

Lloyd's Register of Shipping.

(Report on Machinery, No. _____)

Port Middlesbrough

No. F1774S: ENGINE FORGINGS OR CASTINGS.

I have to report that the ~~Iron or Steel Forgings or Castings~~, as herein described, manufactured by John Spencer & Sons, Ltd. of Newburn for the Engines No. 1875 being constructed by Blair & Co. Ltd. of Stockton-on-Tees for the Ship No. _____, being built by _____ of _____ have been inspected by me as set forth below, and found to be, so far as can be seen, Sound

The words FORGINGS or CASTINGS, IRON or STEEL, should be struck out as may be required.

Mark on Forgings or Castings.

Lloyd's

No. 5931N.

W.C.

W.M.

McCampbell

Newcastle

	CRANK SHAFT.	STRAIGHT SHAFTING.		
		THRUST SHAFT.	INTERMEDIATE SHAFTS.	2 PROPELLER SHAFTS
Material* ...	<u>Ingot Steel</u>	<u>Ingot Steel</u>	<u>Ingot Steel</u>	<u>Ingot Steel</u>
How made ...	<u>Forged</u>	<u>Forged</u>	<u>Forged</u>	<u>Forged</u>
Dimensions ...	<u>15 3/4</u>	<u>15 3/4</u>	<u>14 3/4</u>	<u>17</u>
Progress on Inspection }	<u>Rough turned</u>	<u>Rough turned</u>	<u>Rough turned</u>	<u>Rough turned</u>
Tests on Standard Test Pieces.				
Tensile Test— Tons per square inch	<u>29.5 30.3 29.6 30.8 31.0 30.6</u>	<u>31.9</u>	<u>32.0 31.2 31.8 30.0 31.5 31.4 31.4</u>	<u>31.8 31.9</u>
Extension per cent $\bar{\delta}$	<u>35% 29% 33% 28% 32% 34%</u>	<u>28%</u>	<u>27% 29% 30% 34% 32% 30% 27%</u>	<u>28% 28%</u>
Cold Bending Test— Angle before fracture	<u>180° 180° 180° 180° 180°</u>	<u>180°</u>	<u>180° 180° 180° 180° 180° 180°</u>	<u>180° 180°</u>
Dates when Inspected	<u>April 23, To July 27-1921</u>			

PARTICULARS OF OTHER TESTS APPLIED TO CASTINGS:—

continuous liners
Shafting examined under special survey while being machined & when finished and found, so far as could be seen, sound and good. Shafts re-stamped as above

Wm Morrison

RECEIVED
SEP 30 1921
LLOYD'S REGISTER
MIDDLESBROUGH

Fee (if any chargeable) £
To be paid at _____

* If of iron, state whether scrap or puddled iron. If of steel, state whether made on the Open Hearth process.