

## NOTE ON OCEAN STEAM NAVIGATION.

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I ask your permission to offer some remarks on a subject which cannot fail to command the attention of the members of the Institute.

We are all familiar with the wonderful development of that service, which has brought countries widely separated by the sea, into nearer and closer relationship. We have had our attention directed to the further development of ocean steamships and likewise to projected "fast lines" to Europe, which, by abridging the period of the Atlantic voyage, are designed to bring the two continents into closer intercourse.

I do not doubt that in due time these projects will in some form be carried out with the gratifying result that they will tend to advance Canada among the nations by more firmly establishing her position on the highway of the world's commerce.

It is not my present purpose to dwell at any length on the possibilities of the future with regard to the application of steam machinery to the navigation of the ocean. My immediate object is to revert for a moment to the infancy of our present steam marine, to go back to the day when the first steam-ship started on her voyage across the Atlantic, when the passage between America and Europe by the agency of steam power was regarded as an experiment.

Sixty years ago the voyage was made by sailing ships. The fathers of many of us could have testified how long, how tedious and how trying the voyage then was, for it occupied frequently from one to two months. In modern times the trip across the Atlantic is reduced to a single week, for indeed by some of the best steam-ships it is generally accomplished in less than seven days, and we are encouraged to believe that before many years the passage will be made in a still shorter period.

A few weeks back the Engineering Society of Liverpool had the subject under examination, and it was then brought out in discussion that the Atlantic had been crossed by steam-ships no less than 3,800 times within the twelve months ending the 1st of October last, being on an average more than ten departures, that is five from each side, per day for