

own publications as 28.00 feet below the Bench Mark cut on the east side of the principal gateway to the Marine and Fisheries building in Quebec.

The various connections by means of which the reductions are made, are as follows: From the Admiralty Bench Mark in Quebec to the Levis dry dock where the tide gauge is situated, connected by Mr. Steckel's levels across the river; one of his Bench Marks being set in the masonry of the dry dock. From Levis to Montreal, connected by Mr. Steckel's levels. From Montreal to Rouses Point, from the levels of the Georgian bay Canal Survey, which there connect with the levels of the United States Coast and Geodetic Survey from New York. The elevation taken for the Coast Survey Bench Mark at Rouses Point is the revised value of 1903. As explained in Mr. St. Laurent's report, the elevation of this Bench Mark is based upon a readjustment made in that year by the United States Coast Survey, and is now accepted as 107.955 feet above Mean Sea Level, instead of 110.06 as used before the 1903 determination. The difference between Mr. Steckel's datum and that of the Georgian bay Canal Survey, is based on a common Bench Mark at St. Lambert.

Admiralty Bench Mark at Quebec, as above described. . . . .	28.00
Sill of Old Lock No. 1, Lachine canal. Difference of level as determined by Mr. R. Steckel, 15.50 feet below the Admiralty Bench Mark at Quebec. Resulting elevation. . . . .	12.50
Mean Sea Level, or half tide at Quebec, as determined at the Levis dry dock; from the hourly ordinates of the tide during eight years of continuous observations, from 1894 to 1902. Mean of the eight years, 8.584 feet above the Admiralty datum. . . . .	8.58
(The value adopted by the Royal Engineers in 1864, for mean sea level in Quebec harbour, corresponds to 8.72 feet above the Admiralty datum. This would be somewhat further up the river than the dry dock.)	
Mean Sea Level at New York determined by the Georgian bay Canal Survey, as 5.38 feet below the sill of Old Lock No. 1, Lachine canal. . . . .	7.12
Steckel's datum referred to the Admiralty datum; the elevation of the Admiralty Bench Mark above his datum being 27.039 feet. . . . .	0.96
Admiralty Low Water datum at Quebec; adopted as the datum for the Tidal Survey. . . . .	0.00

It thus appears that Mean Sea Level or half tide at Quebec, when accurately determined by tidal observations, is 1.46 feet above Mean Sea Level at New York.