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.

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. 4°.

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 Innuit, 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 Innuit 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,

may be benefited by the reminder that other observers, including some of Mr. Muir's companions on the trip in question, have been unaccountably blind to the remarkable phenomena upon which some of his far-reaching conclusions seem to rest.

Such records as this volume affords, in spite of minor defects, are most creditable to the bureau and its officers; and it is to be hoped that the series may be indefinitely continued.

NEW BOOKS.

**** *For full titles see 'Publications received at editor's office.'*

'THE perfect way in diet' (Kingsford) is a translation of a thesis presented, in 1880, by the author, for her degree of doctor of medicine, and is a plea for a return to the natural and ancient food of our race, which is better understood when one knows that Miss Kingsford is a vegetarian. —— 'The Russian revolt' (Noble) gives a history of the development of the country, showing the effects of contact with western civilization, and closes with an appeal for a constitutional government for Russia. —— 'Wanderings of plants and animals' (Hehn and Stallybrass) is an attempt to trace the origin of well-known plants and animals by historic and philologic methods. The author holds that Europe owes much more to Asia than the mere botanist and mere zoölogist are willing to admit; that the flora of southern Europe has been revolutionized under the hand of man; and that the evergreen vegetation of Italy and Greece is not indigenous, but is mainly due to the sacred groves planted around the temples of oriental gods and goddesses. He has much to say of Indo-Europeans, or Aryans, at the time of their settling Europe, and holds that the builders of the lake villages in Switzerland were Aryans at a comparatively advanced period. In fact, the low condition of the Aryans on entering Europe, and their subsequent obligations to other Aryans in Asia, and, above all, to the Semitic races in Palestine, form, perhaps, the central idea of the book. —— 'Chemical conversion tables' (Battle and Dancey) are intended to meet a long-felt want on the part of agricultural analytical chemists for some relief from the time-consuming calculations necessary to convert the result of each separate determination into the customary per cent. They embrace only what is required in the analysis of commercial fertilizers and their derivative constituents. —— 'Notes on the chemistry of iron' (Troilius) gives a description of such chemical methods of analysis in iron and steel manufacture as have come under the author's personal observation. —— 'History of Japan' (Thorpe) is a history of the country from the earliest times, giving an account of the primitive religion, and of the different dynasties, and ends with an account of the recent progress of the country. —— 'The principles of house-drainage' (Putnam) contains lectures delivered before the Suffolk district medical society, the Boston society of architects, and the Massachusetts institute of technology, on house-drainage, and the proper construction of wash-basins, closets, soil and drain pipes, with hints as to the size and general arrangements of piping. —— 'First lessons in amateur photography' (Spaulding) gives the beginner, in a few pages, an account of the general method of taking a negative, and obtaining from it a silver print. The subject-matter is arranged in the form of seven short lectures, which were originally delivered before the senior class of a high school. That portion of the book relating to the camera and lens is treated very briefly, and the description of the process of development of the negative is not stated as fully as might be desired. The general criticism on the book is that there is not quite enough of it. —— 'De l'effet artistique en photographie' (Robinson et H. Colard) begins where most books on photography leave off, treating photography wholly from the artistic side, and doing so in a very thorough and satisfactory manner. We can commend the book to all who wish to study the principles of art in photography, and to those who wish to obtain really artistic pictures, whether of landscapes, groups, or portraits.

GEOGRAPHICAL NOTES.

APROPOS of our comments on the facilities for navigation in Hudson Bay (*Science*, No. 142, p. 350), we learn that the company's annual vessel, with a cargo valued at over a million, was recently driven on the bar at the anchorage near Moose Factory, the port of the region, and became a total wreck.

The whaling fleet in Alaskan waters this summer numbered forty sailing-vessels and eight steamers, with a total tonnage of 14,262 tons. No further disasters had occurred up to the latest advices, and the vessels embayed by ice near Point Barrow had been safely extricated. One hundred and twenty-six whales had been taken.

The fishing fleet of the North Pacific has returned to San Francisco. Fourteen trips were made by twelve vessels, aggregating 2,550 tons. The fish taken in Alaskan waters numbered 922,000, and from the Okhotsk Sea 452,000. The value of the catch is about $150,000. This industry has been successfully prosecuted since 1864.

The boundary between the territory of the Argentine Confederation and Brazil, forming the