

REPORT ON MACHINERY.

Port of *Hull*

FRI. FEB 7 1900
Received at London Office

Survey held at *Hull* Date, first Survey *Aug 31/19* Last Survey *Jan 17th 1900*
(Number of Visits *16*)

Steam Trawler *"Linnel"* Tons { Gross *200*
Net *72*

Built at *Hull* By whom built *Earle's Co. Ltd.* When built *1900*

Machinery made at *Hull* By whom made *Earle's Co. Ltd.* when made *1900*

Indicated Horse Power *52* Owners *Pioneer Stra. Fishing Co. Ltd.* Port belonging to *Grimby*
Horse Power as per Section 28 *62* Is Refrigerating Machinery fitted *No* Is Electric Light fitted *No*

ENGINES, &c. — Description of Engines *Triple Compound* No. of Cylinders *Three* No. of Cranks *3*

Length of Stroke *23"* Revs. per minute *as per rule 6.339* Dia. of screw shaft *as fitted 6 3/4"* Lgth. of stern bush *27 1/2"*

Tunnel shaft *as per rule 5.735* Dia. of Crank shaft journals *as per rule 6.0372* Dia. of Crank pin *6 1/2"* Size of Crank webs *6 1/2" x 4 1/2"* Dia. of thrust shaft under *6 3/8"*

Dia. of screw *8" x 2"* Pitch of screw *11" x 0"* No. of blades *4* State whether moveable *No* Total surface *24 sq ft*

Feed pumps *one* Diameter of ditto *2 1/2"* Stroke *10"* Can one be overhauled while the other is at work *—*

Bilge pumps *one* Diameter of ditto *2 1/2"* Stroke *10"* Can one be overhauled while the other is at work *—*

Donkey Engines *one* Sizes of Pumps *2 1/2" x 5" x 5"* No. and size of Suctions connected to both Bilge and Donkey pumps *In Holds, &c. one 2" to slush well, and*

Engine Room *Two 1 1/2"*

to forward bilge *2"*

bilge injections *one* sizes *3 1/2"* Connected to condenser, *Cond.* as a separate donkey suction fitted in Engine room & size *2 1/2" x 5 1/2"*

the 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 *—*

connections with the sea direct on the skin of the ship *yes* Are they Valves or Cocks *Both*

ey 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*

ey 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 *Shushwell suction* How are they protected *wood casing*

all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times *yes*

the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges *yes*

were stern tube, propeller, screw shaft, and all connections examined in dry dock *now new* Is the screw shaft tunnel watertight *—*

fitted with a watertight door *—* worked from *—*

BOILERS, &c. — (Letter for record *S*) Total Heating Surface of Boilers *1050 sq ft* Is forced draft fitted *No*

Description of Boilers *1 Cylindrical Multitubular* Working Pressure *200* Tested by hydraulic pressure to *400*

of test *13/1/00* Can each boiler be worked separately *—* Area of fire grate in each boiler *34.3* No. and Description of safety valves to *2 Spring loaded*

Area of each valve *3.140* Pressure to which they are adjusted *205* Are they fitted with easing gear *yes*

Least distance between boilers or uptakes and bunkers or woodwork *7"* Mean dia. of boilers *135.9375"* Length *9" x 9"* Material of shell plates *Steel*

Range of tensile strength *29,32* Are they welded or flanged *—* Descrip. of riveting: cir. seams *D.R. lap* long. seams *T.R. dbl. Shapes*

ter of rivet holes in long. seams *1 1/16"* Pitch of rivets *7/8"* Lap of plates or width of butt straps *15 1/2"*

antages of strength of longitudinal joint *89.6* Working pressure of shell by rules *204* Size of manhole in shell *16" x 12"*

of compensating ring *2-7" dia x 1 1/2"* No. and Description of Furnaces in each boiler *2 Hobnis* Material *Steel* Outside diameter *39.0625"*

h of plain part *16"* Thickness of plates *8.9.6* Description of longitudinal joint *welded* No. of strengthening rings *4*

ing pressure of furnace by the rules *205* Combustion chamber plates: Material *Steel* Thickness: Sides *1/16"* Back *1/16"* Top *1/16"* Bottom *1/16"*

of stays to ditto: Sides *8 1/2" x 7 3/4"* Back *8" x 7 1/4"* Top *8 1/2" x 7 1/2"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *204*

rial of stays *Steel* Diameter at smallest part *1.480"* Area supported by each stay *51.531* Working pressure by rules *229* End plates in steam space: *Steel*

Thicknes *1 1/2"* Pitch of stays *15 3/8" x 15"* How are stays secured *0 nuts* Working pressure by rules *206* Material of stays *Steel*

er at smallest part *5.157* Area supported by each stay *230.625* Working pressure by rule *206* Material of Front plates at bottom *Steel*

ness *32* Material of Lower back plate *Steel* Thickness *1/16"* Greatest pitch of stays *12 1/2"* Working pressure of plate by rules *200*

eter of tubes *3 1/4"* Pitch of tubes *4.625"* Material of tube plates *Steel* Thickness: Front *3/32"* Back *3/4"* Mean pitch of stays *9 1/4"*

across wide water spaces *13 1/4"* Working pressures by rules *203* Girders to Chamber tops: Material *Steel* Depth and *7 1/2" x 1 3/4"*

ess of girder at centre *7 1/2" x 1 3/4"* Length as per rule *29"* Distance apart *7 1/2"* Number and pitch of Stays in each *2, 8 1/2"*

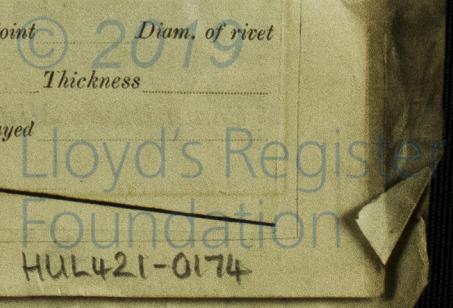
ing pressure by rules *218* Superheater or Steam chest; how connected to boiler *—* Can the superheater be shut off and the boiler worked *—*

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

ened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

ing pressure of end plates Area of safety valves to superheater Are they fitted with easing gear



DONKEY BOILER— No. Description
 Made at By whom made When made Where fixed
 Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves
 No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boiler
 enter the donkey boiler Dia. of donkey boiler Length Material of shell plates Thickness Range of
 strength Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets
 Lap of plating Per centage of strength of joint Rivets Thickness of shell crown plates Radius of do. No. of Stays to do.
 Dia. of stays. Diameter of furnace Top Bottom Length of furnace Thickness of furnace plates Desc.
 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 uptake plates Thickness of water tubes

SPARE GEAR. State the articles supplied:— *Two top and bolts. Two bottom end bolts. Two main bearing bolts. One set of coupling bolts. One set of feed pump valves. One set of bilge pump valves. One set of check valves. Safety valve spring &c. &c.*
 The foregoing is a correct description,
 EARLE'S
 SHIPBUILDING & ENGINEERING CO. LIMITED
 Manufacturer. *A. E. Teator*
 GENERAL MANAGER & DIRECTOR.

Dates of Survey while building
 During progress of work in shops - 1899: Aug 31. Sep 13. 21 Oct 9. 25 Nov 8. 20 Dec. 12. 13. 15
 During erection on board vessel - Jan 15. 16. 17.
 Total No. of visits 16
 Is the approved plan of main boiler forwarded herewith *Yes*

General Remarks (State quality of workmanship, opinions as to class, &c.) *Workmanship good. The engines and boilers of this vessel were constructed under Special Survey and are now in my opinion in a safe working condition and the case is respectfully submitted for the notification + L.M.C. 1.10.00. in the Register*

Particulars	Amount	When applied for	When received
Donkey Boiler Fee	£ 1 : 0 : 0	30/1/1900	25/5/01
Special	£ 9 : 6 : 0		
Travelling Expenses (if any)	£ - : - : -		
Total	£ 10 : 6 : 0		

Wm. C. Hammett
 Engineer Surveyor to Lloyd's Register of British & Foreign Steamships

The amount of Entry Fee... £ 1 : 0 : 0
 Special... £ 9 : 6 : 0
 Donkey Boiler Fee... £ - : - : -
 Travelling Expenses (if any) £ - : - : -
 Committee's Minute **TUES. 6 FEB 1900**
 Assigned
 MACHINERY CERTIFICATE WRITTEN **FRI. 1 MAR 1901**
 + L.M.C. 1.00

Certificate (if required) to be sent to

The Surveyor requested not to write on or below the space for Committee's Minute.

