

Sirius Hpl.

No. 21216
 3578.

REPORT ON MACHINERY.

Port of *Sunderland*

14 MAY 1903

Received at London Office

Survey held at *Sland & Stockton* Date, first Survey *11th Sept.* Last Survey *19th Dec. 1902*

(Number of Visits *21*)

on the *Steel Screw Steamer "Dicio"*

Tons { Gross *1478.23*
 Net *917.92*

Built at *Stockton* By whom built *Messrs Craig Taylor & Co. Ltd.* When built *1903*

made at *Sunderland* By whom made *The N.E. M.E. Coy. Ltd.* when made *1902*

made at " By whom made " " " " " " when made "

ed Horse Power Owners *The Trinidad S.S. Co. Ltd* Port belonging to *London*

orse Power as per Section 28 *168.3* Is Electric Light fitted *No*

ES, &c.—Description of Engines *Triple Expansion* No. of Cylinders *3* No. of Cranks *3*
 er of Cylinders *19"-31"-51"* Length of Stroke *36"* Revolutions per minute *About 80* Diameter of Screw shaft *as per rule 11.1"*
 r of Tunnel shaft *as per rule 9.211"* Diameter of Crank shaft journals *9 3/4"* Diameter of Crank pin *9 3/4"* Size of Crank webs *15 1/2" x 6"*
 of screw *13-3"* Pitch of screw *14-6"* No. of blades *4* State whether moveable *No* Total surface *55 ff*
 Feed pumps *2* Diameter of ditto *2 3/4"* Stroke *1-9"* Can one be overhauled while the other is at work *Yes*
 Bilge pumps *2* Diameter of ditto *3"* Stroke *1-9"* Can one be overhauled while the other is at work *Yes*
 Donkey Engines *2* Sizes of Pumps *6 x 7 x 9 8 1/2 x 3 x 5"* No. and size of Suctions connected to both Bilge and Donkey pumps
 ne Room *2 of 2 1/2"* *1 of 3"* In Holds, &c. *2 of 3" in each & 1 of 3" in*
 mel well
 lge injections *1* sizes *3 1/2"* Connected to condenser, or to circulating pump *C.P.* Is a separate donkey suction fitted in Engine room & size *Yes 2 1/2"*
 he bilge suction pipes fitted with roses *Yes* Are the roses in Engine room always accessible *Yes* Are the sluices on Engine room bulkheads always accessible *None*
 connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *BOTH*
 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*
 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 *None* How are they protected *✓*
 pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*
 bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges *Yes*
 ere stern tube, propeller, screw shaft, and all connections examined in dry dock *New vessel* Is the screw shaft tunnel watertight *See ship report*
 ted with a watertight door *yes* worked from *Main deck*

RS, &c.— (Letter for record *S*) Total Heating Surface of Boilers *2710 ff* Is forced draft fitted *No*
 d Description of Boilers *2 Ordinary Marine* Working Pressure *160 lbs* Tested by hydraulic pressure to *320 lbs*
 test *19/11/02* Can each boiler be worked separately *Yes* Area of fire grate in each boiler *74.25 ff* No. and Description of safety valves to
 ler *2 Spring* Area of each valve *4.9 ff* Pressure to which they are adjusted *160 lbs* Are they fitted
 ing gear *Yes* Smallest distance between boilers or uptakes and bunkers or woodwork *18"* Mean diameter of boilers *12.39 1/16*
10-6" Material of shell plates *S* Thickness *1 1/16"* Description of riveting: circum. seams *D.R.L* long. seams *D.R.D.B.*
 r of rivet holes in long. seams *1 3/16"* Pitch of rivets *6 7/16"* Lap of plates or width of butt straps *12 5/8"*
 ages of strength of longitudinal joint rivets *83.5* Working pressure of shell by rules *162.3 lbs* Size of manhole in *end 16" x 12"*
 plate *81.18* plate *81.18* Working pressure of shell by rules *162.3 lbs* Size of manhole in *end 16" x 12"*
 compensating ring *Flanged* No. and Description of Furnaces in each boiler *2 plain* Material *S* Outside diameter *3-6"*
 of plain part top *6-11"* Thickness of plates crown *3/4"* Description of longitudinal joint *Welded* No. of strengthening rings *✓*
 bottom *6-11"* Thickness of plates bottom *3/4"* Description of longitudinal joint *Welded* No. of strengthening rings *✓*
 g pressure of furnace by the rules *169 lbs* Combustion chamber plates: Material *S* Thickness: Sides *2 1/32"* Back *1/16"* Top *2 1/32"* Bottom *1"*
 stays to ditto: Sides *10 1/4" x 8 3/4"* Back *10 1/4" x 9 3/4"* Top *9 1/4" x 8 3/4"* If stays are fitted with nuts or riveted heads *BOTH* Working pressure by rules *160.2 lbs*
 l of stays *S* Diameter at smallest part *1.79 ff* Area supported by each stay *99.94 ff* Working pressure by rules *161.5 lbs* End plates in steam space:
 l *S* Thickness *1 1/32"* Pitch of stays *18 1/8" x 17 1/4"* How are stays secured *N.T.W.* Working pressure by rules *161 lbs* Material of stays *S*
 at smallest part *5.05 ff* Area supported by each stay *312.65 ff* Working pressure by rules *161.6 lbs* Material of Front plates at bottom *S*
 ss *3/4"* Material of Lower back plate *S* Thickness *1 1/16"* Greatest pitch of stays *13 3/4" x 9 3/4"* Working pressure of plate by rules *160.4 lbs*
 r of tubes *3 1/4"* Pitch of tubes *4 3/4" x 4 1/2"* Material of tube plates *S* Thickness: Front *3/4"* Back *3/4"* Mean pitch of stays *9 1/2" x 9"*
 across wide water spaces *14 1/2"* Working pressures by rules *245 lbs* Girders to Chamber tops: Material *S* Depth and
 ss of girder at centre *7 3/4" x 1 1/2"* Length as per rule *29"* Distance apart *9 1/4"* Number and pitch of Stays in each *2 of 8 3/4"*
 g pressure by rules *164 lbs* Superheater or Steam chest; how connected to boiler *None* Can the superheater be shut off and the boiler worked
 ly — Diameter — Length — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet
 — Pitch of rivets — Working pressure of shell by rules — Diameter of flue — Material of flue plates — Thickness —
 ned with rings — Distance between rings — Working pressure by rules — End plates: Thickness — How stayed —
 g pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

SPARE GEAR. State the articles supplied:— Set of top & bottom end, main bearing & coupling bolts & nuts. Set of air, circ., feed, & bilge pump valves, propeller shaft, assorted bolts, nuts, & iron

NORTH EASTERN MARINE ENGINEERING CO. LTD. *James D. Smith* Manufacturer.

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

Material of screw shaft *Scrap iron* Is the screw shaft fitted with a continuous liner the whole length of the stern tube *No*
Is the after end of the liner made water tight in the propeller boss *Yes* If the liner is in more than one length are the joints burned *✓*
If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *No* If two liners are fitted, is the shaft lapped or protected between the liners *Lapped at ends*

The whole examined under steam at working pressure & found satisfactory.

In our opinion this vessel is worthy of the
Record of **L.M.C. 5-03** in The Register Book.

It is submitted that
this vessel is eligible for
THE RECORD - LMC 6503

W. F. L. Moore R.D. Shilston
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

FRL 15 MAY 1963

+ L. 16. 5. 03

MACHINERY CERTIFICATE
WRITTEN

Lloyd's Register
Foundation