

Report of Survey for Repairs of Engines and Boilers.

No. 100

No. in Reg. Book. Survey held at Newcastle

Date, first Survey July 1st Last Survey August 24th 1878

248 on the Iron S^s Elaine

Master L. Hunter

Tons 343
544
575

Owners J. Homer

Port belonging to London

Classed

Years assigned.

Character in Register Book.

90 A 1
6.78.

YEAR.

Diameter of Cylinder 22" + 42"

Length of Stroke 28"

Engines made at

Belfast

When made 1869

Pressure of Steam 80 lb

By whom made

E & W Coates

Registered Horse Power 90

Particulars of Repairs and Examination

The S^s Elaine having been chartered by the Company for working de Peris patent double action propeller, extensive alterations to her Machinery for that purpose was made by Mess^{rs} Hawkes Crawshaw & Sons of Newcastle. Coir the old propeller, stern tube and after length of shaft removed, and de Peris patent propeller, a new stern tube and two after shafts fitted, the one being an ordinary solid shaft, and the other of gun metal being a tube or hollow shaft working outside of the first in the reverse direction, both shafts being driven by Bevel gearing, and each of them having a propeller fitted on to the ends, the blades of which interlase each other, as shown on tracing submitted, the new arrangements so far as the stern tube, shafts and gearing were concerned appeared to me to be of sufficient strength to give out the power developed by the Engines, and the propellers of sufficient strength at the boss, from the formation of the blades with I consider in practice be a source of danger to the vessel from the small amount of clearance ($\frac{1}{4}$ inch) between the interlacing portions of the blades, also in the event of any portion of the blades breaking off, and falling between the blades it would in all probability destroy the propellers, as they revolve in reverse directions,

The vessel was fitted as above but had only a trial of half an hour at sea, but owing to the stormy weather the vessel was run at half speed the whole time, so we were unable to form any idea of the efficiency of the propeller, the Machinery and gearing worked satisfactorily during that time,

The vessel was then taken to London without any other trial, it being the intention of the Patentee to run the other trials on the Mapein Sands, from which place she

The Amount of Fee ... £ 5 : 5 : received by me,

Certificate (if required) ... £ - : - : - 5 Sep 1878

(Travelling Expenses, if any, £)

Committee's Minute

18

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register Foundation

21685 Jan

returned in about two weeks time, in consequence of the results
of Propellers not being satisfactory, the Propellers and the
arrangements to Machinery for working it have been taken out
of the vessel, and the old steam tube, shaft and propellers
are being replaced, *

The old steam tube, shaft and Propellers being now
satisfactorily replaced. The Machinery of this vessel is now
in good order and safe working condition and eligible in
my opinion to retain her class in the Society's Register
Books,

John Brooker
Engineer Liverpool
North Shields

It is submitted that this vessel
is eligible to remain in
class

21/6/11 W