

# REPORT ON MACHINERY.

3068

in Survey held at *Belfast & Banow* Date, first Survey *29<sup>th</sup> Aug 1884* Last Survey *4<sup>th</sup> July 1884*  
 look. on the *"S.S. Lord O'Neill"* (Number of Visits *20*) Tons *2452.58*  
*1816.44*

*C.H. Baskfill* Built at *Belfast* By whom built *Harland & Wolff* When built *1884*  
 s made at *Belfast* By whom made *"* when made *1884*  
 s made at *Banow* By whom made *The Iron Ship Bldg Co Ltd* when made *1884*

ered Horse Power *350* Owners *Irish Ship Owners Co (Lim)* Port belonging to *Belfast*

NES, &c.—  
 tion of Engines *Compound Inverted Surface Condensing*

er of Cylinders *37.72* Length of Stroke *45* No. of Rev. per minute *60* Point of Cut off, High Pressure *Variable* Low Pressure *26*  
 er of Screw shaft *13* Diam. of Tunnel shaft *12* Diam. of Crank shaft journals *13* Diam. of Crank pin *13* size of Crank webs *18x10*  
 er of screw *16-6* Pitch of screw *19-0* No. of blades *4* state whether moveable *yes* total surface *about 74 sq ft*

Feed pumps *Two* diameter of ditto *4* Stroke *26* Can one be overhauled while the other is at work *yes*  
 Bilge pumps *Two* diameter of ditto *4* Stroke *26* Can one be overhauled while the other is at work *yes*  
 do they pump from *Cupola room fore & foremost holds, after hold, after well & tunnel well.*

Donkey Engines *2* donkey *Size of Pumps 3 dia 4 dia 9 dia* Where do they pump from *Smallest pump from sea bed*  
*(tanks & distilling apparatus feed donkey from sea bed well, tanks & as big pump, ballast from tank only.)*

the bilge suction pipes fitted with roses *yes* Are the roses always accessible *yes* Are the sluices on Engine room bulkheads always accessible *yes*  
 bilge injections *One* and sizes *4 1/2 dia* Are they connected to condenser, or to circulating pump *Circulating pump*  
 re the pumps worked *by levers from both engines.*

connections with the sea direct on the skin of the ship *yes* Are they Valves or Cocks *both Valves and Cocks*  
 y fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates *yes* Are the discharge pipes above or below the deep water line *above except*  
 y each fitted with a discharge valve always accessible on the plating of the vessel *yes* Are the blow off cocks fitted with a spigot and brass covering plate *yes*

pipes are carried through the bunkers *Suction 6 for Comp* How are they protected *Lead casing*  
 pipes, cocks, valves, and pumps in connection with the machinery accessible at all times *yes*  
 e pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges *yes*

were stern tube, propeller, screw shaft, and all connections examined *in dry dock* *before launching*  
 screw shaft tunnel watertight *yes* and fitted with a sluice door *yes* worked from *top platform*

ERS, &c.—  
 of Boilers *Three* Description *Cylindrical Multi-tubular* Whether Steel or Iron *Steel*  
 g Pressure *90 lb* Tested by hydraulic pressure to *180 lb* Date of test *21/3/84*

tion of superheating apparatus or steam chest *None fitted*  
 h boiler be worked separately *yes* Can the superheater be shut off and the boiler worked separately *no superheater*  
 square feet of fire grate surface in each boiler *61.8* Description of safety valves *Spring* No. to each boiler *Two*

e each valve *15.95* Are they fitted with easing gear *yes* No. of safety valves to superheater *✓* area of each valve *✓*  
 y fitted with easing gear *✓* Smallest distance between boilers and bunkers or woodwork *12* Diameter of boilers *14-4*  
 of boilers *10-0* description of riveting of shell long. seams *d 1/4 butt, d 1/4 butt* circum. seams *lap, d 1/4 butt* Thickness of shell plates *3/16*

r of rivet holes *1/8* whether punched or drilled *drilled* pitch of rivets *4 1/2* Lap of plating *butt & lap 1 1/8 wide*  
 age of strength of longitudinal joint *75.02* working pressure of shell by rules *92.1 lb* size of manholes in shell *16x12*  
 compensating rings *24x24x3/16* No. of Furnaces in each boiler *Three*

diameter *3-6* length, top *5.9 ft* bottom *9-0* thickness of plates *1/2* description of joint *d 1/4 butt, d 1/4 butt* If rings are fitted *yes*  
 length between rings *5.9 ft* working pressure of furnace by the rules *90 lb* combustion chamber plating, thickness, sides *1/2* back *1/2* top *1/2*

stays to ditto, sides *9 1/2 x 7 1/4* back *9 x 9* top *9 1/2 x 7 1/2* If stays are fitted with nuts or riveted heads *nuts* working pressure of plating by  
*92 lb* Diameter of stays at smallest part *1 3/8* working pressure of ditto by rules *97.5 lb* end plates in steam space, thickness *3/4*  
 stays to ditto *17 x 17* how stays are secured *d 1/4 butt, d 1/4 butt* working pressure by rules *80 lb* diameter of stays at  
 est part *2 5/8* working pressure by rules *105 lb* Front plates at bottom, thickness *3/4* Back plates, thickness *3/4*

pitch of stays *about 12* working pressure by rules *140 lb* Diameter of tubes *3 1/4* pitch of tubes *4 1/2* thickness of tube  
 s, front *1/16* back *1/16* how stayed *stay tubes* pitch of stays *13 1/2 x 9* width of water spaces *1/4*

of Superheater or Steam chest *✓* length *✓* thickness of plates *✓* description of longitudinal joint *✓* diam. of rivet holes *✓*  
 rivets *✓* working pressure of shell by rules *✓* diameter of flue *✓* thickness of plates *✓* If stiffened with rings *✓*  
 between rings *✓* working pressure by rules *✓* end plates of superheater, or steam chest; thickness *✓* how stayed *✓*

Superheater or steam chest; how connected to boiler *✓*



DONKEY BOILER— Description *No donkey boiler fitted to this vessel.*

Made at \_\_\_\_\_ by whom made \_\_\_\_\_ when made \_\_\_\_\_ where fixed \_\_\_\_\_  
Working pressure \_\_\_\_\_ tested by hydraulic pressure to \_\_\_\_\_ No. of Certificate \_\_\_\_\_ fire grate area \_\_\_\_\_ description of  
valves \_\_\_\_\_ No. of safety valves \_\_\_\_\_ area of each \_\_\_\_\_ if fitted with easing gear \_\_\_\_\_ if steam from main boiler  
enter the donkey boiler \_\_\_\_\_ diameter of donkey boiler \_\_\_\_\_ length \_\_\_\_\_ description of riveting \_\_\_\_\_  
Thickness of shell plates \_\_\_\_\_ diameter of rivet holes \_\_\_\_\_ whether punched or drilled \_\_\_\_\_ pitch of rivets \_\_\_\_\_ lap of plating \_\_\_\_\_  
per centage of strength of joint \_\_\_\_\_ thickness of crown plates \_\_\_\_\_ stayed by \_\_\_\_\_  
Diameter of furnace, top \_\_\_\_\_ bottom \_\_\_\_\_ length of furnace \_\_\_\_\_ thickness of plates \_\_\_\_\_ description of joint \_\_\_\_\_  
Thickness of furnace crown plates \_\_\_\_\_ stayed by \_\_\_\_\_ working pressure of shell by rules \_\_\_\_\_  
Working pressure of furnace by rules \_\_\_\_\_ diameter of uptake \_\_\_\_\_ thickness of plates \_\_\_\_\_ thickness of water tubes \_\_\_\_\_

SPARE GEAR. State the articles supplied:— *in addition to the spare gear required by the rules the following articles have been supplied:— 1 set propeller blades, 1 air pump, 1 guide for high & low pressure & expansion slide valves, 2 safety valve springs, 6 packing bolts, spare studs for cylinder covers glands & other parts of engine.*

The foregoing is a correct description,

*F.P.M.*

*Wardlaw & Co. Ltd.* Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c.)

*Material and Workmanship good and satisfactory.  
The Machinery and Boilers of this vessel are in good and  
and safe working condition and in my opinion, eligible for  
the Notification. Hyd. M.C. 7-84 designed.*

The amount of Entry Fee .. £ 3 : : : received by me,

Special .. £ 37 : 10 : :

Donkey Boiler Fee .. £ : : :

Certificate (if required) .. £ : : : 9.7.1884

To be sent as per margin.

(Travelling Expenses, if any, £ 9-9-0.)

Committee's Minute

FRIDAY 11 JULY 1884

*+ M.C.*

*Duncan Ritchie*  
Engineer Surveyor to Lloyd's Register of British & Foreign Ships

*Belfast*

Lloyd's Register  
Foundation