

The new locks, of which there will be five between Montreal and Lachine, will be 270 feet long and 45 feet wide at bottom.

The two lower locks, between the harbour of Montreal and Wellington Bridge have a depth of 18 feet on the sills, the canal between those points having a depth of 19 feet. The remaining three locks, those at St. Gabriel, Côte St. Paul, and Lachine have a depth of 14 feet on the sills, the canal between these points having a depth of 13 feet.

Throughout the new works all permanent structures have their foundations so placed that the canal may eventually be deepened to 15 feet without disturbing them.

The two lower locks are connected by a basin known as No. 1 540 feet long, with an average width of 260 feet. The next basin, No. 2, has been enlarged at its south-west end. Wellington Basin, off Basin No. 2, is 1,210 feet long and 225 feet wide. A second basin is projected, of the same length and depth, and of 240 feet width, parallel to it.

From below Wellington Bridge to Côte St. Paul Lock, the new canal will have an average width of 200 feet, and from that lock to Lachine the average width will be 150 feet.

The new locks are located as independent structures adjoining the old locks, and hereafter the canal will be navigable through the double range of locks with double entrances at Montreal and at Lachine.

The construction of the new lock-gates required is now under contract.

For the five locks, ten pairs of gates, varying in height from  $31\frac{1}{2}$  feet to  $22\frac{1}{2}$  feet will be furnished, three spare sets being also prepared.

The mode of hanging the gates, the formation of the valves and the manner of working them, will be in accordance with what is known as "Townsend's Improved System."

(App. 9, page 129.)

#### BEAUHARNOIS CANAL.

|                                        |                                 |
|----------------------------------------|---------------------------------|
| Length of canal .....                  | 11 $\frac{1}{4}$ statute miles. |
| Number of locks.....                   | 9                               |
| Dimensions of locks.....               | 200 feet by 45 feet.            |
| Total, rise or lockage.....            | 82 $\frac{1}{2}$ feet.          |
| Depth of water on sills.....           | 9 "                             |
| Breadth of canal on bottom.....        | 80 "                            |
| Breadth of canal at water surface..... | 120 "                           |