

he had been able to cover nearly 300 yards. He is now at work on a four-horse power oil engine, to weigh about 40 pounds, which he intends to fit together with a five-foot screw propeller to one of these machines; he hopes then to have a genuine flying machine. Captain Baden-Powell described an aluminum balloon, fitted with a Daimler oil-motor, which had recently been tried at Berlin with somewhat qualified success, and after a few remarks from the chairman on the military aspects of flying machines, the proceedings terminated with a vote of thanks to those who had brought forward exhibits.

#### UNIVERSITY AND EDUCATIONAL NEWS.

PRESIDENT HARPER says in his twenty-first quarterly statement that it is the custom of the Board of Trustees to arrange for the expenditures of a particular year six months before the beginning of that year. In accordance with this custom the Trustees, on December 29th, voted the budget for the year beginning July 1, 1898. The assured income of the University from all sources was estimated at \$529,000. In addition to this amount the founder of the University, Mr. Rockefeller, has been kind enough to designate, under certain conditions, the sum of \$200,000, making in all \$729,000. The expenditures of the various divisions of the University and of the various departments have been adjusted to this estimated income. The sum of \$25,000 has been set apart as a contingent fund and the remainder is distributed as follows:

Administration and General Expenses, ..	\$72,875
Faculty of Arts, Literature and Science, ..	347,767
The Divinity School, .....	49,516
The Morgan Park Academy, .....	37,120
University Extension Division, .....	41,064
Libraries, Laboratories and Museums, ..	44,615
Printing and Publishing, .....	41,560
Physical Culture, .....	7,500
Affiliated Work, .....	3,000
Buildings and Grounds, .....	59,425

THE number of graduate students in arts and science in several leading universities are given by the *Harvard Graduates' Magazine* as follows: Harvard, 268; Yale, 254; Johns Hopkins, 220, and Columbia, 207. The number at Chicago appears from President Harper's recent state-

ment to be larger than in any other American university, namely, 324, of which 202 are men and 122 are women.

DURING the present winter semester the registration of regular students in Berlin University amounts to 5,921. This is the largest registration in the history of the University, being 400 in excess of last winter.

PROFESSOR JAMES E. RUSSELL, of the department of Education in the Teachers' College, New York, has been appointed Dean of the College and will, with Dr. F. S. Baker, of the department of English, represent the College on the Council of Columbia University.

THE Academy of Sciences, Paris, has recommended M. C. Chatelier, professor of chemistry in the School of Mines, and M. Joannis, lecturer at the Sorbonne, as candidates for the chair of mineralogical chemistry in the Collège de France, vacant by the death of M. Schützenberger.

M. GUIART has been given charge of the practical work in natural history under the Faculty of Medicine in the University of Paris.

MR. ALFRED HOPKINS, Q.C., M.P., has been elected Principal of Owens College, Manchester, in succession to Dr. Ward, resigned. Mr. Hopkins has announced his attention of retiring from Parliament.

DR. JULIUS ISTVÁNYFFY has been appointed professor of botany in the University of Klausenburg, and Dr. Alexander Mágocsy-Dietz associate professor of botany in the University of Budapest. Dr. Ambronn and Dr. Rhumbler, docents in astronomy and zoology in the University of Göttingen, have been promoted to professorships. M. Benard has been appointed assistant in physics at the Collège de France, succeeding M. Maurain.

#### DISCUSSION AND CORRESPONDENCE.

##### CLIMATIC CONTRASTS ALONG THE OROYA RAILWAY.

TO THE EDITOR OF SCIENCE: Much has been written concerning the wonderful engineering necessary in order to construct the Oroya Railway, and concerning the scenery along its line, and every one is more or less