

was obscured, and the country is covered with a thin coating of volcanic dust. At Wanganui, some sixty miles distant, a thick haze overhangs the town, and the air is distinctly sulphurous. Violent explosions and rumblings have been heard many miles away.

UNIVERSITY AND EDUCATIONAL NEWS

A BILL now before the Pennsylvania legislature provides for the appropriation of \$950,000 to the University of Pennsylvania, \$475,000 for each of the two years beginning June 1, 1909, and June 1, 1910, the money to be used for: hospital maintenance; new hospital building; the continuation of the new veterinary building; the maintenance of the new veterinary building; maintenance of the general university; increase of the library, and a new building for the department of architecture.

THE Hall of Engineering of Northwestern University, given by Mrs. G. F. Swift and Mr. E. F. Swift, at a cost of \$100,000, was opened on March 24. It will be remembered that Mr. John F. Hayford, of the U. S. Coast and Geodetic Survey, has accepted the directorship of the new school of engineering.

MR. FREDERICK W. VANDERBILT, in addition to his recent gift of a dwelling house for the use of the Sheffield Scientific School of Yale University, has purchased an adjacent house for \$50,000 for the school. With the sale of these two houses the entire square bounded by Wall, College, Grove and Temple streets, with the exception of the building of the New Haven Colony Historical Society and the house on the corner of Grove and Temple streets, in which Noah Webster wrote his dictionary, has passed into the hands of the Sheffield Scientific School.

A HONG-KONG Chinaman residing at Saigon has offered to contribute \$4,000 to the university endowment fund, and he also undertakes to raise \$40,000 among his compatriots in Saigon.

FOR the purpose of founding a Capper Pass chair of chemistry at Britol University Mr. W. Capper Pass, son of the late Mr. Alfred Capper Pass, who was a member of the council of

Bristol University College, has increased his subscription of £4,000 to £10,000.

A CONFERENCE of the deans of the colleges of liberal arts in state universities of the middle west was held at the University of Wisconsin on March 25. Dean Olin Templin, of the college of liberal arts and sciences at the University of Kansas, who is chairman of the meeting, announced a program of four papers to be presented for discussion, as follows: "Method of Grading," by Dean John C. Jones, of the University of Missouri; "Student Organizations," by Dean L. G. Weld, of the University of Iowa; "The Relation of the College to the Other Schools of the University," by Dean Evart B. Greene, of the University of Illinois, and "Advanced Standing," by Dean J. O. Read, University of Michigan.

THE department of engineering of Colorado College will conduct a summer school of surveying at Manitou Park, elevation 7,500 feet, for four weeks beginning June 7. Professor T. B. Sears, of the department of civil engineering at the University of Nebraska, has been chosen director. Several cottages are available for the school and tents are being erected for the accommodation of the students. Manitou Park is on the reserve of the Colorado School of Forestry, twenty miles west of Colorado Springs.

DR. J. H. KASTLE, for the past three years chief of the division of chemistry, of the Hygiene Laboratory, Washington, D. C., has been elected professor of chemistry in the University of Virginia.

M. PERROT, of the Observatory at Meudon, has been appointed professor of physics in the Paris Polytechnic School to succeed M. Becquerel.

M. CAULLERY has been appointed professor of zoology at Paris to succeed the late M. Giard.

DISCUSSION AND CORRESPONDENCE

AMERICAN CHEMICAL HISTORY AND BIOGRAPHY

TO THE EDITOR OF SCIENCE: Having been appointed historian of the American Chemical Society and having arranged for the care of its documents by the Smithsonian Institution, I

earnestly request chemists throughout the country to send to me for safe-keeping in the Smithsonian Institution such historical and biographical documents of American chemical history and biography as they may be willing to part with. They will be kept together, catalogued and be easily accessible to chemists, students and other proper persons. Just at present papers by the late Dr. Wolcott Gibbs are particularly desired. Questions of precedence and patent questions may be decided by such a concentration of documents in a single accessible place. Please address them to The Smithsonian Institution, Washington, D. C., care of Dr. Alfred Tuckerman.

ALFRED TUCKERMAN

NOTES ON FISHES AT CORSON'S INLET, NEW JERSEY

ON March 1, 1909, in company with my friend, Dr. R. J. Phillips, the salt-ponds on the meadows at this locality were examined for small fishes. We were rewarded by securing three fine examples of the rare *Fundulus luciae*, a small cyprinodont described from the Great Egg Harbor region by Baird in 1854. As this is the first definite instance of its occurrence in New Jersey waters since that time I have thought it well worthy of record. Dr. T. H. Bean visited the region of the type locality in 1887 and after a careful search failed to locate the fish. The rediscovery of the species was made by Dr. H. M. Smith in the lower Potomac River in 1890, and was based on two small specimens. Baird's types were not then believed to be extant. Our specimens were found associated with numerous small amphipod crustaceae, *Crangon vulgaris*, numbers of *Palæmonetes vulgaris*, small transparent *Anguilla chrisypa*, numerous *F. heteroclitus macrolepidotus* of all ages, many *Lucania parva*, great numbers of *Cyprinodon variegatus* and a single example of *Menidia beryllina cerea*. Dr. Phillips picked up a fine example of *Gobiosoma boscii* on the beach, and on February 15 he secured in a rain-pool on the barrier beach a number of specimens of *Gasterosteus aculeatus* and one of *Pygosteus pungitius*, the latter being the most southern record on the New Jersey coast

we know of. Quite a number of *Pseudopleuronectes americanus* were reported by the fishermen recently, and *Ammodytes americanus* was several times noted during the past winter.

HENRY W. FOWLER

ACADEMY OF NATURAL SCIENCES,

PHILADELPHIA,

March 6, 1909

SCIENTIFIC BOOKS

The Mechanical Engineering of Steam Power Plants. By DR. F. R. HUTTON, Professor Emeritus, Mechanical Engineering, Columbia University. Third edition. John Wiley & Son.

The first edition of this work appeared in 1897 and it has become a standard work of reference in its class. The third revised edition contains some changes in arrangement of topics and material which brings the work up to date. In the last edition the steam turbine is fully described and its advantages, as compared with the piston engine, thoroughly discussed.

There are various technical works which relate to specific machines required for the generation of steam power, but only a few which are devoted to the installation and arrangement of these various machines so as to produce the most economic result, which is the branch of engineering to be considered in the design and installation of the machinery for a complete power plant. The modern power plant involves such a large variety of machinery that its construction constitutes a complicated problem, and it is necessary for the designer to be thoroughly acquainted with the various types of machines and the different varieties of each in order to make an aggregation, of which all the parts will co-act and perform their functions so as to produce the highest economic results. It is obvious that a steam power plant must contain "steam-making" machinery, "steam-using" machinery and the various elements required for transmitting the steam from where it is generated to where it is usefully applied. A knowledge of the industries of this country reveals numerous manufacturers engaged in the production of different vari-