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TIDE LEVELS AND DATUM PLANES ON THE PACIFIC COAST OF CANADA.

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(Read before the Annual Meeting, January, 1906.)

In extending the Survey of Tides and Currents to British Columbia on the Pacific coast, it has been necessary to decide upon planes of reference for the height of the tide in the various harbours, and to establish several new bench-marks. In doing so, any datum already established or levels previously determined have been correlated with the new work, to avoid confusion and to give the tide levels a satisfactory basis from the outset. The levels which a continuous record of the tide affords will be valuable for reference in the construction of wharves, dredging, and other harbour improvements, and in city works, as well as for marine purposes.

Owing to the planning and directing of tidal work on the St. Lawrence and the Atlantic coast, and the investigations of currents during the earlier years of this Survey, it had not been possible for the writer to visit the Pacific coast until the season 1905. Some headway has been made, however, in the publication of tide tables for the Pacific ports, and the commencement of tidal observations. The opportunity of this season enables the results with regard to datum planes and bench-marks to be given in a complete form, up to the stage now reached.