

throughout every grade and department of the military establishment.

ARTHUR D. LITTLE, Inc., chemists and engineers, Cambridge, Mass., through its Information Department, is planning a series of Bibliographic Studies, to be circulated among the public, university and special libraries of the United States, and the firms and individuals interested in the various studies. Those in course of preparation are: Chemical Warfare; Alcohol from Waste Sulfite Liquors; Industrial Research; The Automobile and Tractor at the Front; The Electric Furnace; Industrial Laboratories; Molasses; The Chemical Action of Light; Woods and Fibers used as Paper Making Materials. Copies of the first three of them are ready and may be had upon request.

THE REV. DR. WILLIAM T. MANNING, rector of Trinity Parish, New York, offered a resolution in the House of Deputies of the Episcopal Church at the recent general convention in Detroit, providing for the appointment of a committee of three bishops, three presbyters, and three laymen "to consider the fuller recognition of the ministry of healing in the Church and the need of its revival under proper sanctions and safeguards." The resolution was unanimously adopted and sent to the House of Bishops for concurrence. Dr. Manning, who is a trustee of Columbia University, has been interested in an English faith healer who has held clinics at Trinity Church.

IN connection with the statement issued by the United States Public Health Service in regard to the probable return of the influenza epidemic this year, it is announced that the laboratories of Harvard University have been chosen to conduct exhaustive research into the causes, effects and complications of the disease, together with their prevention and cure. Dean David L. Edsall, of the Harvard Medical School announces that a large corporation which suffered losses as a result of the epidemic last year has given \$50,000, the greater portion of which will be used by Dr. Milton Joseph Rosenau, professor of preventive medicine and hygiene of the Harvard Medical

School and a corps of assistants to carry on the exhaustive studies and research to discover some means to prevent future outbreaks of the epidemic.

It is stated in *Nature* that under the will of the late Dr. Joseph Wigglesworth, his ornithological library passes by bequest to the University of Bristol. This library of more than 1,000 volumes, including finely-bound copies of the works of Gould, Seebohm, Dresser, Lilford, Levaillant and other leading authorities, is probably one of the best in England. It will be housed in a separate room in the new university buildings, and will be kept up to date. Dr. Wigglesworth gave the residue of his estate to the university after his widow's death for the furnishing and maintenance of this special library.

UNIVERSITY AND EDUCATIONAL NEWS

At the recent meeting of the Yale Corporation several gifts were announced. Mr. Austin C. Dunham, of Hartford, has given \$64,000 to cover the amount advanced by the Sheffield trustees in constructing the electrical engineering building of the Sheffield Scientific School. The building is to be known hereafter as the Dunham Laboratory of Electrical Engineering. By the death of the widow of Dr. Levi Shoemaker, of Wilkes-Barre, property valued at about \$200,000 goes to the university for the general endowment of the School of Medicine. A fund of \$6,000 has been received from Edith Meacham Hitchcock and Standish Meacham of Cincinnati, to establish a scholarship in the Sheffield Scientific School in memory of Robert Douglas Meacham of the class of 1907 of the Scientific School.

THE sum of five thousand dollars from a "friend of the university" has been received by the University of California for the support of special research work in the department of paleontology during the year 1920.

DR. ROSWELL P. ANGIER, professor of psychology at Yale University, has been appointed to the newly established deanship of the common freshman year.

At the University of Manchester the following appointments have been made: A. G. Ogilvie, reader in geography; J. MacMurray, lecturer in philosophy; A. Gardner and R. L. Newall, demonstrators in anatomy.

DISCUSSION AND CORRESPONDENCE

A PROPOSAL OF TWO NEW MIOCENE FORMATIONAL NAMES

IN the summer of 1916, I organized, with the help and encouragement of Professor G. D. Harris, a paleontological expedition to Santo Domingo, with the hope of differentiating the Yaqui Valley Tertiary beds. These had been indiscriminately called Miocene by Professor Gabb in 1874, and in recent years referred by Dr. Dall and Dr. Pilsbry to the Oligocene. The members of the exploratory party were Mr. Karl Paterson Schmidt, Mr. Axel Olsson and the writer, the actual collecting being very efficiently done by the two gentlemen. The collections were chiefly made from bluffs along tributary streams flowing northward through the Samba Hills into the Rio Yaqui. Our most important collections and sections were made on the Rio Cana near Caimito, the Rio Gurabo near Los Quemados, and the Rio Mao near Cercado.

While proceeding up the Rio Gurabo, Mr. Schmidt and Mr. Olsson observed a sudden change in the fauna of the bluffs near Los Quemados. They felt confident that this indicated a different formation from that further down the stream.

A careful and detailed study of the mollusca we had collected was made by the writer and the presence of two formations verified, the results being published in 1917.¹ I then designated these two formations by index fossil names, calling them the Lower or *Aphera islacolonis* formation, and the Upper or *Sconsia lævigata* formation.² This was to contrast them with the *Orthaulax inornatus* formation. I referred the *Orthaulax* formation to the

Upper Oligocene of Tampa; the Lower or *Aphera* formation to the Lower Miocene; and the Upper or *Sconsia* formation to the Middle Miocene.

It now, however, seems desirable to apply geographical names, in conformity with modern stratigraphical nomenclature, to these formations. I therefore propose for the Upper or *Sconsia lævigata* formation of my 1917 report, the name Gurabo Formation. This includes primarily our Zones A to F on Rio Gurabo near Los Quemados and our Bluff 1 on Rio Mao near Cercado. For the Lower or *Aphera islacolonis* formation of my 1917 report I now propose the name Cercado Formation. This includes primarily our Bluffs 2 and 3 on Rio Mao near Cercado, our Zones H and I on Rio Cana near Caimito, and our Zone G on Rio Gurabo near Los Quemados. The Cercado formation also includes a set of fossils from Bulla river loaned to me for study by the American Museum of Natural History.

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SNOW DOUGHNUTS

TO THE EDITOR OF SCIENCE: To the descriptions of snow-rollers which have appeared in recent numbers of your journal may the following be added?

During the winter of 1916-17 a heavy snow fell in Monongalia county, West Virginia, which provided for a short period an opportunity for travel in sleighs. The snow drifted to depths of several feet in places and formed along some roadside fences steep-walled drifts which were, here and there, overhanging at their tops. The writer traveled in a sleigh for several miles along the side of Chestnut Ridge, the westernmost of the Allegheny Mountain ridges in this region. The snow was at this time fresh and unpacked.

At the foot of these steep-walled drifts and also lying part way down their slopes were, in many places, numbers of small snow rings resembling doughnuts in appearance. The rings were a little slenderer than the average

¹ Bulletins American Paleontology, Nos. 29 and 30.

² Bull. Amer. Pal., No. 30, p. 40, and Correlation Table facing p. 44.