

and such material as could be supplied without serious cost, and the makers furnished time and labor, and, at their own cost, put in the boiler, an extraordinary construction built for specially high pressures and actually tested to 1300 pounds per square inch. The engine and boiler will hereafter constitute an important portion of the Sibley College equipment, and is expected to do wonderful work. It is already known to be capable of excelling the world's record in economy, on saturated steam; although that record is at present held by a triple-expansion engine of thirty times the size of the Sibley College quadruple expansion engine. A series of trials has been conducted by the builders and the results will be published later as a thesis, by the builders, both of whom are graduate students, candidates for advanced degrees. Meantime, it is known that the engine has developed twenty horse-power, its rated work, on a consumption of less than ten pounds of steam, less than 11,000 *B. T. U.* per horse-power per hour. The College will supplement this work by still more elaborate trials, and in the expectation of still further reducing the figure. Mr. Hall, the senior of the designers and builders, has been, for some years past, the stroke oar of the Cornell 'Varsity' crew.

THE annual general meeting of the Institution of Mechanical Engineers was held at London on January 30. The report of the council stated that at the end of last year the number of names in all classes on the roll of the institution was 2,270, as compared with 2,222 at the end of the previous year. The council had bought a site at Storey's gate, Westminster, with the view of providing a permanent home for the institution. Contracts are being prepared for a building, and it was hoped that next year the house would be completed. Amongst other technical matters which had been dealt with by the council during the year, the report mentioned a memorial to the President of the Local Government Board for the repeal of existing statutes so far as they prevented mechanical locomotion on common roads, apart from traction engines. Should the appeal prove successful the council were sanguine enough to anticipate with confidence the speedy development of a branch of mechanical engineering, which

might even call forth an amount of enterprise exceeding anything that had yet arisen in connection with the remarkably rapid growth of the cycle manufacture.

ATTENTION may be called to the fact that the Academy of Natural Sciences of Philadelphia holds in trust the sum of \$2,500, given by Mrs. Emma W. Hayden for a Hayden Memorial Geological Fund, in commemoration of her husband, the late Prof. Ferdinand V. Hayden, M. D., LL. D. According to the terms of the trust, a bronze medal and the balance of the interest arising from the fund are to be awarded annually for the best publication, exploration, discovery or research in the sciences of geology and paleontology, or in such particular branches thereof as may be designated. The award and all matters connected therewith are to be determined by a committee to be selected in an appropriate manner by the Academy. The recognition is not confined to American naturalists.

UNIVERSITY AND EDUCATIONAL NEWS.

THE suit of the United States against the executrix of the late Senator Stanford, for over \$15,000,000, has been decided by the Supreme Court of the United States in favor of Mrs. Stanford. The future endowment of Stanford University depended on this decision.

THE will of the late Hart A. Massey, of Toronto, leaves about \$650,000 to educational and charitable institutions, including the following bequests: Victoria College, Toronto, \$200,000; Wesley College, Winnipeg, Man., \$100,000; Mount Allison College, Slackville, N. B., \$100,000; Wesleyan Theological College, Montreal, \$50,000; American University, Washington, D. C., \$50,000.

THE finance committee of the Senate of the State of Virginia has presented a bill appropriating \$50,000 annually, instead of \$40,000 as heretofore, to the University of Virginia.

THERE has been organized at Indianapolis a University of Indianapolis consisting of Butler College, the Medical College of Indiana, the Indiana Dental College and the Indiana Law School. These institutions have at present about 1000 students.

THE will of the late Charles L. Colby, of New York, bequeaths \$20,000 to Brown University.

MORRIS M. WHITE and Francis T. White have given Earlham College, a Quaker institution in Richmond, Ind., \$25,000, to be added to the endowment fund and to be known as the John T. White memorial fund, in honor of their father.

MRS. JOSIAH FISKE, of New York city, has given \$5,000 to Radcliffe College in memory of her late husband. The College has also received \$6,568, the balance of a bequest by the late Caroline B. Perkins.

MR. T. E. BONDURANT, of De Land, Ill., has offered to give \$20,000 to the endowment fund of Eureka College, Illinois, provided the Board of Trustees will secure \$100,000 additional by the first of March, 1897. Mr. T. J. Underwood, of Sangamon County, Ill., has donated \$10,000 towards the fund.

PROF. G. F. ATKINSON has been made full professor and head of the department of botany at Cornell University, succeeding Prof. Prentiss, who has held this position since the organization of the University.

DR. E. B. DELABARRE, professor of psychology at Brown University, has been appointed director of the psychological laboratory at Harvard University during the absence of Prof. Münsterberg. Dr. Mark Wenley, recently Examiner in Philosophy to the University of Glasgow, and Lecturer at the Queen Margaret College, has been appointed Professor of Philosophy in the University of Michigan.

THE committee of fifty-one, in charge of the project for the removal of Union College to Albany, at a meeting in that city on February 26th, decided to present to the Legislature a bill calling for the bonding of the city for \$1,000,000 for the purpose.

A PUBLIC meeting on behalf of the University College of Wales was held in Cardiff, on February 5th, under the presidency of Lord Windsor, with a view to raise £20,000 required to meet conditional grants from the Treasury and the Drapers' Company in aid of the building fund of the college. Subscriptions amounting to

£13,400 were promised, including one of £2,500 from Lord Windsor.

At a meeting of the Senate of the University of London, on February 19th, Sir Henry Roscoe was elected Vice-Chancellor of the University, in the room on the late Sir Julian Goldsmid.

At a meeting of the Convocation of Oxford University the proposal to allow women to take degrees was rejected by a vote of 215 to 140. A similar proposal will soon be voted on at Cambridge, where the movement to admit women to degrees is probably stronger than at Oxford.

DISCUSSION AND CORRESPONDENCE.

CHUAR, HEGEL AND SPENCER.

IT is with much hesitation that one undertakes to criticise or even comment upon a paper written in the style of that by Major Powell which appeared in *SCIENCE* on February 21st. The author speaks with such authority regarding the nature of matter and mind, and rebukes so firmly the philosopher and the metaphysician, that one shrinks from indicating even by a question that one may be numbered with such, or, at least, found in the class of their admirers. No one likes to confess that he is the subject of 'feverish dreams;' or write himself down as a 'wrapt dreamer' who 'imagines that he dwells in a realm above science—in a world which, as he thinks, absorbs truth as the ocean the shower, and transforms it into a flood of philosophy' (p. 271). It must be to any conscientious man a matter of sincere regret that he has cast over some unoffending physicist 'the spell of metaphysics,' and made him turn from that useful tool the spectroscope with the despairing exclamation that 'all his researches may be dealing with phantasms!' I cannot, of course, speak for Chuvar, who, as a savage, has a right to be shameless, but I cannot but think that both the shade of Hegel and the living Spencer would be loth to confess themselves 'immersed in thaumaturgy,' and lovers of the wonderful, who, 'in the revelry developed by the hashish of mystery' find 'the pure water of truth' insipid (p. 269).

Nevertheless, as one who has spent several