

or chemical work by the Carolinian Institution in Stockholm, for literature by the Academy in Stockholm, and for the propagation of peace by a committee of five persons to be elected by the Norwegian Parliament.

CHAS. D. WALCOTT, Director of the U. S. Geological Survey, will have, in the next issue of *Appleton's Popular Science Monthly*, an article on 'The Preservation of our Forests,' and President David Starr Jordan an article on 'The Evolution of the Mind.'

WITH the January number *The Journal of School Geography* has been enlarged to 40 pages, and the editor, Professor Richard E. Dodge, Teachers' College, New York, announces that it will be improved in several ways. Particular attention will hereafter be given to mathematical geography, elementary meteorology and commercial geography. Mr. Andrew J. Herbertson Collington, Scotland, has become associate editor for Great Britain.

THREE packages of yellow fever serum from Dr. J. Sanarelli, of the Institut de Hygiene Experimentale at Montevideo, have been received at New York, intended for Dr. Wyman, of the United States Marine Hospital service at Washington and for Dr. Doty. Part will be used in experiments made by Dr. Doty's assistant, Dr. C. B. Fitzpatrick, at the laboratory at Quarantine.

UNIVERSITY AND EDUCATIONAL NEWS.

AT a meeting of the Corporation of Yale University on January 13th it was decided to appoint a committee to prepare plans for the proper celebration, in October, 1901, of the bi-centennial anniversary of the granting of the charter to Yale College.

AT a special meeting of the Council of Columbia University, on January 13th, action was taken as authorized by the Board of Trustees, incorporating the Teachers' College as a professional school for the training of teachers. President Low will become President of the Teachers' College, but the Trustees of the College will be continued as an independent board, responsible for the financial administration of the College. The Teachers' College was founded in 1887, Professor Nicholas Murray

Butler, of Columbia University, being the first President. In 1893 the College was partially affiliated with Columbia University for educational purposes. The buildings of the College, erected at a cost of about \$1,000,000 on land given by Mr. George W. Vanderbilt, are adjacent to those of Columbia University and Barnard College. The foundation of a professional school for the training of teachers of the same rank as university schools for medicine and law is one of the most important advances ever made in educational methods.

DISCUSSION AND CORRESPONDENCE.

A PROPOSED ADDITION TO PHYSIOGRAPHIC NOMENCLATURE.

THE rocky mass of the earth, the lithosphere, is mantled in large part by formations whose particles or grains are loosely aggregated, either incoherent or feebly coherent. To these formations collectively Merrill has given the appropriate name *regolith* (stony mantle), a term approximately coördinate with lithosphere, hydrosphere and atmosphere. It was not proposed until its need had come to be distinctly recognized, and I believe it will be promptly adopted in geology and physiography. But a companion term is equally needed. The lithosphere is composed of rock, the hydrosphere of water and the atmosphere of air; of what does the regolith consist? There is no compact name for its material, although surface geology and physical geography have found occasion to mention it so frequently and under so many relations that there are plenty of descriptive phrases. Lying above the firm rock, it is *superficial* or *surficial material*. Having been formed by the breaking up of rock, it is *disintegrated material*. Because destined eventually to coalesce as rock, it is *unconsolidated material*. As a substitute for these binomial terms I propose the word *discrete*.

The adjective *discrete* comes to us along with *discreet*, from the Latin *discretus*, separate. *Discreet* is now appropriated by a secondary meaning, wise, but *discrete* means only separate, incoherent, discontinuous. In converting it into a technical noun I propose to retain this adjective meaning and add the idea of stony

material, making *discrete*=discontinuous stony material, or the material of the regolith.

Portions of the material of the regolith are already well named. Part of it is sedentary, the remainder transported. The sedentary portion has been called *geest* (Le Duc, McGee) and *saprolite* (Becker). The transported portion is sometimes broadly included under the term *drift*, but it is more commonly classified by genesis as *alluvium*, *glacial drift*, etc. *Discrete* is proposed to include all these.

It is proper to add that for many years I have personally felt the need of a succinct term for this idea, and that I have already made experimental use of the word *discrete* in two courses of lectures on physiography as well as in unpublished manuscript. Despite Dr. Branner's deprecation,* I cannot avoid the feeling that such tests, when critically applied, are of practical value, and I therefore venture to hope that the new word will be found useful by some of my colleagues in physiographic study.

After the writing of the preceding paragraphs my attention was directed to the fact that the noun *discrete* is already in print. It is used in the sense here proposed, but without definition, in a Johns Hopkins thesis by my friend Dr. A. C. Spencer.† G. K. GILBERT.

WASHINGTON, D. C.

HARVARD'S METEOROLOGICAL WORK ON THE WEST COAST OF SOUTH AMERICA.

TO THE EDITOR OF SCIENCE: In a previous communication on 'Meteorology in South America,' published in SCIENCE, October 1, 1897, pp. 523-525, the writer gave some facts as to the meteorological work now being done in Brazil and in the Argentine Republic. It would seem well to supplement the information given in that letter with some notes on what has been and is being done in Peruvian meteorology.

With the exception of the observations made at the 'Unanne' observatory in Lima, all the meteorological work now being done in Peru is being carried on by the Astronomical Observa-

*SCIENCE, N. S., Vol. VI., 1897, p. 134.

†The Geology of Massanutten Mountain in Virginia. Published by the author. Washington, 1897. See p. 33.

tory of Harvard College. Harvard's astronomical and meteorological work in Peru is the result of a bequest left to the Harvard College Observatory by the will of Mr. Uriah A. Boyden, in 1887. By the terms of the will this money was to aid in the establishment of an observatory "at such an elevation as to be free, so far as practicable, from the impediments to accurate observation which occur in the observatories now existing, owing to atmospheric influences." In order to determine the best site for the new observatory, it was necessary to make a more or less careful study of the meteorological conditions, especially as affecting the visual conditions, at various places which seemed to promise well. Accordingly preliminary stations at which astronomical and meteorological work was temporarily carried on were established in 1888 and 1889 in Colorado and in California. It was, however, thought advisable, for various reasons, to place the new observatory within the tropics, and accordingly an expedition was sent out in 1889 to make a study of the meteorological conditions, and of the availability for astronomical work, of various places along the west coast of South America. There is, as is well known, along this coast a narrow strip of desert, which extends roughly from latitude 4° to 30° S., over the greater part of which rain seldom or never falls. This desert strip, about 1,800 miles in length from north to south, is probably best known to scientific men, and to the world at large, as containing the rich nitrate fields of northern Chili, which were seized by the Chilians in the late war with Peru. These nitrate deposits which have, since the war, furnished the greater part of the revenues of Chili, are essentially a product of the dry climate of this interesting region.

The expedition above referred to was in charge of Professor Solon I. Bailey, of the Harvard College Observatory, and reached Lima on March 6, 1889. After a survey of the surrounding country it was finally decided to place a temporary station on a summit about 20 miles northeast of Lima, at an altitude of 6,600 feet above sea-level. This summit, which had previously been unnamed, was called Mt. Harvard. Meteorological observations on Mt.