

PUBLICATION OF TIDE TABLES AND OTHER INFORMATION.

The publications of this Survey during the past year, have been reviewed in British and foreign periodicals, which is of service in making them widely known; and the new tide tables for British Columbia, issued for the first time for the year 1901, have been much appreciated.

Currents in the Gulf of St. Lawrence, including the Anticosti region, and Belle Isle and Cabot Straits.—The pamphlet with this title which was issued in June, 1900, gives in a condensed form, adapted for reference, the information derived from the investigations in the Gulf of St. Lawrence made by this Survey during the seasons of 1894, 1895 and 1896. It has now been reviewed in the following periodicals:—*The Geographical Journal*, London, December, 1900, gives a notice of it, half a page in length. *The Annalen der Hydrographie*, by Dr. Schott, Hamburg, gives an extensive summary occupying seven pages. It is noticed in the *Fortschritte der Ozeanographie*, by Dr. Krummel, Kiel. *The Annales de Géographie*, Paris, gives a concise review. Also, two articles of three columns each, based upon this pamphlet, were prepared by me by request, and published in *Nature*, London and New York, January 24 and April 18, 1901.

Tide Tables for British Columbia.—These comprise complete tide tables for Victoria, B.C., and for Sand Heads in the Strait of Georgia, a locality centrally situated in that strait, and well suited as a reference station for the ports around it. Tidal differences for Vancouver, New Westminster and Nanaimo are given with these tables. They have met with so much appreciation that the demand for them has been greater than could be supplied, from an edition of 500 copies.

The Provincial Engineer for British Columbia, referring to the original erection by the Public Works Department of the tidal gauges at Victoria and in the Strait of Georgia, says: 'It is very gratifying to find that previous efforts are at last bearing fruit.' The Agent of this department at Victoria says: 'The publication of tide tables for this province has been a long-felt want.' The Resident Engineer of Public Works at New Westminster also remarks that they will fill a long-felt want, and asks for twenty-five or fifty copies; a request which could be only partially met. Mr. F. N. Denison, who is continuing the tidal observations at Victoria, writes: 'Your Victoria tidal predictions are almost perfect, as proved by plotting them upon the actual records; and are greatly admired and appreciated by those who have seen the comparison.' These tide tables have been reprinted one month at a time, by the *Times* and the *Colonist* of Victoria. The editor of the *Daily Province* of Vancouver, speaks of them as invaluable.

Improvements have been secured during the year by working out the relation of the tide at Esquimalt to Victoria, and also of New Westminster to Sand Heads, from simultaneous observations at those places. A similar relation was worked out for Baynes Sound, from six months of tidal record obtained there; which is of value in affording some knowledge of the run of the tide throughout the length of the Strait of Georgia; as this Sound is 80 miles from Sand Heads, and nearly as far north as the southern tide runs before meeting the contrary tide from the other direction. Observations have also been obtained for some months at Vancouver; and simultaneously with these, the turn of the current in First Narrows at the entrance to that harbour. The results of these observations have been worked out promptly, in time to issue with those above mentioned, to accompany the tide tables for 1902.

Quebec, Father Point, Halifax and St. John, N.B.—In this set, the accuracy of the tide tables for Quebec has been improved by extending the basis from which they are calculated for 1902, from two to four years of observation. This is an important improvement, in view of the full information now issued with these, for the whole of the tidal portion of the St. Lawrence, from Three Rivers to Gaspé. Accurate tide tables for Father Point have also been prepared, and issued for 1902 for the first time. These are calculated from the Quebec tide tables by the method described further on. Tidal differences are also given with these tables for the whole of the Bay of Fundy, based upon observations in that region, and for the Atlantic coast of Nova Scotia.

These tide tables were again supplied to the leading Canadian and British almanacs willing to publish them in whole or in part. An edition of 600 copies, reprinted from

Greenwood's Almanac, distributed. The various tide tables, or former years.

Charlottetown, character as last year in them will be during this season, of Pictou to St. Paul the tabulation of the improvement so a principal station.

The time of high tide is published a month at a time for Pictou and accompanied by Strait.

St. Croix bar, the difference in time company with the in the publication of The new information also supplied in a copy *Tadoussac, Gaspé* and September were summer residents and as the tide tables were

In the season of from Quebec to Pictou as the mouth of the record secured were

Quebec
Grosse Isle
Île d'Anticosti
Orignaux du
Rivière du
Tadoussac
Father Point
Oupe Chat

The two principal tide tables could best be obtained this, trial complete tide at these places is on the other. With upper part of the estuary Orignaux Point and be referred to Father Point with the natural fathoms off Father Point a depth of 20 fathoms