of these observations. 'In the following summary, such other observations as have been secured by this Survey are also noted, to make an embodiment of all the information extant. The extremes here given may be taken as limiting values for natural or astronomical tides, when unaffected by storm disturbance.

Levels of extreme High and Low Tides in Cumberland Basin, Head of Bay of Fundy.	Elevation above Marine Railway datum.
	Feet.
Saxby tide of October 5, 1869, which flooded the country during a heavy storm. Eleva- tion reached. (The datum of the Chignecto Marine Railway is taken as 100 feet below this level.)	100.00
Highest High Water observed at Fort Lawrence dock by the Engineers of the Marine Railway, during five months, August to December, probably in 1893. Occurred October 25.	96.00
Exceptional High Water of October 8, 1896, which overflowed the dykes at many places between Amherst and Sackville, and along the Petitcodiac River. Elevation at Fort Lawrence dock.	96.13
Exceptional High Water of November 7, 1900, day tide. During a period of light east wind which does not affect height. As marked at the time by Captain Chase at the wharf at Sockville, on the Tantramar River near its mouth.	96-68
The High Water of October 9, 1900, also rose within two inches of this. Corresponding elevation	96.52
High waters of April 20 and May 18, 1901; about equal in height. Midnight tides which in May overflowed the dykes in places, causing a wash-out on the Intercolonial railway. Wind northerly and north-easterly at these dates, which does not affect height.	
<ol> <li>At Fort Lawrence dock. Two independent points in this vicinity, marked by myself. Elevations of the tide at these points, 96 '15 and 56' '85, Mean</li></ol>	96°00 95°98
Extreme High Water at Aulac, as indicated in September, 1901, by wash at Aulac River batardeau, at the crossing of the Intercolonial railway.	95*33
(Mean level of High Water throughout the month	89.00
From the continuous observations during four and a half months, MEAN SEA LEVEL. (See Report of Dec., 1898, p.30.)	70.76
at Fort Lawrence dock	52.29
Reference level, taken as extreme Low Water, to which the Marine Railway soundings are reduced.	47 20
Lowest Low Water observed at Fort Lawrence dock by the Engineers of the Marine Railway, during the five months, August to December. Occurred October 25 and November 24.	47.00

Range of the Tide in the Bay of Fundy.—It is evident from the above figures, that although the range of the tide in the Bay of Fundy is remarkably great, it has been much exaggerated. The greatest ranges in the whole extent of the bay, occur in Cobequid Bay, however, is cut off at low water by sand bars. The externe end of Cobequid Bay, however, is cut off at low water by sand bars. The water is thus ponded in, and does not fall to the true level of low water; but remains at a level which is eighteen feet above this, according to the chart. Accordingly, the highest range that can be measured at any one point, is at Noel Bay. The range at spring tides and the rise at neap tides in these localities, as given in the Admiraly list, are as follows:—Noel Bay: aprings 50 $\frac{1}{2}$ , neaps 43 $\frac{1}{2}$  feet; Horton Bluff: springs 48, neaps 40 feet; Cumberland basi at Sackville : springs 45 $\frac{1}{2}$ , neaps 38 feet.

The observation levels of extreme H thus available, we c From the lower

tinuous observation country in October, three feet.

Maximum ran observed Low Wate feet.

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Level of the 'marshes' or hay Bay of Fundy. points on the dyke on comparing the

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dykes)... Dykes in same vicin Dyke on north side Dykes on Tantrams

General average lev

We may n the stretch of n of the water its valuable for fu extreme High '

As a check close correspond Fort Lawrence at these two ex

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