

15223 Lm

Stockta 3525

Dec 8/10/75

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S CERTIFICATE, & REPORT.

### ENGINES.

Description *Inverted Compound surface Condensing,*  
 Made by *Messrs J. Richardson & Sons, Hartlepool.*  
 In the year *1875.*  
 Present condition *New.*  
 Diameter of cylinder *8 HP 26, 1P 49.*  
 Length of stroke *30.30.*  
 No. of revolutions per minute *70.*  
 Point of cut off *1/2 stroke.*  
 Paddle, or Screw *Screw.*  
 Nominal Horse Power *98.*  
 Diameter of screw, or of paddle wheel *12.7.*  
 Pitch of screw *15.0.*  
 No. of blades, *4* total surface *49.24 feet.*  
 No. of bilge pumps *1* and size *3 1/4 dia x 22 1/2 stroke single acting.*  
 Do they pump from each compartment *yes.*  
 Is there provision made for pumping } *yes.*  
 from the wings of the stoke hole }

Are all the bilge suction pipes fitted with roses *yes.*  
 What vacuum and steam gauges are } *1 vacuum gauge on Condenser,*  
 there attached to the engines } *1 steam gauge in Engine room,*  
 and boilers..... } *1 steam " stokehole.*  
 No. of feed pumps *1* and sizes *3 1/4 dia x 22 1/2 stroke single acting.*  
 Description and size of } *Inverted Cyl 6 dia x 6 stroke*  
 Donkey Engine... } *Pump 4 1/2 dia x 6 " double acting.*  
 Will it feed the boilers, pump } *yes.*  
 from the bilges, and pump }  
 on deck ..... }  
 Can it be driven by steam } *yes.*  
 from a separate boiler }  
 No. of bilge injections *1* and sizes *4 1/2 dia.*  
 Are they fitted with non return valves *yes.*  
 Is there a hand pump in the engine room *yes.*  
 Can it be worked by the main engines *no.*  
 Is there a deck hose of sufficient length } *yes.*  
 to reach to any part of the vessel }

### CONNECTIONS ON HULL.

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

Are any pipes carried through the bunkers *none.*  
 If so state how protected .....  
 When was the stern tube, } *new propeller fitted and other*  
 propeller, screw shaft, } *parts examined Aug. 1875.*  
 and all connections }  
 examined in dry dock }  
 How are the pipes, cocks, and valves } *non return valve and shell*  
 arranged so as to prevent } *cocks with only 1 port in side*  
 an unintentional connection } *of plug.*  
 between the sea and the bilge }  
 Have the bilge suction non- } *not fitted*  
 return valves fitted or not }

### BOILERS.

Number *one.*  
 Description *Cylindrical.*  
 Made by *Messrs J. Richardson & Sons.*  
 In the year *1875.*  
 Present condition *good.*  
 When last extensively repaired *new.*  
 Working pressure *65 lbs per sq. inch.*  
 When tested by Hydraulic pressure *Sept 1875.*  
 To what pressure tested *130.*  
 Any super-heating apparatus *none.*  
 Describe it .....  
 Can each boiler be worked separately *yes.*  
 Is each boiler fitted with a separate steam gauge *yes.*

Can the super-heater be shut off and }  
 the boilers worked separately }  
 No. of safety valves on each boiler *2.*  
 Description and area of each safety valve *Spring 4 3/8 = 15.0 area,*  
 No. of square feet of fire-grate } *51 1/4.*  
 surface in each boiler }  
 Is there a separate blow off and } *yes. (both into 1 Cock on ship's side)*  
 brine cock on each boiler, }  
 independent of those }  
 on the vessel's skin }  
 Is the screw shaft tunnel water } *Tunnel not watertight,*  
 tight and fitted with a } *sluice door fitted.*  
 sluice door on bulkhead }  
 Are all pipes, cocks, and roses in con- } *yes.*  
 nection with these boilers acces- }  
 sible to the engineer at all times }

*J. Richardson & Sons* Manufacturer.  
*M. Chas. Smith*

*I was present when steam was raised and engines worked. Sept 23/75.*  
*Steam 65 lbs vacuum 2 1/2 revolutions 72. at full speed*  
*machinery all satisfactory. W. A.*

I hereby certify that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle)  
 Steam Vessel *"Lord Byron"* owned by *Messrs Palgrave & Co.*  
 of the Port of *Dublin* of *515.44* Tons Register, and *98* Nominal Horse Power,  
 have been carefully inspected and examined by *me* at *Hartlepool* and found to be  
 at this date, viz., *September 23 1875.* in good order and safe working condition.

*William Allison,*  
 Engineer Surveyor to Lloyd's Register of Shipping.