

## ENGINEER SURVEYOR'S REPORT ON MACHINERY. ENGINES.

*Per 14/7/79*

Report (if any) on Hull of Vessel. Port *Kirkcaldy* No. *4251*

Description *Compound* ~~Int. Cyl.~~ *Surface Condensing*  
 Made by *Messrs John Key & Sons*  
 When *June 1879* At *Kirkcaldy*  
 Diameter of cylinders *24" & 46"* Length of stroke *33"*  
 No. of revolutions per minute *85*  
 Point of cut off *2/16 H. 12/16* *2 P. Cylinders*  
 Diameter of screw shaft *7 3/4" in body 8 1/2" stem tube*  
 Diameter of crank shaft journals *8 1/4" inches*  
 Diameter of screw, ~~or of paddle wheel~~ *11" 6"*  
 Pitch of screw *14 feet*  
 No. of blades *4* Total surface *38.5 feet*  
 No. of bilge pumps *one* and sizes *3" Dia. 22" stroke*  
 Do they pump from each compartment *after well and engine room*

Are all the bilge suction pipes fitted with roses *Yes*  
 No. of feed pumps *one* and sizes *3" Dia 22" stroke*  
 What gauges are there attached to the engines and boilers ... *one water on boiler one pressure in stoke hold. one each engine. Compound and Vacuum on engines one int. Cyl. 8" x 8"*  
 Description and size of Donkey Pumps ... *4" D.A. pump. one Horiz. 10" x 10" 8" D.A. pump*  
 Where do they pump from ... *feed from sea. Hotwell through condenser to boiler and on deck ballast from sea. tanks. engine room bilge through ship side*  
 No. of bilge injections *one* and sizes *3" bore*  
 Are they connected to air, or circulating pumps *Circulating*  
 Is there a hand pump in the engine room *not but donkey*  
 Can it be worked by the main engines *made to work by hand*  
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

### MAIN BOILERS.

Number *one* Description *Circular Subular*  
 Made by *Messrs John Key & Sons*  
 When *June 1879* At *Kirkcaldy*  
 Working pressure *80 lbs*  
 Tested by hydraulic pressure to *160 lbs*, Date *11.4.79*  
 Description of super-heating apparatus *none*  
 Can each boiler be worked separately *---*

Can the super-heater be shut off and the boilers worked separately *---*  
 Description and area of safety valves on each boiler ... *Two Adams Spring 28.38 square inches area*  
 No. of square feet of fire-grate surface in each boiler *51 feet*  
 Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes*  
 Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. *Yes*

### DONKEY BOILER.

Description *Round Vertical*  
 Where fixed *Stoke hold*  
 Working pressure *60 lbs*

Tested by hydraulic pressure to *160 lbs*, Date *10.5.79*  
 Description and area of safety valves *one Adams Spring 7" inch area*  
 No. of square feet of fire grate *12 feet*

### PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *Yes*  
 Are they Kingston valves or common cocks ... *Cocks and valves*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *Yes*  
 Are the discharge pipes above or below the deep water line *Above*  
 Are they each fitted with a discharge valve on the plating of the vessel *Yes*

What pipes are carried through the bunkers *none*  
 How are they protected *---*  
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *Before launch 22.2.79*  
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes*  
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *Yes*

*John Key & Sons* Manufacturer.

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (~~or Wood~~) Screw (~~or Paddle~~) Steam Vessel "Joseph Rickett" owned by *Messrs Jamman Son & Carter* of the Port of *LONDON* of *449.41* Tons Register, and *90* Registered Horse Power, and that they have been carefully inspected and examined by me at *Kirkcaldy* and found to be at this date, viz., *11<sup>th</sup> June 1879* in good order and safe working condition.

Amount of Fee for Survey *£5 : 0 : 0*  
 (Travelling Expenses, if any, *£5 " 3 " 4*)

*John Sturrock*  
 Engineer Surveyor to Lloyd's Register of Shipping.  
*Dundee*

[Form No. 8-1000-22(6/78)]

The Maching of this vessel has been  
built and fitted in accordance with the  
rules submitted that she is eligible to have  
Lloyd's M.C. and a maching certificate for

11 June 1879 -

MD 17.7.79

THE  
MACHING  
OF  
THIS  
VESSEL  
HAS  
BEEN  
BUILT  
AND  
FITTED  
IN  
ACCORDANCE  
WITH  
THE  
RULES  
SUBMITTED  
THAT  
SHE  
IS  
ELIGIBLE  
TO  
HAVE  
LLOYD'S  
M.C.  
AND  
A  
MACHING  
CERTIFICATE  
FOR



© 2019

Lloyd's Register

FOOTNOTES

425