

probably be unsatisfactory, as they naturally split and crack badly when subjected to the action of the weather, and are therefore unsuitable for use in exposed positions.

Our ordinary white pine is an expensive wood and is yearly becoming more scarce and valuable. It is good and suitable for use in dry situations, but is objectionable in large dimensions by reason of its liability to dry rot, and it rapidly decays when subjected to the action of moisture or alternately wet and dry.

The only available timber which is suitable for the construction of a wooden dock is Southern, Georgia, or pitch pine. When of good quality it is heavy, close grained, elastic and durable, and when the sap wood is removed it will remain sound for a long time in damp localities. It is however, in this country, very expensive, being worth about fifty cents per cubic foot, in a rough state, delivered at Halifax. To arrive at its value fixed in place, in a finished work, it would not be safe to estimate less than seventy cents per foot, or say \$19 per cubic yard. As this is a higher price than is usually paid for granite masonry in this city, it is clear that the saving effected by the adoption of pitch pine in the face of a dock would not be as great as may be generally supposed. That there would be a saving is undoubted, even though the wood should cost much more per cubic yard than stone, because the quantity of the former material required is much less than the latter, as the stones have necessarily to be well bonded with the backing, while the wood forms simply a lining.

The great saving effected by the adoption of a timber dock (as constructed in the United States) is by reason of the absence of all backing in the structure, clay puddle being substituted and rammed in solidly against the wooden altars as they are placed in position, and built upwards. In the best timber docks concrete has been liberally used at and about the entrance, so that the portions of the work exposed to the action of ship worms are well protected, and only a veneering of wood work in those places will require renewing.

I think it would be a mistake to adopt a structure of this description in this port, and if it should ultimately be decided to adhere to wood for the face of the dock, it would be advisable to build a heavy backing of the best Portland cement concrete and to bed the timbers upon this material, in other words, it would be an artificial stone dock with a wooden face.

For the purpose of enquiring into the cost of maintenance of such a structure, it may be assumed that the heart of the work would be indestructible and permanent, while the wooden portions, which would be mostly exposed, would require periodical repairs and renewing.

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