

Professor Farrington, Curator of the Geological Department, accompanied by Mr. E. S. Riggs, of Princeton University, is conducting an expedition in the Bad Lands of South Dakota for the purpose of collecting vertebrates from the White River beds. Gratifying success has attended the work of the expedition thus far. There have been secured one nearly complete small *Titanotherium* skeleton, four well preserved skulls and many miscellaneous bones of other individuals of the same genus. *Crocodylus* and *Aceratherium* remains have been found in the same beds. The party will later seek to secure specimens of *Dæmonelix* from northwestern Nebraska and close the season with a visit to some newly discovered *Equus* beds in Montana.

President Ayer has just returned from his annual trip to Europe and Africa, and has brought back an even richer harvest for the Museum than on former occasions. Among the most interesting may be mentioned a sitting mummy of great antiquity and in a splendid state of preservation, several figure heads and busts carved in stone, and a collection of Egyptian and Etruscan jewelry. In Rome he secured two very curious incinerating tomb boxes, made from tufa in the general shape of temples, the largest being six feet long, three feet wide and two feet high, both highly decorated in archaic drawings of griffins, dogs, geese, lotus flowers and scrolls. They are thought to be of Etruscan origin and date back to from 700 to 900 B. C. The new accession will certainly prove a valuable addition to the already very respectable collections representing Italian and Egyptian archæology.

CURRENT NOTES ON PHYSIOGRAPHY.

YUKON GOLD DISTRICT.

A REPORT on the Alaskan expedition of Messrs. Spurr, Goodrich and Shrader in the summer of 1896, written chiefly by Spurr, is

lately published (18th Ann. Rept. U. S. G. S., 101-392). The most important physiographic contributions are in Chapter IV., by Spurr and Goodrich, in which crustal movements are inferred from the topographic forms and drainage features. Extensive pre-Neocene denudation wore down the older rocks to gentle slopes, between which the rivers meandered in broad and shallow valleys. Now elevated, this denuded region forms the 'Interior Plateau,' which, when seen from an elevated point, appears like a gently undulating plain, above which hills and mountains rise to moderate height, and beneath which the deep valleys are incised. The region about Forty-mile creek exhibits these features with remarkable distinctness; the steep-sided valley, several hundred feet deep, curves about as if incised from a meandering stream on the former valley floor; the sharp turns of the stream being known to the prospectors by the suggestive name of 'kinks.' The elevation by which the present cycle of denudation was introduced is thought to have taken the form of broad, flat folds, accelerating some streams and retarding others.

Additional information on Alaska is found in a 'Map of Alaska,' with text prepared under the direction of S. F. Emmons, published by the U. S. Geological Survey; and in Bulletin No. 16, Department of Labor, chiefly occupied with an account of a tour in Alaska by S. C. Dunham.

PHYSICAL GEOGRAPHY OF WORCESTER, MASS.

THE Physical Geography of Worcester, Massachusetts, by J. H. Perry, with illustrations by J. C. Lyford (published by the Worcester Natural History Society, 1898), is one of a class of essays that are rarer than they should be in the best interests of home study. Here we find a good explanatory account of the dissected uplands of southern New England and their glacial

ornamentation with drumlins and gravel beds, such as must greatly aid the field work of any enterprising teacher who leads her classes in geography out of doors. The practical difficulty that the teacher of to-day will find in using such a guide as this essay will arise, first, from a want of a sufficiently comprehensive scheme of geographical study, by which the facts of local observation shall be correlated with geographical facts generally; and second, from the absence of a series of comparative examples, by which local features may be used to illustrate the various parts of the world which they resemble.

JAMAICA.

SPENCER continues his Antillean studies in an article on Jamaica (Late Formations and Great Changes of Land in Jamaica, *Canadian Journal*, V., 1898, 324-357), from which the following notes are taken: The White-limestone uplands, deeply dissected, abound in caverns and are in part uninhabitable from the numerous sinks, or 'cock-pits,' 200-300 feet in diameter and 'deeper than they are wide.' The border of the uplands is dissected by torrential wash-outs, which enter broad-floored valleys 'almost reduced to the base level of erosion.' The northern coast is comparatively abrupt in its descent into the sea; this "suggests great dislocations off that part of Jamaica, and that the forces which squeezed up the island also rammed down the sea floor to the north." On the south coast broad valleys floors independent of structure form embayments sloping to the shore line from among highland spurs. The lower portions of certain streams have cut canyons beneath former broad valleys floors, indicating recent uplift; several examples of this kind being shown on the northern coast.

CUBA.

A 'TIMELY' article on Cuba from the competent pen of R. T. Hill is the leading

article in the 'Cuba number' of the *National Geographic Magazine* (IX., 1898, 193-242). Besides a brief summary of physiographic features, it gives a good general account of population and industries, in which the physiographic control is well brought forward. A contour map, compiled from the best known authorities, is a valuable contribution to the geography of the island.

APPALACHIA.

THE latest number of *Appalachia*, March, 1898, includes a number of good illustrations of the Canadian Rocky Mountains from photographs, some of which are from the great series taken by the Dominion Topographical Survey. The usual mountain-climber's narratives are by Thompson and Habel. The region is of strong Alpine scenery—grand snow fields aloft; great glaciers descending into the upper valleys; old moraines of huge size farther down; avalanche paths on steep slopes beneath high cliffs; lakes curiously related to the larger valleys. Although as yet not productive of many physiographic essays, there is no part of his continent that offers so good and so accessible a field for the careful study of Alpine forms.

W. M. DAVIS.

CURRENT NOTES ON ANTHROPOLOGY.

THE RATIO OF HUMAN PROGRESS.

At the last meeting of the British Association, Mr. George Iles read a suggestive paper, 'Why human progress is by leaps.' He points out that the triumphs of man over nature in the discovery of its laws of action are not simple additions to his resources, but are multipliers of high potency, often extending over the whole field of his activity. This he illustrates by the manifold applications of electricity in our own day, and by the use of fire in prehistoric times. He draws the conclusion that man's