feeders and ditches, on the line through the North-West valley, will be nearly as follows, viz. :—

For a Half-Tide Canal, not intended for extension to full-tide in the Bay of Fundy, but accessible during extreme low water in Baie Verte, for vessels of 15 feet draught, and an allowance of one foot extra for keel-way throughout :

	Cubic yards.
Earth excavation	14,319,753
Rock „	44,736
Total	14,364,489

For a Half-Tide Canal, designed for extension to full-tide at the Bay of Fundy terminus, and accessible during extreme low water in Baie Verte, for vessels of 15 feet draught, and an allowance of one foot extra for keel-way throughout :

	Cubic yards.
Earth excavation	14,595,898
Rock „	44,736
Total	14,640,634

In the preceding estimates of quantities, the canal prism is calculated for a depth of 16 feet of water, with a bottom width of 100 feet, the slopes being two horizontal to one vertical through earth, and ¼ horizontal to one vertical in rock cuttings.

Allowance has been made for the mucking required under the embankments, not merely for the purpose of rendering them water-tight, but, also for the prevention of slides in the trunk of the canal, especially through the bogs.

The latter, as before stated, consist generally of a crust of moss at the surface, and of semi-fluid vegetable matter beneath, forming a stratum which rises and falls with the water whereon, it may be said, they float, as can be tested by any one who will venture over them in summer, during the driest season.

When the canal is constructed, the drainage of the bogs to be traversed can be accomplished by commencing the excavation through the water-shed of the Missiguash and Tidnish, or from the valley of the former into the North-West or Little-West, which are considerably lower, as may be seen by referring to the elevations indicated on the map.

Once this drainage is effected, as suggested or otherwise, there is no doubt that the semi-fluid matter will be greatly reduced, probably to ¼ or less of its present thickness, which varies from six to ten feet or more.

This applies not only to the boggy material under the seats of the banks, but also to the surface of the canal prism, for a considerable distance ; a corresponding reduction should therefore be made, either in the quantity or in the cost of the excavation.

Again, as regards mucking under the banks across the bogs, it should be borne in mind that the permanent surface elevation of high water in the canal, is limited to 88 feet, whereas the surface of the bogs rises to 96 and 103 more or less, or from eight to fifteen feet above the proposed water level. It will be needless, therefore, to do any more mucking than what is necessary to provide against the loss of water through the boggy stratum, and to prevent the soft material from sliding into the trunk of the canal, whether through bogs, swamps or otherwise, unless their surface elevation is less than 88, in which case the seats of the embankments must, of course, be mucked more thoroughly—a contingency which has also been provided for.