

The original least depth of water in the channel was 10 ft. this being the nearly uniform depth on the flats of Lake St. Peter, which is a shallow expansion of the river about 9 miles wide by 18 miles long. The bottom here is of blue clay of a varying degree of softness, with some sand and stones in places.

For the information of those unfamiliar with the subject, the following table of the successive stages of water attained, and the dates of completion, is appended.

Original depth of water in channel. . . . .	10 ft.
Dredging commenced in 1832.	
Depth completed in 1853. . . . .	16 "
Depth completed in 1858. . . . .	18 "
Depth completed in 1865. . . . .	20 "
Depth completed in 1878. . . . .	22 "
Depth completed in 1882. . . . .	25 "
Depth completed in 1888. . . . .	27½ "
Depth now nearly completed. . . . .	30 "

The fact that this great work was commenced in 1832 and prosecuted with more or less continuity ever since, is eloquent testimony alike to the importance of the work and to the energy, pluck and perseverance of those early pioneers who so boldly faced a work of such stupendous magnitude with the primitive appliances and slender financial resources which they then possessed. It is indeed a fortunate fact that all this early work still remains to the good, and that the character of this noble river is such that its bed is practically unchangeable. In this respect it is unlike the alluvial Mississippi, which requires a fleet of ten powerful dredges to maintain the channel. It is strange that in the public mind, unacquainted with the facts, there exists a widespread impression that much of this dredging is of a temporary nature and that it must naturally fill in again. This is entirely erroneous. The geological formation is such that there is practically no erosion of the banks, and the bed of the river is composed of various kinds of material, some of which is very difficult to dredge, and all of which (with the exception of one or two unimportant places where sand occurs) remains in place. Surveys and soundings made sixty years ago correspond closely with those of the present day. The work, therefore, is permanent.

The size of ships using the St. Lawrence route has steadily increased and has at all times been fully up to the limit of the depth of water. In a paper on "The Economy of Large Ships," read by the author before the Society in 1902, he pointed out that when the 30 ft. channel of the St. Lawrence was completed, it could be navi-