

REPORT ON MACHINERY.

No. 15491

Port of Bull

MON. 24 AUG 1903

Received at London Office

No. in Survey held at Bereley & BullDate, first Survey Jan 19thLast Survey Aug 11th

1903

Reg. Book.

144 on the

Steam Trawler Malabar(Number of Visits 25)Tons { Gross 170
Net 57When built 1903

Master

Built at BereleyBy whom built Cook & BellSemmelEngines made at BullBy whom made Amos Smithwhen made 1903Boilers made at BullBy whom made Amos Smithwhen made 1903

Registered Horse Power

Owners Bull & Fishing & CoPort belonging to BullNom. Horse Power as per Section 28 45Is Refrigerating Machinery fitted hIs Electric Light fitted h

ENGINES, &c.—Description of Engines

Triple CompoundNo. of Cylinders ThreeNo. of Cranks ThreeDia. of Cylinders 10" 17" 20" Length of Stroke 21Revs. per minute 115

Dia. of Screw shaft

as per rule 6.58

Material of

IronIs the screw shaft fitted with a continuous liner the whole length of the stern tube Yes

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 -

If two

liners are fitted, is the shaft lapped or protected between the liners -Length of stern bush 28"

Dia. of Tunnel shaft

as per rule 5.48

Dia. of Crank shaft journals

as per rule 5.76as fitted 6"Dia. of Crank pin 6"Size of Crank webs 2 1/4"

Dia. of thrust shaft under

collars 6"Dia. of screw 8" 9"Pitch of screw 8" 9"No. of blades 14State whether moveable hNo. of Feed pumps oneDiameter of ditto 2 1/2"Stroke 1 1/2"Can one be overhauled while the other is at work -No. of Bilge pumps oneDiameter of ditto 2 1/2"Stroke 1 1/2"Can one be overhauled while the other is at work -No. of Donkey Engines twoSizes of Pumps 3" 6" & 5" 5"

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Roomone 2"In Holds, &c. two 2"Is a separate donkey suction fitted in Engine room & size gallonIs a separate donkey suction fitted in Engine room & size gallonIs a separate donkey suction fitted in Engine room & size gallonIs a separate donkey suction fitted in Engine room & size gallonIs a separate donkey suction fitted in Engine room & size gallonIs a separate donkey suction fitted in Engine room & size gallonIs a separate donkey suction fitted in Engine room & size gallonNo. of bilge injections onesizes 2 1/2"Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size gallonAre all the bilge suction pipes fitted with roses YesAre the roses in Engine room always accessible YesAre the sluices on Engine room bulkheads always accessible humeAre all connections with the sea direct on the skin of the ship YesAre they Valves or Cocks bothAre they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates YesAre the discharge pipes above or below the deep water line aboveAre they each fitted with a discharge valve always accessible on the plating of the vessel YesAre the blow off cocks fitted with a spigot and brass covering plate YesWhat pipes are carried through the bunkers Suction to forwardAre all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times YesAre the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges YesWhen were stern tube, propeller, screw shaft, and all connections examined in dry dock humeIs the screw shaft tunnel watertight humeIs it fitted with a watertight door -worked from -

BOILERS, &c.—

(Letter for record S)Total Heating Surface of Boilers 7504 sq ftIs forced draft fitted hNo. and Description of Boilers One Cylal boilerWorking Pressure 200 lbTested by hydraulic pressure to 400 lbDate of test 6/7/03Can each boiler be worked separately -Area of fire grate in each boiler 25 1/4 sq ft

No. and Description of safety valves to

each boiler Two SpringArea of each valve 3.14 sq ftPressure to which they are adjusted 185 lbAre they fitted with easing gear YesSmallest distance between boilers or uptakes and bunkers or woodwork 9"Mean dia. of boilers 10.6"Length 9' 3"Material of shell plates steelThickness 1"Range of tensile strength 27.32Are they welded or flanged -Descrip. of riveting: cir. seams all weld long. seams all shopDiameter of rivet holes in long. seams 1 1/8"Pitch of rivets 7 7/16"Lap of plates or width of butt straps 16 1/4"

Per centages of strength of longitudinal joint

rivets 99.37plate 99.57Working pressure of shell by rules 200 lbSize of manhole in shell 16" x 12"Size of compensating ring 40" x 30" x 1"No. and Description of Furnaces in each boiler Two Plain

Length of plain part

top 5' 0"

Thickness of plates

crown 49/64"Description of longitudinal joint weldedNo. of strengthening rings -Working pressure of furnace by the rules 245 lbCombustion chamber plates: Material steelThickness: Sides 1 1/16"Back 1 1/16"Top 1 1/16"Bottom 1 1/16"Pitch of stays to ditto: Sides 8 1/4"Back 7 1/8"Top 8 1/4"If stays are fitted with nuts or riveted heads humeWorking pressure by rules 264 lbMaterial of stays steelDiameter at smallest part 1 3/8"Area supported by each stay 7 1/8"Working pressure by rules 232 lb

End plates in steam space:

Material steelThickness 29/32"Pitch of stays 13 1/4"How are stays secured all nutWorking pressure by rules 270 lbMaterial of stays steelDiameter at smallest part 2 9/32"Area supported by each stay 13 1/4"Working pressure by rules 234 lbMaterial of Front plates at bottom steelThickness 15/16"Material of Lower back plate steelThickness 15/16"Greatest pitch of stays 14"Working pressure of plate by rules 200 lbDiameter of tubes 3 1/4"Pitch of tubes 4 3/4"Material of tube plates steelThickness: Front 15/16"Back 1 1/4"Mean pitch of stays 9 1/2"Pitch across wide water spaces 13 1/2"Working pressures by rules 210 lbGirders to Chamber tops: Material steel

Depth and

thickness of girder at centre 7 1/2" x 13 1/4"Length as per rule 30Distance apart 6 5/8"Number and pitch of Stays in each two 8 1/4"Working pressure by rules 235 lb

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

separately -

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened 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

W840 - 0064

Lloyd's Register

Foundation

DONKEY BOILER— No. _____ Description *None*

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 _____

Dia. of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____ Range of tensile 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 _____ 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 and bottom. 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 &c.*

The level effluent with masts and sails as a marker.

The foregoing is a correct description, **FOR AMOS & SMITH**
 Manufacturer. *W. S. Hidi*

Dates of Survey while building { During progress of work in shops - 1903 - Jan 19. Feb. 10. 16. 26. Mar 5. 10. Apr 15. 20 May 5. for *RP* May 14. 25 June 4. 8. 17. 24.
 { During erection on board vessel - July 1. 6. 15. 20. 24. 28. 30 Aug 5. 7. 11.
 Total No. of s *25*

Is the approved plan of main boiler forwarded herewith *Ref No. 15265*

" " " donkey " " " "

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

Notes

The Safety Valves have been adjusted to 185 lbs of the Superintendent Engineers request. There is no reason why the pressure should not be marked 200 lbs in the Register Book.

This case is similar in all respects to the 'Poonah' hull Report No 15265 dated 15th May 1903.

The Machinery and Boilers of this Steam Harbour have been constructed under Special Survey and placed on board in accordance with the Society's Rules. They are and in my opinion in safe working condition and the case is respectfully submitted in the Notification + LMC P.O. in the Register Book.

It is submitted that this vessel is eligible for **THE RECORD.** - LMC 8.03.

Ref.
25.8.03
25.8.03

Certificate (if required) to be sent to

The amount of Entry Fee... £ 1 : 0 :
 Special ... £ 0 : 0 :
 Donkey Boiler Fee ... £ ✓ :
 Travelling Expenses (if any) £ ✓ :
 When applied for, 21/8/1903
 When received, 31.8.03

Committee's Minute **TUES. 25 AUG 1903**
 Assigned *+ LMC 8.03*

James James
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.