

the vessel was then made fast to the quay at Liverpool, and the engine then on board her, made the paddles steadily perform no less than thirty-three revolutions in one minute for more than an hour; that on the same voyage the Victory beat her sister vessel, the Harriett, which (when she had the old paddles) used to beat the Victory, and that she passed the Dublin Steam Packet, which happened to sail at the same time, making her passage entirely by steam in four days from Liverpool to London with the above-mentioned paddles. That subsequently, when the new paddles were fitted, Messrs. Braithwaite and Ericsson's machinery, even in its imperfect state, did actually propel the Victory at several times for some minutes, and on one occasion for *half an hour*, at the rate of six miles per hour, and the speed only decreased because the steam could not be kept up. It was therefore positively proved that it could not be the construction of the paddle-wheels, or from their great immersion that the failure took place; neither could it be from the paddle-boxes, which were never altered, and which are both unfairly described by Mr. Braithwaite.

The Victory, when deepest, never drew more than 7 feet 8 inches, which was 7 inches more than with the old engine; but this increased depth was occasioned by the weight of Messrs. Braithwaite and Ericsson's machinery being double what they had calculated it at, and promised it should be; but their calculations and their promises were, unfortunately, equally fallacious.

I would now pass from the paddle-wheels, having shown that they were not in fault, but it is a duty I owe to Mr. Robertson to state, that the floats of his paddle-wheels were diagonal, and that they therefore did not lift on entering, nor depress on leaving, the water. The paddle-box *above the axis*, instead of being, as usual, circular, was indeed like a chest, in order to admit the whole paddle-wheel when raised, and then to contain it *above* the water line; but if Mr. Braithwaite means, that *below* the axis of the wheel, or below the water line, the paddle-box was of that or any other construction calculated to impede the free ingress or egress of the water, he obliges me to say that he is incorrect: the object which Mr. Robertson had in view, namely, to construct a paddle-wheel that would not either lift or depress the ship, when she was so deeply laden as to immerse the paddle-wheel to within one-sixth of its diameter, has been fully accomplished, which I can testify from actual experience, even by using Mr. Braithwaite's machinery, bad as it