

Lloyd's Register of  
British & Foreign Shipping  
Glasgow: 28<sup>th</sup> Jan'y 1881

Messrs. A. McMillan & Son,

Gentlemen,

As desired by your Mr Robert,  
we write you upon the subject of our visit  
to your establishment yesterday, and we beg to  
urge upon you the desirability of making some  
additions to thwartship ties and panting  
arrangements aft in your vessels Nos 228 & 231,  
as by increasing experience we find evidence  
in this type of vessel, through their bulk forms,  
of their working loose in the after part,  
between keel and counter, to an extent beyond  
which ordinary vessels are found to indicate.

We therefore recommend that two transverse  
floors above the arch of the stern frame should  
be connected at middle line & quarters  
alternately to the upper deck beams next above



by broad tie plates; two diagonal pillar stays to be fitted, on each side, to the after frames under the middle deck, connecting to the bulk beams above them, near where also a pillar is required, at the middle line, between the main deck beams and the top of the after compartment; three deep thwartship tie plates stiffened at their top edges should be riveted to the frames and the top of the after compartment where the stringer bar should have been fitted and riveted, to the reverse bar; three pairs of diagonal pillar ties from the intercostal stringers to the bulk beams, in the tunnel recess, with as many deep cross ties above the floors and below the shaft as can be fitted there; three pairs of pillar ties in a similar way before the recess bulkhead, where under the step of the mizen mast the lower deck beams should be connected to the tunnel stiffeners.

It is also desirable that the

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top edge of the centre line plate, abaft the  
ends of the double bottom of the steel  
ship should be connected with lug pieces  
from floor to floor with a flat plate  
on top, and that the after stringers between  
this and the lower deck beams should be  
fitted, intercostal, throughout all the length  
it extends as was originally recommended.

We regret to have to point out, that  
a retrogression is evident in some of the  
workmanship of these vessels, more particularly  
in the plying up of the frames to the plating.  
Your foreman Mr. Currie, was present during  
the whole of our survey yesterday and will  
be able to describe to you what we cannot  
explain in writing.

We are,

Gentlemen,

Your obedient Servants.

(signed)

J. F. Dodd

W. J. Burnford

(Surveyors)

(copy)

Head Register of  
British & Foreign Shipping