

If this view of the matter be correct, there should always be kept on hand sufficient dredging power and equipment to remove, as expeditiously as possible, any slides that may occur.

There is good reason to believe that the only mode that could be adopted, with any prospect of success to guard against such casualties, is to lighten the banks on both sides of the Cut.

This, if not an entire preventative, would at least reduce them to the minimum; besides it would be much less expensive to remove the materials from the top, than to be under the necessity of dredging the bulk of them from the bottom.

From Allanburg to the "Rock Cut" below Stone Bridge, the Canal is for the most part 50 feet bottom width at the level of the sills of Port Colborne Lock, and for the lower one-third of that distance, the depth is about one foot below the top of the sills--the bottom of the upper two-thirds is nearly down to the lock sills.

From Fort Colborne northwards for fully $1\frac{1}{2}$ miles, the Canal is from 56 to 58 feet in width, and the bottom from 15 to 18 inches higher than the lock sill. This Cut for the full depth is in rock of a hard class, with many seams and fissures in it through which water enters freely, and there being no good drainage in the vicinity, the unwatering of this section is likely to be attended with unusual difficulty.

The expenditure on the present works since 1842, amounts in the aggregate to \$5,066,702, a sum which would not now pay for over three-fifths of a like extent of work.

It has been considered proper to submit the foregoing brief sketch of the Canal, and such matters connected with it, as may be of service in enabling a decision to be arrived at on several important questions about to be brought under notice.

In the letter of instructions handed me, dated 22nd July, 1871, the scale for the enlarged navigation is fixed for locks 270 feet long, and 45 feet wide, with 12 feet water on the sills.

This is understood to be the dimensions recommended by the Canal Commission, as the proper size for locks, &c., from Lake Superior to tide water. It should however be borne in mind that there are *three* Canadian paddle wheel steamers (two built in 1871) now plying between Collingwood and the head of Lake Superior, that could not pass through the Sault Ste. Marie Canal, if it were made of the dimensions above given.

It may also be stated that the Canal on the American side at this place, has a depth of 12 feet on the sills; but a survey was recently made with a view to the construction of another tier of locks made so as to have $14\frac{1}{2}$ feet of water on the sills.

These facts may, however, not possess any great degree of importance when the St. Lawrence and Lake navigation are looked upon, and considered as a whole; still, if the class of vessels engaged on the Lake Superior trade are necessary, it will be evident they could not pass through that part of the Canadian route.