

national Congress is required, since the abbreviations present no difficulties.

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TIDES AND CURRENTS IN CANADIAN WATERS.

TO THE EDITOR OF SCIENCE: Permit me to invite your attention to the latest report of the engineer in charge of the survey of the tides and currents of the coast waters of Canada, Mr. W. Bell Dawson, M. A., M. E., etc., a copy of which has been addressed to you. This survey, commenced by the government of Canada in 1894, is of great importance, not merely in the interest of hydrographical science, but of the large and increasing trade which finds its way along the Gulf and River St. Lawrence, the greatest waterway from the north Atlantic into the northern part of the American continent, and which, like all similar tide-ways, is affected by the complex action of the tides and consequent currents.

It is much to be regretted that the economy or parsimony of the government has caused a suspension for the present of the special survey of the currents, and has restricted the work to tidal observations, which, though of great value to the shipping interests, can only be considered as preliminary in regard to the investigation of the currents themselves, which lead to so many losses of property and life, and tend to high rates of insurance, injurious to the ship owners and merchants of Canada, and, through them, to those of an empire as a whole.

The present report, in addition to what can be done with the insufficient grant allowed in the matter of tide-gauges and tide-tables, has reference to the behavior of the gigantic tides of the Bay of Fundy, when confined by the converging coasts at the head of the bay, and their relation to the smaller tides on the opposite side of the isthmus connecting Nova Scotia and New Brunswick, at Bay Verte, on the Gulf of St. Lawrence. These and the phenomena of the 'bore' at the head of the Bay of Fundy are here for the first time described, illustrated by maps and sections, and tabulated, and will be found of the greatest interest by all who desire information as to the exceptional tides of this region.

NATURAL HISTORY OF THE TRES MARIA ISLANDS, MEXICO.

THE latest publication from the Division of Biological Survey of the U. S. Department of Agriculture, being 'North American Fauna, No. 14,' bears the title at the head of this notice. It contains the result of an exploration made in the spring of 1897 by Mr. E. W. Nelson and Mr. E. A. Goldman during the month of May of that year, and adds largely to our previous knowledge of the fauna and flora of these islands. The more appropriate title to the paper would be 'Contributions to the Natural History,' etc., for no *insecta* are mentioned and only six species of mollusks; of these four had not been previously known to occur. The author, after mentioning the names of Col. A. J. Grayson and Alphonse Forrer, says 'no other naturalist is known to have visited the islands until the spring of 1897,' the season of his visit. He should have known that the islands were visited in the spring of 1876 by Mr. W. J. Fisher, previously naturalist of the Tuscarora Telegraph Sounding Expedition, directed by Commander George E. Belknap in 1873. Mr. Fisher made a large collection of molluscan forms as published in the Proc. U. S. Nat. Museum, pp. 139-204 of Volume XVII., 1894, wherein 89 species are listed.

It is not unlikely that both Grayson and Forrer collected many insect species which have been published somewhere. Only the mollusks collected by Fisher have come under my notice.

ROBERT E. C. STEARNS.

LOS ANGELES, CAL., June 26, 1899.

NOTES ON INORGANIC CHEMISTRY.

No little work has been done on the compounds of sulfur and iodine, but with no very satisfactory results. The latest contribution is by L. Prunier in the *Journal de la pharmacie et de la chimie*, and it can hardly be said that the subject is left in a much clearer condition. Prunier distinguishes between what he calls 'iodized sulfur' and 'sulfur iodid.' The former is made by adding the desired quantity of iodine to sulfur at 115° to 120°, stirring, cooling and preserving in a stoppered bottle. The iodine