

Port of Hull

Received at London Office

1905 15 FEB 1906

No. in Survey held at Hull Date, first Survey Sep. 12/05 Last Survey Jan. 27 1906
Reg. Book. 99 Buff on the Screw Trawler "Crown"
Master Built at Hull By whom built Charles S. & Co. Ltd.
Engines made at Hull By whom made Charles S. & Co. Ltd.
Boilers made at do By whom made do
Registered Horse Power Owners Crown Steam Fishing Co. Ltd.
Nom. Horse Power as per Section 28 79 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple No. of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 12 3/4, 22, 36 Length of Stroke 24 Revs. per minute 110
Dia. of Screw shaft as per rule 7 3/8 as fitted 8 Material of screw shaft Iron
Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes
Dia. of Tunnel shaft as per rule 6.49 as fitted 7 3/8 Dia. of Crank shaft journals as per rule 6.8 as fitted 7 1/2
No. of Feed pumps 1 Diameter of ditto 3 Stroke 12
No. of Bilge pumps 1 Diameter of ditto 3 Stroke 12
No. of Donkey Engines One Sizes of Pumps 6x3x6
In Engine Room One 2 dia. In Holds, &c. Four 2 dia.
Ejector suction from all bilges & discharge on deck.
No. of bilge injections 1 sizes 3 1/2 Connected to condenser, or to circulating pump Cond. Is a separate donkey suction fitted in Engine room & sized 3" ejector
Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes
Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Both
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes
Are they each fitted with a discharge valve always accessible on the plating of the vessel yes
What pipes are carried through the bunkers For suction & winch pipes How are they protected Wood & iron casing
Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times yes
Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges yes
When were stern tube, propeller, screw shaft, and all connections examined in dry dock Before launch Is the screw shaft tunnel watertight None
Is it fitted with a watertight door worked from

BOILERS, &c.— (Letter for record (S) Total Heating Surface of Boilers 1370 sq. ft. Is forced draft fitted No
No. and Description of Boilers One Cyl. S. E. Muller Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs
Date of test 10.1.06 Can each boiler be worked separately Area of fire grate in each boiler 35 sq. ft.
Each boiler Two direct spring Area of each valve 4.9 Pressure to which they are adjusted 185 lbs
Smallest distance between boilers or uptakes and bunkers or woodwork 11 Mean dia. of boilers 12-9 Length 10-6 Material of shell plates Steel
Thickness 1/16 Range of tensile strength 28-32 Are they welded or flanged No Descrip. of riveting: cir. seams BR Lap long. seams BR S 5 Rivets
Diameter of rivet holes in long. seams 1/16 Pitch of rivets 7/8 Lap of plates or width of butt straps 15 1/2
Per centages of strength of longitudinal joint rivets 87 plate 85 Working pressure of shell by rules 182 lbs Size of manhole in shell 16x12
Size of compensating ring 2-7x2-4x1/16 No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 3-8 1/2
Length of plain part top 5-9 bottom 5-2 1/2 Thickness of plates crown 4-9 bottom 6-4 Description of longitudinal joint Welded No. of strengthening rings
Working pressure of furnace by the rules 180 lbs Combustion chamber plates: Material Steel Thickness: Sides 5/8 Back 2/32 Top 5/8 Bottom 5/8
Pitch of stays to ditto: Sides 8 1/2 x 8 1/4 Back 9 1/4 x 8 Top 8 3/4 x 8 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 181 lbs
Material of stays Steel Diameter at smallest part 1 1/2 Area supported by each stay 74 Working pressure by rules 190 lbs End plates in steam space:
Material Steel Thickness 1 1/8 Pitch of stays 17 1/2 x 17 1/2 How are stays secured Nuts Working pressure by rules 186 lbs Material of stays Steel
Diameter at smallest part 2 13/16 Area supported by each stay 306 Working pressure by rules 203 lbs Material of Front plates at bottom Steel
Thickness 15/16 Material of Lower back plate Steel Thickness 2 3/4 + 3/4 Greatest pitch of stays 17 x 13 1/2 Working pressure of plate by rules 230 lbs
Diameter of tubes 3 1/2 Pitch of tubes 5 x 4 3/4 Material of tube plates Steel Thickness: Front 15/16 Back 13/16 Mean pitch of stays 10 x 9 1/2
Pitch across wide water spaces 14 1/2 Working pressures by rules 182 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 10 x 1 3/4 Length as per rule 3-0 Distance apart 8 3/4 Number and pitch of Stays in each 3 @ 8 1/2
Working pressure by rules 198 lbs Superheater or Steam chest; how connected to boiler None 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

**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 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 + two bottom-end connecting rod bolts + nuts. Two main bearing bolts + nuts. One set of coupling bolts + nuts. One set of feed + bilge pump valves. Main + donkey feed check valves. Assorted bolts + nuts &c.*

The foregoing is a correct description,  
*F. J. Palethorpe* Manufacturer.

**SECRETARY**  
 Dates of Survey while building { During progress of work in shops - - } 1905: - Sep 12. Oct 2. 20. Nov 6. 21. 28. Dec 1. 8. 9. 19. 30. 1906: - Jan 8. 10.  
 { During erection on board vessel - - } Jan 20. 23. 27.  
 Total No. of visits 16  
 Is the approved plan of main boiler forwarded herewith *Yes*  
 " " " donkey " " " " *✓*

**General Remarks** (State quality of workmanship, opinions as to class, &c.)  
*The Engines and Boiler of this vessel have been constructed under Special Survey, are of good material and workmanship, and have been fitted and secured on board in accordance with the Rules. They are now in good working condition and in my opinion eligible to have the notation of +LMC 1, 06 in the Register Book.*

*I attach hereto a letter received by Mess<sup>rs</sup> Carlis & Co. from the Owners with regard to the feed + bilge pumps of their Nos 512-13-14.*

It is submitted that  
 this vessel is eligible for  
**THE RECORD** H L M. C. 1. 06.

*Pub*  
*Ed. 13.2.06*  
*19.2.06*

*[Signature]*  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee... £ 1 : - : - :  
 Special ... .. £ 11 : 17 : - :  
 Donkey Boiler Fee ... .. £ . : . : - :  
 Travelling Expenses (if any) £ . : . : - :  
 When applied for, 12/21 1906  
 When received, 6/23 1906

Committee's Minute **FRI. 16 FEB 1906**

Assigned *+ Lmb 1. 06*



Certificate (if required) to be sent to \_\_\_\_\_