

gliders with a large number of superposed planes, but the type finally adopted was a bi-plane glider furnished with a smallish balancing tail. Although balance was, as a rule, maintained by moving the body, Chanute embodied in his apparatus the principle of a flexible framework, which thus paved the way for the Wright Brothers' "warping" devices and similar arrangements for the recovery of balance and counteraction of instability, which form such a noteworthy feature of modern aeroplanes. The glides made with his machines were remarkably successful, and, the practising grounds being among sand dunes, no fatalities ensued. Chanute was the author of a number of papers and reviews dealing with the flight problem, and the Wright Brothers, the late Captain Ferber, and numerous other aviators were indebted to him for much valuable assistance.

THE following statement, concerning the University of Wisconsin, appeared in the republican party platform of that state:

We are proud of the high eminence attained by our state university. We attribute its advancement both to the able and courageous guidance of its president and faculty and to the progressive and enlightened character of the citizenship that sustains it. We commend its work, illustrated by what has been accomplished in agricultural and dairy affairs, conserving our natural resources which have effected a saving of millions of dollars annually to the people of our state. We also commend its investigations for the improvement of the relations of men to one another. We regard the university as the people's servant, carrying knowledge and assistance to the homes and farms and workshops, and inspiring the youth toward individual achievement and good citizenship. We recognize that its service to the state, through investigations in agriculture, industrial and social institutions, depends upon its freedom to find the truth and make it known, and we pledge the republican party to the policy of academic freedom so well expressed by the board of regents in 1894, when they declared: "Whatever may be the limitations which trammel inquiry elsewhere, we believe that the great State University of Wisconsin should ever encourage that continual and fearless sifting and winnowing by which alone the truth can be found."

UNIVERSITY AND EDUCATIONAL NEWS

AN alumnus, who does not wish his name disclosed, has given \$100,000 to the University of Pennsylvania for the endowment of a chair of physiological chemistry. It will be known as the "Benjamin Rush chair of physiological chemistry." Dr. Alonzo E. Taylor, formerly of the University of California, will be the first occupant of the chair.

THE University of Vermont has received \$87,965 from the Rockefeller Foundation, representing the first instalment of a gift of \$100,000 made to the university on condition that an additional \$400,000 be raised. The \$400,000 has now been subscribed and the amount \$271,000 has been collected. The half million dollars is to be added to the endowment fund for the general uses of the university.

MR. WILLIAM BLODGETT has given to Columbia University two farms near Fishkill, N. Y., to be used in connection with the work in agriculture.

THE mining engineering building of the University of North Dakota is being enlarged and the interior remodeled in response to an imperative demand for more room. The roof has been raised, materially adding to the light, floor space and utility of the technical museum. Adjoining the museum, which is in the center of the building, there is to be at one end a large preparation room for the curator and at the other a mineral stock room. The laboratories on the first and second floors have been readjusted to provide better facilities for the classes in analytical chemistry and metallurgy as well as for research work in ore treatment, coals and clays. The newly-established ceramic department is being equipped with general clay working and pottery machinery.

COLUMBIA UNIVERSITY, according to the official catalogue which has just been published, has this year a registration of 7,429 students. The vast majority of these are in the graduate and professional faculties, the undergraduate and scientific departments having a total registration of 1,456. Nearly every department of the university shows an increase of

from 5 to 20 per cent. The academic department has 732 students as compared with 636 a year ago. The medical school, which for the first time required more than a high-school training for admission, has practically the same number of students as it had a year ago, 316 men fulfilling the requirement of two years' college work having entered the school. The number of officers and instructors is the largest in the history of the university, numbering 761, including the emeritus professors, of whom there are 16. The newly-appointed professors include: William B. Fite and Herbert E. Hawks, in the department of mathematics; Walter Irvine Slichter, electrical engineering; George V. Wendell, physics, and Milton C. Whitaker, industrial chemistry.

DR. EDGAR F. SMITH, professor of chemistry in the University of Pennsylvania, became provost on New Year's Day, succeeding Dr. Charles C. Harrison, who had held this office for seventeen years. Dr. Smith will continue to lecture on chemistry.

PROFESSOR G. R. THOMPSON, professor of mining, University of Leeds, has been appointed professor of mining at the South African School of Mines and Technology, Johannesburg, and principal of the college.

PROFESSOR GUIGNARD, who has served for fifteen years as director of the Paris School of Pharmacy, has resigned his appointment and is succeeded by Mr. Henry Gautier, professor of mineral chemistry at the school.

THE professors of the Paris medical college have nominated Dr. Dejerine, professor of medical pathology, to the clinical chair of diseases of the nervous system at the Salpêtrière. This position, once held by Charcot, was recently occupied by Professor Raymond, who died last September.

DISCUSSION AND CORRESPONDENCE

INORGANIC NOMENCLATURE

IN the issue of SCIENCE for December 9 appeared an article on the nomenclature of the acid phosphates. The author, R. E. B. McKenney, pointed out the difficulty of identify-

ing these from the trade names, and suggested more exact names as primary, secondary and tertiary or, better, mono-, di- and tri-potassium phosphates. While the change would be a step in the right direction it fails with salts of the polyvalent metals; for the mono-calcium salt would correspond to the di-potassium and thus the confusion would be perpetuated. It appears to the writer that a more scientific method would be to indicate the number of replaceable hydrogen atoms (per molecule of acid) present in the salt. Thus K_2HPO_4 and $CaHPO_4$ would be named mono-hydrogen phosphates while KH_2PO_4 and $CaH_4(PO_4)_2$ would be the di-hydrogen phosphates. The normal phosphates could then be designated as such or simply as phosphates.

In this connection I would call the attention of chemists, manufacturers and printers of chemical names to the need of a thorough revision of inorganic nomenclature. It is still common to hear and read the names potassic hydrate for potassium hydroxide and sodic carbon for sodium carbonate; the hydrogen (acid) carbonates are called bicarbonates because in making them two equivalents of the acid are required for each equivalent of the base. But modern chemistry is founded on molecular rather than equivalent quantities and a bicarbonate should mean, therefore, two carbonate (CO_3) radicals in the molecule of the salt. Besides, the bichromates are not acid salts at all in the sense of containing replaceable hydrogen atoms. Likewise the percarbonates, persulphates and permanganates do not follow the nomenclature of the perchlorates, perbromates and periodates. Also the dioxides and peroxides are named with no discrimination as to differences in constitution.

Has not the time come for scientific men to be exact and scientific in the matter of chemical nomenclature, and to demand of manufacturers the use of names which shall indicate the composition of the material designated? And would it not be well for section C of the American Association, or the American Chemical Society, to appoint a permanent committee on inorganic nomenclature to