

Received at _____ Office, _____

369.10

A. **Lloyd's Register of British & Foreign Shipping.**

(Report on Machinery, No. _____ Port _____)

Order 63686.

No. 18814

ENGINE FORGINGS OR CASTINGS

I have to report that the ~~Iron~~ ~~Steel~~ ~~Forgings~~ ~~or~~ ~~Castings~~, as herein described, manufactured by Messrs. Haniel & Lueg, of Düsseldorf-Grafenberg for the Engines No. 336. being constructed by Messrs. Workman Clark & Co., of Belfast. 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 and free from defects

4 connecting rods, 4 crossheads.

Mark on Forgings or Castings.

Lloyd's
No. 302/303/04/05/01.
A.L.3.14.

Düsseldorf, 17th April 1914.

Alex. Lawrence.

	CRANK SHAFT.	crossheads	STRAIGHT SHAFTING.	
	connecting rod		INTERMEDIATE SHAFTS.	PROPELLER SHAFT.
Material*	annealed - Siemens Martin - Ingot steel			
How made	forged	forged		
Dimensions	7 3/4" / 9"	7 1/2" diam.		
Progress on Inspection	rough turned	rough turned		
Tests on Standard Test Pieces.	diameter .977" No. 302.-No. 303.	diameter .977" No. 301.		
Tensile Test— Tons per square inch	28.9	30.2		
Extension per cent	37.1	34.8		
Cold Bending Test— Angle before fracture	180 degr. good.	180 degr. good.		
Dates when Inspected	9/3.30/3.1914.	9/30/3.1914.		

PARTICULARS OF OTHER TESTS APPLIED TO CASTINGS:—

No. 304¹ connecting rod (29.5 tons p.sq.inch 34.8% Elongation in 3 1/2"
-305. 1 do. do.

Fee (if any chargeable) £
To be paid at Düsseldorf.

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



