

the ever-increasing specialization in the different branches of natural history. More than that, the conditions and opportunities for special work have greatly altered in this country within recent years. Other large museums have been founded or more abundantly endowed, while a large part of the original investigation of to-day must be carried on in the field on fresh material which no museum can furnish from its stores. It therefore becomes wiser to abandon the accumulation of vast collections, excepting such as may be cared for at small expense, wherever these are certain to be duplicated elsewhere; and to expend the income from the funds rather in fostering such work as may most efficiently be conducted by the professors holding endowed chairs in the university, and by the assistants in the various departments of the museum.

The boldness and decision with which Mr. Agassiz here advocates a policy utterly at variance with that which has been heretofore pursued, is worthy of the most careful attention of all who have to deal with museums. From his position at the head of an extensive establishment, in which he has complete control, and which he has himself largely endowed, he occupies an unequalled vantage ground. He has cut completely adrift from the traditional notions of what a great museum should be, while adhering rigorously to the exhibitional features impressed upon the museum by his father. In this we believe he has struck the keynote of what is needed for a university museum in this country, and what the requirements of modern science demand. We commend his views to all who have to deal with the expensive problem which natural history museums force upon the attention.

ANSWERS TO CHARGES AFFECTING THE GEOLOGICAL SURVEY.

SECRETARY LAMAR has received from Major J. W. Powell, director of the geological survey, a letter, of which the following are the most important portions:—

Various charges affecting discredibly the administration of the geological survey have been current in the newspapers of the country for the past four months, and I deem it my duty to call your attention to the same, and to append brief statements to them severally, that you may see how baseless and absurd they appear in the presence of the truth.

It is charged that the survey has been extended into the eastern portion of the United States in violation of law. The law specifically provides that the survey shall extend over the entire United States, and the law was passed after repeated and

lengthy debate in congress by an overwhelming majority.

It is charged that the geological survey is duplicating the work of the coast survey and of state geological surveys. There is no truth or color of truth in the statement.

It is charged that a corrupt conspiracy existed in the National academy of sciences to break down the old organization for geographical and geological surveys in order to create the new; that the National academy itself had little to do with this, but that the conspiracy was the work of a corrupt committee. In an act of congress approved June 20, 1878, the academy was required to report to congress a plan for making a topographic and geologic survey. Such plan was reported, and the present geological survey exists in pursuance of that plan, under specific statutes passed by congress. The committee of the academy that considered the subject was composed of Profs. O. C. Marsh, James D. Dana, William B. Rogers, J. S. Newberry, W. P. Trowbridge, Simon Newcomb, and Alexander Agassiz. The plan was reported by the committee at a meeting of the academy called for the purpose of hearing the report, and was discussed at length in the academy, and adopted unanimously.

It is charged that the scientific men of the National academy of sciences, in wicked collusion with Major Powell, "proposed to wipe out the lines which now fix the limits of all lands sold from the public domain of the entire country, and introduce a new system." There is no truth and no color of truth in the statements; its falsity is equalled only by its absurdity.

It is charged that Major Powell was elected a member of the National academy of sciences by corruptly distributing patronage to its members. Major Powell was elected to membership in the academy prior to his appointment as director of the U. S. geological survey, and at a time when he had no patronage under his control to be used with the members of the National academy.

It is charged that the publication of the geological survey is not germane to its work, and Packard's 'Report on geometrid moths' is given as an illustration; and it is stated that nearly all the publications of the survey are of the same class. This work of Dr. Packard's was not published by the U. S. geological survey, but by what was known as the Hayden survey years ago. The law now prohibits the publication of general works on natural history by the survey, and confines the publication to works germane to geology and geography.

It is charged that "Major Powell has a fondness for state geologists. Now, if Powell can give a

state geologist \$4,000 a year, as he does in several cases, the geologist is so much better off." No state geologist has ever received a cent of salary from the U. S. geological survey. In connection with the above charge, the names of all the geologists and assistant geologists in the geological survey are given, together with their salaries; and the statement is made in such a manner as to make it appear that they are all state geologists, when, in fact, not one of them is employed by a state.

It is charged that Captain Clarence E. Dutton, of the ordnance corps, receives his salary as captain in the army, and also a salary as geologist in the geological survey. Captain Dutton receives his salary as captain in the army, but does not receive a salary as geologist; and his detail as an officer in the geological survey is made under authority of a specified act of congress, and his detail has been extended by the present secretary of war.

It is charged that collections of fossils which cost in one instance \$50,000, and in another \$100,000, instead of being deposited in the national museum, have been diverted to the private museums of Professor Marsh of Yale college, and Professor Cope of Philadelphia. The geological survey has fossils in the hands of Professor Marsh of Yale college. It also has fossils in the hands of Professor Newberry of New York, Professor Fontaine of the University of Virginia, Professor Leidy of Philadelphia, and various other persons throughout the United States. The collections of the geological survey are sent to specialists for their examination, and the statute organizing the geological survey contemplates this by providing that when the specialists have finished their work on the collections, they shall then be deposited in the national museum.

It is charged that \$112,000 was paid out for salaries in excess of the amount appropriated for that purpose last year. There is no truth, or color of truth, in the statement.

CRUISE OF THE CORWIN.

THOSE interested in arctic matters will recall the pleasure afforded by a modest octavo report, issued by the Revenue marine bureau in 1881, on the explorations of the *Corwin* during the season of 1880. The following year the officers of this gallant little cutter seem to have outdone themselves, and, among a variety of creditable explorations, had the honor of being the first civilized men to set

foot on Wrangell Island, afterwards more completely surveyed by the officers of the U.S.S. *Rodgers*. This land, first reported by the Chukchi to Russian traders, was first seen by Kellett, who saw the tops of the highest land, and called it Plover Island, located it erroneously, and, having reported much more land which was only mirage, his whole discovery fell into discredit, if not oblivion. The land was first accurately described, named, and located clearly, by Capt. Long, of the whaling fleet, who did not land, — an honor reserved for Hooper and his party, and afterward for the *Rodgers* party.

The present report gives in detail an account of the voyage, and is profusely illustrated by cuts in the text, of a not very accurate or always useful kind, and a number of heliotypes from photographs made by Nelson. These are poor, considered merely as pictures, for the difficulties under which they were taken were great; but intrinsically they are extremely valuable. They contain portraits of numerous Innuits, Tsau-chu (or Chukchi), and ethnological objects of special interest. The text contains much that is of interest to the general reader, but is less useful to the student than the small report of the previous voyage. Probably nothing was farther from Capt. Hooper's mind than the idea, that, by incorporating material from other sources, he was doing an injury to his report. It is quite true, however, that in many cases it is impossible to determine whether a given statement is the result of personal observation by himself, or an inference from the observations of others; and the value of the work as a contribution to knowledge is seriously impaired by this state of things. There is some hasty generalization, and rarely a distinct error, as in the statement that the Asiatic Innuits have entirely disappeared except at East Cape (p. 100). It is well known that they have not disappeared, and are not likely to, and that the short stay of the *Corwin* party at any one point often did not enable them to learn to which of the two races their casual visitors belonged. The long delay of publication, also, has made some of the statements obsolete, especially in regard to currents, which Capt. Hooper discusses at some length, and comes to conclusions which would be to some extent modified, if reviewed to-day.

The birds, fishes, etc., were treated by Nelson, Bean, Rosse, and others, in a publication which appeared some time since. In the present volume are some useful meteorological summaries from Nelson's note-books, and a characteristic effusion on glaciers, by John Muir. This gentleman's devotion to glaciers and their work is sufficiently well known to American geologists to need no serious attention here. Foreign readers, however,

Report of the cruise of the U.S. revenue steamer Thomas Corwin, in the Arctic Ocean, 1881. By Capt. C. L. HOOPER, U. S. R. M., commanding. Washington, Government, 1884 [1885]. 147 p., illustr., 16 pl. 4c.