mr. L. A. Hawkins, of Iowa, was appointed.

DR. E. VON DRYGALSKI, of Berlin, has accepted a call to a newly-established chair of geography at Munich.

PROFESSOR WALTER NERNST has been offered the chair of physical chemistry at Leipzig, vacant by the retirement of Professor Wilhelm Ostwald, but has decided to remain at Berlin. //