

REPORT ON MACHINERY.

No.

9704

Port of *Null*

THUR 6 JUN 1895

Received at London Office

Survey held at *Null*

Date, first Survey *Feb 13th*

Last Survey *May 10th*

1895

Book on the *Steam Trawler Robin*

(Number of Visits *12*)

Tons } Gross *153*
Net *74*

Built at *Null*

By whom built *Cartis Co Lim*

When built *1895*

es made at *Null*

By whom made *Cartis Co Lim*

when made *1895*

s made at *Null*

By whom made *Cartis Co Lim*

when made *1895*

tered Horse Power *45*

Owners *Pioneer S F Co L^d* Port belonging to *Grimby*

Horse Power as per Section 28

INES, &c.— Description of Engines *Triple Comp Inv & Acting* No. of Cylinders *Three*

eter of Cylinders *11" 14" 30"* Length of Stroke *21* Revolutions per minute *130* Diameter of Screw shaft *5 3/8"*

eter of Tunnel shaft *5 1/8"* Diameter of Crank shaft journals *5 3/8"* Diameter of Crank pin *5 3/8"* Size of Crank webs *6 1/2" x 3 7/8"*

ter of screw *4:0"* Pitch of screw *9:3"* No. of blades *4* State whether moveable *No* Total surface *21 098*

f Feed pumps *One* Diameter of ditto *2 1/4"* Stroke *10"* Can one be overhauled while the other is at work *✓*

f Bilge pumps *One* Diameter of ditto *3"* Stroke *10"* Can one be overhauled while the other is at work *✓*

f Donkey Engines *One* Sizes of Pumps *3" x 6"* No. and size of Suctions connected to both Bilge and Donkey pumps

ngine Room *One 2"* In Holds, &c. *One 2"*

Ejector with suction in the Engine Bilge and discharge on deck

ilge injections *One sizes 3 1/2"* Connected to condenser, or to circulating pump *Is a separate donkey suction fitted in Engine room & size 3" - ejector*

ll 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 *Yes*

ll connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *both*

hey 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*

hey 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 to Forward* How are they protected *Wood cased*

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*

ere stern tube, propeller, screw shaft, and all connections examined in dry dock *Seen New* Is the screw shaft tunnel watertight *In tunnel*

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

ELERS, &c.— (Letter for record *S*) Total Heating Surface of Boilers *800 sq feet*

nd Description of Boilers *One Cylindrical Null* Working Pressure *160 lb* Tested by hydraulic pressure to *320 lb*

of test *22/4/95* Can each boiler be worked separately *✓* Area of fire grate in each boiler *28 09 sq ft* No. and Description of safety valves to

boiler *In Spring loaded* Area of each valve *3.14 sq ft* Pressure to which they are adjusted *165 lb* Are they fitted

leasing gear *Yes* Smallest distance between boilers or uptakes and bunkers or woodwork *10"* Mean diameter of boilers *10:0"*

th *9:6"* Material of shell plates *Steel* Thickness *27/32"* Description of riveting: circum. seams *all on lap* long. seams *all chip all*

eter of rivet holes in long. seams *1 3/16"* Pitch of rivets *6 7/8"* Lap of plates or width of butt straps *12 1/4"*

entages of strength of longitudinal joint *85%* Working pressure of shell by rules *160 lb* Size of manhole in shell *16" x 12"*

of compensating ring *30" x 28" x 27/32"* No. and Description of Furnaces in each boiler *two Plain* Material *Steel* Outside diameter *35"*

th of plain part *top 6:0"* Thickness of plates *crown 4 1/16"* Description of longitudinal joint *welded* No. of strengthening rings *✓*

Working pressure of furnace by the rules *161 lb* Combustion chamber plates: Material *Steel* Thickness: Sides *9/16"* Back *9/16"* Top *9/16"* Bottom *11/16"*

of stays to ditto: Sides *8"* Back *8 1/4"* Top *8"* If stays are fitted with nuts or riveted heads *None* Working pressure by rules *161 lb*

erial of stays *Steel* Diameter at smallest part *1 3/8"* Area supported by each stay *8 1/2" x 7"* Working pressure by rules *205 lb* End plates in steam space:

erial *Steel* Thickness *29/32"* Pitch of stays *15"* How are stays secured *all nuts* Working pressure by rules *163 lb* Material of stays *Steel*

eter at smallest part *2 1/4"* Area supported by each stay *15" x 14 1/2"* Working pressure by rules *164 lb* Material of Front plates at bottom *Steel*

ickness *27/32"* Material of Lower back plate *Steel* Thickness *13/16"* Greatest pitch of stays *14"* Working pressure of plate by rules *160 lb*

eter of tubes *3 1/4"* Pitch of tubes *14 1/2"* Material of tube plates *Steel* Thickness: Front *27/32"* Back *10/16"* Mean pitch of stays *9"*

h across wide water spaces *13 1/4"* Working pressures by rules *166 lb* Girders to Chamber tops: Material *Iron* Depth and

ness of girder at centre *6:2"* Length as per rule *27"* Distance apart *7 1/2"* Number and pitch of Stays in each *two 8"*

Working pressure by rules *168 lb* Superheater or Steam chest; how connected to boiler *Can the superheater be shut off and the boiler worked*

ately 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

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

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

DONKEY BOILER— Description *In Donkey Boiler*

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 boilers can enter the donkey boiler _____

Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____

Description of riveting long seams _____ Diameter 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 _____ 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 uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *Two top end bolts. Two bottom end bolts. Two main bearing bolts. One set Coupling bolts. One set Dead pump valve. One set Bilge Pump valve. One set Check valve, Safety valve spring.*

The vessel efficient with masts and sails as a Hawker.

The foregoing is a correct description,

A. S. Seaman Manufacturer.

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

Mr. J. H. H.

The Machinery and Boiler of this Steam Hawker have been constructed under Special Survey, and placed on board in accordance with the Society's Rules. They are now in my opinion in safe working condition and the case is respectfully submitted for the Notification + L.M.C. 5,95 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD: + LMC 5,95

A. R. R.

6.6.95

MACHINERY CERTIFICATE WRITTEN

Certificate (if required) to be sent to *Hull*

| | | | |
|---------------------------|-------|-------------------|----------------|
| The amount of Entry Fee.. | £ 1:0 | When applied for, | <i>5/6 95</i> |
| Special | £ 0:0 | When received, | <i>16/7 95</i> |
| Donkey Boiler Fee | £ | | |
| Log Expenses (if any) £ | ✓ | | |

H. P. W.
17/7/95
James James
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

C. *the's Minute*

FRI 2 JUN 1895

+ LMC 5,95



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