

This dock is said to have cost between £100,000 and £200,000 sterling—as first built—but in 1880 its capacity was enlarged so that it can now lift up to 6,000 tons. The Russian Government have recently completed another dock of the same description to raise vessels up to about 8,000 tons displacement.

The chief objectionable features of this dock, and in fact of all floating docks consisting of several sections or pontoons are said to be—1st. Difficulty in properly supporting a vessel on the dock. 2nd. The practical impossibility of so emptying the different pontoons or sections that great strain will not be brought upon the vessel.

5. *The Hydraulic Lift Dock.*—This dock is constructed with two rows of hydraulic presses and rams, which serve to raise the vessel; between these are suspended “a number of transverse girders forming a gridiron, which supports a pontoon upon which the vessel when raised, is ultimately floated.” The dock is said to be adapted to localities where the rise and fall of tide are small.

6. *“The Hydraulic Grid”* bears much resemblance to the last-mentioned dock. The vessel is raised by hydraulic presses and rams, but the presses are placed directly beneath the vessel to be raised, and thus the cross girders, the pontoon and other portions of the former dock are dispensed with in this case. The weight of the apparatus to be lifted and the cost of the dock are thus greatly reduced. It is claimed that “in favorable positions “hydraulic grids may be constructed at a cost of £5 per ton of “dead weight to be docked, while as compared with patent slips, “they have the advantage of occupying very little space, and “of raising vessels on an even keel without the slightest strain.”

7. *The Double Power Dock.*—This is an iron floating dock with flat bottom and upright sides. The sides, corners and bottom are in separate pieces or pontoons, and can either slide one within the other or be made rigid. The upper portions of the sides are converted into machine and workshops. The great advantage which this dock possesses over all other descriptions of floating docks is that all the portions below water can readily be got at, as one part of the structure can be made to dock any other part. In this way it can always be kept well cleaned and painted, so that its length of life would be greatly prolonged. It is claimed that with care it will last a hundred years. The objections to a floating dock, even of the best description, seem to me to be that the items, cleaning, painting and maintenance must necessarily amount to a large sum annually, besides which there is always the risk of an accident occurring by which the whole structure might be suddenly precipitated to the bottom.

A dock of the above description (the double power dock) to lift a ship of 4,000 tons dead weight, I am assured by the agent for the patentees, could be placed in Halifax Harbour complete in every respect (duty paid) within eighteen months after the