

REPORT ON MACHINERY.

10.250

Port of Shull

Received at London Office TUES. FEB 17 1896

Survey held at Berkeley & Shull

Date, first Survey Sep. 26/95 Last Survey Jan 27 1896

Book. Admiral
on the Steam Fishing Vessel

(Number of Voyages 21)

Tons Gross 182
Net 80

Built at Berkeley By whom built Cochran Hooper When built 1896

Machinery made at Shull By whom made Earles & Son when made 1896

Boilers made at Shull By whom made Earles & Son when made 1896

Registered Horse Power 55 Owners Anchor Steam Fishing Co Port belonging to Grimby

Horse Power as per Section 28 56

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

Diameter of Cylinders 12 1/4 20 32 Length of Stroke 23 Revolutions per minute 140 Diameter of Screw shaft 6 3/4

Diameter of Tunnel shaft 5 7/8 Diameter of Crank shaft journals 6 3/4 Diameter of Crank pin 6 3/4 Size of Crank webs 7 1/2 x 4

Diameter of screw 8 1/2 Pitch of screw 9 1/4 No. of blades 4 State whether moveable No Total surface 25 sq ft

No. of Feed pumps One Diameter of ditto 2 Stroke 10 Can one be overhauled while the other is at work Yes

No. of Bilge pumps One Diameter of ditto 3 Stroke 10 Can one be overhauled while the other is at work Yes

No. of Donkey Engines One Sizes of Pumps 3 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps one 2"

Engine Room one 2' In Holds, &c. one 2' Slush well 2'

Injector with suction in the Engine Bilge and Discharge & discharge on board

No. of bilge injections one size 3 1/2 Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size injector

Are all 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

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 the discharge pipes above or below the deep water line above

Are they 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

Are all pipes carried through the bunkers Section to Forward How are they protected hood covered

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

Were stern tube, propeller, screw shaft, and all connections examined in dry dock Yes Is the screw shaft tunnel watertight In tunnel

Is it fitted with a watertight door Yes worked from Yes

Boilers, &c.— (Letter for record S) Total Heating Surface of Boilers 923 sq feet

Description of Boilers One Cylindrical Shell Working Pressure 170 lb Tested by hydraulic pressure to 340 lb

Date of test 14/12/95 Can each boiler be worked separately Yes Area of fire grate in each boiler 33 sq ft No. and Description of safety valves to boiler Two Spring loaded

Area of each valve 3 1/2 sq in Pressure to which they are adjusted 175 lb Are they fitted with easing gear Yes Smallest distance between boilers or uptakes and bunkers or woodwork 7' Mean diameter of boilers 11' 0"

Material of shell plates Steel Thickness 3/32 Description of riveting: circum. seams double lap long. seams double lap

Diameter of rivet holes in long. seams 1 5/16 Pitch of rivets 7 1/2 Lap of plates or width of butt straps 14 1/4

Percentage of strength of longitudinal joint 82.5% Working pressure of shell by rules 170 lb Size of manhole in shell 16 x 12

Diameter of compensating ring 20 x 3/32 No. and Description of Furnaces in each boiler Two Plain Material Steel Outside diameter 30 1/4

Length of plain part 6' 0" Thickness of plates 13/16 Description of longitudinal joint double No. of strengthening rings 1

Working pressure of furnace by the rules 172 lb Combustion chamber plates: Material Steel Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 25/32

Number of stays to ditto: Sides 7 3/4 Back 7 3/4 Top 7 3/4 If stays are fitted with nuts or riveted heads None Working pressure by rules 182 lb

Material of stays Steel Diameter at smallest part 1 3/8 Area supported by each stay 7 1/2 sq in Working pressure by rules 197 lb End plates in steam space: Material Steel Thickness 15/16 Pitch of stays 15 How are stays secured double nut Working pressure by rules 175 lb Material of stays Steel

Diameter at smallest part 2 5/16 Area supported by each stay 15 x 14 1/4 Working pressure by rules 171 lb Material of Front plates at bottom Steel

Thickness 14/16 Material of Lower back plate Steel Thickness 13/16 Greatest pitch of stays 14 Working pressure of plate by rules 170 lb

Diameter of tubes 3 1/4 Pitch of tubes 4 1/2 Material of tube plates Steel Thickness: Front 14/16 Back 10/16 Mean pitch of stays 9

Width across wide water spaces 13 1/4 Working pressures by rules 172 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 x 2 1/16 Length as per rule 27 Distance apart 7 1/2 Number and pitch of Stays in each Two 7 3/4

Working pressure by rules 171 lb Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

Material Steel Diameter 12 Length 12 Thickness of shell plates 13/16 Material Steel Description of longitudinal joint double Diam. of rivet 1 5/16

Pitch of rivets 7 1/2 Working pressure of shell by rules 170 lb Diameter of flue 12 Material of flue plates Steel Thickness 13/16

Are they stiffened with rings Yes Distance between rings 12 Working pressure by rules 170 lb End plates: Thickness 13/16 How stayed None

Working pressure of end plates 170 lb Area of safety valves to superheater Two 3/4 Are they fitted with easing gear Yes

Lloyd's Register Foundation

HUL 411-0432

DONKEY BOILER— Description *No 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 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 valves. One set Bilge pump valves. One set check valves. Safety valve spring.*

The vessel efficient with masts and sails as a Steam Fishing Vessel.

EARLE'S SHIPBUILDING & ENGINEERING CO. LIMITED
 The foregoing is a correct description, Manufacturer.

A. J. Seaton per J.H.F.

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

Dates of survey while building

During progress of work in shops - -	1895: - Sep 26, 30 Oct 4, 8, 21, 23 Nov 5, 12, 15, 18 Dec 2, 9, 12, 18, 19, 30 1896 Jan 8, 16.
During erection on board vessel - -	Jan 23, 25, 27
Total No. of visits	21

The Machinery and Boilers of this Steam Fishing Vessel 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 ratification + L.M.C. 1.96. in The Register Book.

[Large blue handwritten signature]

It is submitted that this vessel is eligible for THE RECORD.

L.M.C. 1.96.

J.S.
11.2.96.

W.M.S.
11.2.96.

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

The amount of Entry Fee..	£ 1 : -	When applied for,	10/21/96
Special	£ 8 : 8	When received,	11.2.96
Donkey Boiler Fee .. .	£ . . .		
Travelling Expenses (if any) £	. . .		

James Jones
 Engineer Surveyor to Lloyd's Register of British & Foreign Ships

Committee's Minute **FRI, FEB 14 1896**
 Assigned *+ L.M.C. 1.96*

MACHINERY CERTIFICATE WRITTEN.