

It will be borne in mind that all these depths mentioned refer to a stage of the water which has only occurred once in the past 17 years, that is to say when the river fell to but 4 ft. 6½ in. over the lock sill of the Rideau Canal, on the 1st of October, 1881.

The large quantity of refuse passing from the mills would in a shallow sluggish river very soon produce objectionable consequences, but the deductions drawn from the recent survey show conclusively that the Ottawa is so exceptional in its character and has depths so profound that the evils to be feared from the filling up of the channel are exceedingly remote.

I have had an estimate prepared to convey some idea of the length of time which would elapse before the deep parts of the river between Ottawa and Grenville would be filled. This estimate is based on the soundings recently made and on other data. According to this estimate it would require 350,000,000 cubic yards of solid material to fill up the deeper parts to a line ten feet under extreme low water. I have already indicated that the quantity of sawdust and refuse of all kinds passing from the mills cannot on an average be more than 100,000 cubic yards per annum. It is not possible to determine what part of this material remains above Grenville. It is reasonable to suppose that some of it finds its way to the lower reaches of the river, but assuming that no part of it is carried towards the ocean and that its volume is not reduced by pressure or by any natural process, the question resolves itself into one of simple proportion, viz:—How long will it take to deposit 350,000,000 cubic yards at the rate of 100,000 cubic yards per annum? This whole calculation may be held to be but roughly approximate, yet it will give some idea of the enormous length of time which would elapse before the deep space under the level demanded by a navigable channel could be filled up.

The examination which I have made points to the following conclusion:

1. With respect to private interests, there can be no doubt that riparian owners in some individual cases suffer actual damage from the operations of the lumber manufacturers. While this is the case more especially in the neighborhood of Ottawa there are many persons living along the river banks between this City and Grenville who are benefited in a manner which to them may be considered material. These persons may indeed be counted by hundreds, and they would feel it to be a great deprivation if through any cause they were cut off from their annual supply of firewood.

2. There has been a deposit of sawdust directly in front of the Rideau Canal in the City of Ottawa, it extends from the lower lock, a short distance into the river. The removal of less than 10,000 cubic yards by dredging at this spot would enable all vessels navigating the canal to enter with ease when the water is at its lowest stage. With this