The St. Lambert Lock lifts the ship some 15 feet from the level of Montreal Harbour to the level of Laprairie Basin, through which the ship channel sweeps in a great arc eight and a half miles long between its protecting embankments to the second lock.

## b) Cote Ste. Catherine Lock:

The Cote Ste. Catherine Lock, like the other six new Seaway locks and the seven lift-locks on the Welland Canal, has been built to the following standard dimensions: length, 768 feet; length between stop signs in lock, 715 feet; width, 80 feet; depth over sills, 30 feet.

This lock, which requires 18.3 million gallons of water to fill, can be filled or emptied in approximately seven minutes. It lifts ships from the level of Laprairie Basin 30 feet to the level of Lake St. Louis. Its function is to by-pass the Lachine Rapids. Beyond it, the channel runs seven and a half miles before reaching Lake St. Louis.

Over this channel, at one point, tower the piers that give Honoré Mercier highway bridge 120 feet of clearance for ships. Further upstream, the Canadian Pacific Railway bridge has had two lift-spans installed to allow for the passage of ships. These spans can be raised or lowered in a minute and a half.

## c) Lake St. Louis and Beauharnois Locks:

Entering Lake St. Louis, the ship proceeds some 12 miles by dredged channels before reaching the Lower Beauharnois Lock at the west end of the Lake.

The minimum width of St. Lawrence Seaway channels is 180 feet between bridge abutments and 225 feet when provided with two embankments, to 800 feet in improved channels. The depth in canals and channels is 27 feet.

The Lower Beauharnois Lock by-passing the Beauharnois Power House lifts the ship 38 to 42 feet so that it may pass through a short canal to the Upper Beauharnois Lock, where it is again lifted 36 to 40 feet to the level of Lake St. Francis; after some 13 miles in the Beauharnois Canal, the ship enters Lake St. Francis. It sails westward for some 30 miles by dredged channels to the head of the lake.

All locks and channels to this point have been built by Canada's St. Lawrence Seaway Authority.

## d) United States Locks:

The ship canal leaves Lake St. Francis at the southwest corner and before long crosses the International Boundary just opposite St. Régis, Quebec. From here to the first lock on the United States side is only five miles. Entering the Bertrand H. Snell Lock, the ship is lifted 45 to 49 feet into the