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It is announced that the government has compiled a History of the Territory of Alaska, bringing the explorations made by army officers up to date and including an elaborate description of the physical resources of the Territory. The compilation when published will make a large octavo volume of about 500 printed pages. The material was supplied, by the War Department under the direction of Assistant Secretary Meiklejohn, to the Senate.

BOOKS RECEIVED.

General Physiology. MAX VERWORN. Translated from the second German edition and edited by FREDERIC S. LEE. New York and London, The Macmillan Company. 1899. Pp. xvi + 615. \$4.00. L'audition et ses organes. M. E. Gellé. Paris, Alcan. 1899. Pp. 326.

La Céramique ancienne et moderne. E. GUIGNET and EDOUARD GARNIER. Paris, Alcan. 1899. Pp. 311.

The Theory of the Leisure Class: an Economic Study in the Evolution of Institutions. THORSTEIN VEBLEN. New York and London, The Macmillan Company. 1898. Pp. vii + 400. \$2.00.

SCIENTIFIC JOURNALS AND ARTICLES.

THE American Mathematical Society is actively pushing the plans for the publication of its Transactions, and it is probable that the first number will appear in January next. A committee, consisting of Messrs. T. S. Fiske, R. S. Woodward, E. H. Moore, Maxime Bôcher and James Pierpont has been appointed to secure the necessary financial guarantees. Subscriptions of one hundred dollars annually for a term of five years have already been pledged by representatives and friends of each of the following institutions: Chicago University, Columbia University, Yale University and Bryn Mawr College. Other pledges are anticipated and the plan is already assured of success.

The Journal of Geology, Vol. 7, No. 1, for January and February, contains the following papers:

Frank Leverett: 'The Lower Rapids of the Mississippi River,' pp. 1-20. The writer discusses the abandonment by the Mississippi River of its pre-glacial channel just above Keokuk, Ia., and the production of the newer and

more contracted channel, in which are the rapids. The Kewatin ice sheet and its drift are regarded as the principal cause.

H. B. Kümmel: 'The Newark Rocks of New Jersey and New York,' pp. 23-53. The writer divides the strata under consideration into the Stockton, Lockatong, Brunswick and Trap formations. Their distribution, character, folding and faulting, and the conditions prevailing during their formation, are then discussed.

Henry S. Washington: 'The Petrographical Province of Essex County, Mass.,' II., pp. 53-64. The paper continues one that was begun in the last number. It describes, with analyses, the essexites, diorites, quartz-augite-diorites, porphyritic diorites and gabbros.

J. A. Udden: 'The Sweetland Creek Beds,' pp. 65-79. The beds are chiefly shale, and lie between the Cedar Valley Limestone below and the Coal Measures above, in Muscatine county, Ia. Fossils indicate an Upper Devonian Age.

G. H. Squier: 'Studies in the Driftless Region of Wisconsin,' pp. 79-83. One glaciated boulder has been found in a valley within the driftless region.

W. N. Logan: 'A Discussion and Correlation of certain Subdivisions of the Colorado Formation,' pp. 83-92. The paper discusses and correlates the subdivisions of this formation in the Kansas, Colorado, Black Hills and Iowa-Nebraska areas.

Editorials and reviews complete the number.

The leading article in the American Naturalist for February, is by Dr. W. H. Dall, and discusses 'The Proposed University of the United States and its possible Relations to Scientific Bureaus of the Government.' Dr. Arthur Hollick continues the consideration of 'The Relation between Forestry and Geology in New Jersey,' this paper giving 'The Historical Development of the Flora,' concluding that the gradual extinction of the gymnosperm type is indicated. Professors J. H. Comstock and J. G. Needham also continue the subject of 'The Wings of Insects,' the chapter being devoted to the specialization of wings by addition as illustrated by the venation of the wings of Under the title of 'The Pene-Ephemerida. plain: a Review Dr. R. A. Daly considers at length Professor Tarr's objections to the existence of peneplains on this earth of shifting base levels. Professor F. L. Washburn describes and figures the shoulder girdle of 'A Peculiar Toad,' presenting the abnormality of an extra (left) fore limb. The abundant literature on the subject of the Trenton Gravels receives an addition from Dr. Frank Russell, who describes some 'Human Remains from the Trenton Gravels,' concluding that the skulls which are figured are those of modern Indians, probably of the Lenni Lenapé. A goodly proportion of Notes and Reviews fill out the number.

The Journal of the Boston Society of Medical Sciences for January comprises two parts, each containing a number of excellent plates. Those illustrating the articles on the 'Pathological Histology of Acute Lacunar Tonsilitis,' by J. L. Goodale, and the 'Character of the Cellular Exudation in Acute Keratitis of the Rabbit,' by W. T. Councilman, are particularly fine. Our anti-vivisection friends who discredit the exist ence of hydrophobia would do well to read the paper by Langdon Frothingham on 'Rabies in the Vicinity of Boston,' where 20 positive cases are noted between March, 1897, and December, 1898. An interesting series of 'Observations on the Effects Produced by the 6-mm. Rifle and Projectile,' by H. G. Beyer, is well calculated to create respect for the new Navy arm.

The Botanical Gazette for February contains the following leading articles: 'New or Little Known North America Trees,' C. S. Sargent 'The Ecological Relations of the Vegetation on the Sand Dunes of Lake Michigan,' Henry C. Cowles; 'The Society for Plant Morphology and Physiology—Columbia Meeting,' W. F. Ganong. The briefer articles include: 'Notes on the Maximum Thermal Death-point of Sporotrichum Globuliferum,' B. M. Duggar; 'Descriptions of Two Willows from Central America,' W. W. Rowlee; 'A Peculiar Case of Spore Distribution,' F. L. Stevens; 'A New Silphium,' Wm. M. Canby.

SOCIETIES AND ACADEMIES.

SECTION OF PSYCHOLOGY AND ANTHROPOLOGY OF THE NEW YORK ACADEMY OF SCIENCES.

At the regular monthly meeting of the section, on February 24th, papers were presented

by R. S. Woodworth on the 'Accuracy of Movement, by F. C. Spencer on the 'Origin and Persistent Influence of Sacred Number Concepts,' and by F. Boas on 'Anthropometric Charts.'

Dr. Boas presented the results of recent investigations, which show that the anthropometric charts now used in the gymnasium by anthropologists are valueless as a means for estimating the development of individuals.

CHAS. B. BLISS, Secretary.

ONONDAGA ACADEMY OF SCIENCE.

At the January meeting annual reports of officers and sections were received and the following officers were elected: President, John Van Duyn, M.D.; Vice-President, J. A. Dakin; Secretary, P. F. Schneider; Corresponding Secretary, H. W. Britcher; Treasurer, Miss L. W. Roberts; Librarian, Miss V. L. Jones.

The report of the Geological Section showed considerable progress in the investigation of interesting local problems, and cited the discovery of a vein of quartz crystals in the Corniferous rock at the Onondaga Indian Reservation.

The report of the Botanical Section included new localities for several of the rarer plants of the county. One plant, Glaucium glaucium, was reported as new to the county, and two, Crepis virens and Sanguisorba canadensis, were reported as new to the State. Selaginella selaginoides was also found and is probably new to the State.

The report of the Zoological Section contained the result of feeding experiments on the larvæ of *Diedamia inscripta*. During the year upwards of thirty spiders were added to the list of Onondaga county species. Of these, nine species had not hitherto been reported in the State.

H. W. BRITCHER.

DISCUSSION AND CORRESPONDENCE.
WHAT IS THE CAUSE OF THE SO CALLED
TOBACCO FERMENTATION?

Thus far it has been generally believed that the rise of temperature and the chemical changes that take place when the cured tobacco leaves are piled up in heaps are due to bacterial action. But careful investigations of the 'fer-