

Amherst, are built out into the bay. The water is shallow, and the moles, or breastwork, are run out nearly half a mile to deep water. Beyond the moles, the entrance channel is dredged 3,000 feet. As the tide rises here only six feet, no gate is required. The bottom of the basin between the moles is to be dredged to a depth of 20 feet at low water, affording ample depth and secure haven for all classes of vessels using the railway. The moles are made of cribs filled with rock. They are supplied with mooring posts, and are decked over and protected from the sea by piles and riprap-work. Thus at both termini, large and safe harbors and good entrances are provided for shipping.

Like all novel enterprises, this ship railway has encountered its full share of scepticism and hostility, and run the gauntlet of the gibes of the incredulous and the criticism of its opponents; but it has steadily made headway among capitalists, commercial men, and engineers, so that no one to-day doubts that the scheme is feasible and practicable as an engineering work, and the doubters are those who now argue that it will not be commercially a success.

When one considers the great advantages and resources of this country for a maritime business, which is to-day in its infancy, and looking at the growth and progress made during the last generation alone, and then at the vast possibilities of the future, one cannot but feel that the ship railway will eventually be a commercial success beyond all expectation. The present tonnage adjacent to it is over 11,000,000, arrivals and departures. The annual increase is nearly half a million tons per annum. It rose from 8,000,000 in 1884 to 11,000,000 in 1890. If the ship railway draws but 10 per cent. of the present tonnage, it will pay a dividend on the capital of the company sufficiently large as not to necessitate calling on the government for any portion of the subsidy agreed to be given.

The reason of this is, that the working expenses will be very small, much smaller than by ordinary railways, and because it so nearly approaches the requirements of a perfect railway. The standard of a perfect railway is to be straight