

former is required to tack and wear in moderate circles; but the latter not having occasion to work or beat to windward, may profit of this qualification to a considerable degree. The theory of a long vessel being easiest in a sea is this. The larger the ship, the less affected by the motion of the water. A boat is tossed about where a ship is not moved: and the small ship is affected by a sea that the majestic line of battle ship scarcely notices. The Columbus, and Baron Renfrew built in Quebec, were the vessels entitled to in theory, and have had in practice the least motion of any ships that ever crossed the Atlantic. And why? Because they were the largest! Suppose for instance, a ship could be constructed so vast, that the most tremendous sea of the Ocean, compared with her size, would only be as the rippling of a River to a Frigate: would not such a vessel circumnavigate the globe unconscious of the agitation of the waters in their greatest fury? Thence it follows that size to a certain extent, is a requisite for a steam-packet on the lake, conducting by her easier motion, to the more effectual stroke of the paddle, the less friction of the engine, the more efficient progress of the Boat, and (though finally of prime consideration) the greater comfort of the passengers. Below a certain size, I am certain Steam vessels on the lake cannot be, to be profitable, the numerous failures they must make, their incessant liability to damage, would more than counteract any advantage on the score of economy. And my opinion is, that a small sailing vessel is far safer than a small Steam-boat in a sea.

I will now say a word regarding the form of vessels' bottoms. In our first ignorance, and I be-