

REPORT ON MACHINERY.

Port of *Leith*

Received at London Office **FRI. 4 OCT. 1895**

No. in Survey held at *Leith*
Reg. Book.

Date, first Survey *10th May 1895* Last Survey *Sept 19th 1895*
(Number of Visits *9*)

on the *S. H. "East Neuk"*

Tons } Gross *117.57*
 } Net *10.25*
When built *1895*

Master *J. Watson* Built at *Anstruther* By whom built *William Jarvis*

Engines made at *Sunderland* By whom made *North Eastern Marine E. Co (Lim)* when made *1894*

Boilers made at *do* By whom made *do* when made *1894*

Registered Horse Power *50* Owners *Coil Steam Fishing Co (Lim)* Port belonging to *Hickcaldy*

Nom. Horse Power as per Section 28 *44.5 NP*

ENGINES, &c.— Description of Engines *Compound* No. of Cylinders *2*

Diameter of Cylinders *16" x 32"* Length of Stroke *22"* Revolutions per minute *100* Diameter of Screw shaft *as per rule 5.9"*
Intermediale as per rule *5.6"* as fitted *6.1/8"*

Diameter of ~~Tunnel~~ shaft as fitted *5.3/4"* Diameter of Crank shaft journals *6"* Diameter of Crank pin *6"* Size of Crank webs *7" x 4"*

Diameter of screw *8' 0"* Pitch of screw *10' 0"* No. of blades *4* State whether moveable *no* Total surface *18.9 sq*

No. of Feed pumps *1* Diameter of ditto *2 1/2"* Stroke *12"* Can one be overhauled while the other is at work

No. of Bilge pumps *1* Diameter of ditto *2 1/2"* Stroke *12"* Can one be overhauled while the other is at work

No. of Donkey Engines *one* Sizes of Pumps *5" x 3" x 4 1/2"* No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room *one 2 1/2" dia & 1 1/2" ejector* In Hold, &c. *one in hold 2" dia*

No. of bilge injections *1* sizes *2 1/2"* Connected to ~~condenser~~ to circulating pump *yes* Is a separate donkey suction fitted in Engine room & size *yes 2"*

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 *none*

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~~ ^{skin} of the vessel *yes* Are the blow off' cocks fitted with a spigot and brass covering plate *yes*

What pipes are carried through the bunkers *none* How are they protected

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 *new vessel* Is the screw shaft tunnel watertight *none*

Is it fitted with a watertight door worked from

BOILERS, &c.— (Letter for record) Total Heating Surface of Boilers *800 Sq feet*

No. and Description of Boilers *one multitubular single ended* Working Pressure *100 lbs* Tested by hydraulic pressure to *200 lbs*

Date of test *16-9-95* Can each boiler be worked separately Area of fire grate in each boiler *30 sq* No. and Description of safety valves to

each boiler *Two, spring* Area of each valve *4.9 sq* Pressure to which they are adjusted *105 lbs* Are they fitted

with easing gear *yes* Smallest distance between boilers or uptakes and bunkers ~~or woodwork~~ *7"* Mean diameter of boilers *10' 4 3/4"*

Length *9' 6"* Material of shell plates *Steel* Thickness *5/8"* Description of riveting: circum. seams *Cap & Rivet* long. seams *SBS & Rivet*

Diameter of rivet holes in long. seams *13/16"* Pitch of rivets *4 1/4"* Lap of plates or width of butt straps *8 3/4"*

Percentage of strength of longitudinal joint ^{rivets} *87* Working pressure of shell by rules *103 lbs* Size of manhole in shell *16" x 12"*

Size of compensating ring *6 x 23/32"* No. and Description of Furnaces in each boiler *2-plain* Material *Steel* Outside diameter *36"*

Length of plain part ^{top} *6' 0"* ^{bottom} *6' 0"* Thickness of plates ^{crown} *1"* ^{bottom} *2"* Description of longitudinal joint *welded* No. of strengthening rings *1/2 each*

Working pressure of furnace by the rules *111 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *5/8"* Back *9/16"* Top *5/8"* Bottom *5/8"*

Pitch of stays to ditto: Sides *9 1/4"* Back *10 3/8"* Top *7 3/4"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *110 lbs*

Material of stays *Steel* Diameter at smallest part *1 3/8"* Area supported by each stay *107 sq* Working pressure by rules *102 lbs* End plates in steam space:

Material *Steel* Thickness *23/32"* Pitch of stays *15"* How are stays secured *nuts* Working pressure by rules *102 lbs* Material of stays *Steel*

Diameter at smallest part *29/32"* Area supported by each stay *225 sq* Working pressure by rules *116 lbs* Material of Front plates at bottom *Steel*

Thickness *3/4"* Material of Lower back plate *Steel* Thickness *23/32"* Greatest pitch of stays *13"* Working pressure of plate by rules *105 lbs*

Diameter of tubes *3 1/4"* Pitch of tubes *4 1/2" x 4 5/8"* Material of tube plates *Steel* Thickness: Front *3/4"* Back *3/4"* Mean pitch of stays *13 1/2" x 13 7/8"*

Pitch across wide water spaces *14"* Working pressures by rules *100 lbs* Girders to Chamber tops: Material *Steel* Depth and

Thickness of girder at centre *6 3/8" x 2"* Length as per rule *26 5/16"* Distance apart *7 3/4"* Number and pitch of Stays in each *one stay*

Working pressure by rules *150 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

Size Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

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

LTH565-0152



DONKEY BOILER— 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 casing gear _____ If steam from main boilers can enter the donkey boiler _____

Description of riveting long. seams _____ Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____

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:— *As per Rule.*

The foregoing is a correct description,
 Manufacturer. *John Brown & Co*

General Remarks (State quality of workmanship, opinions as to class, &c. *The engines & boiler of this vessel were taken out of the steamer "Kate Thomson" wrecked in January 1895, please see Sunderland report No. 30564 & Secretary's letter of 13th May 1895. They have now been overhauled & examined throughout, a new main steam pipe, intermediate shaft, screw shaft & propeller have been fitted the boiler & main steam pipe have been tested by hydraulic pressure to 200 lbs per square inch with satisfactory results. The engines have been tried & the boiler safety valves adjusted under steam at the working pressure. The machinery is now in good & safe working condition & eligible in my opinion to have the notation of + LMC 95.*

[Large handwritten signature]

It is submitted that this vessel is eligible for THE RECORD

*L.M.C. 95
 NE & B. 94 re-filled 95*

Certificate (if required) to be sent to

The amount of Entry Fee..	£	✓	✓	✓	When applied for,
Special	£	5	5	5	27/10/95
Donkey Boiler Fee .. .	£	✓	✓	✓	When received,
Travelling Expenses (if any)	£	✓	✓	✓	15/10/95

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

Committee's Minute **TUES. 8 OCT 1895**

Assigned *+ LMC 95
 + NE & B re-filled 95*

Official _____

102,

No., Date, and _____

Whether British or Foreign Built _____

British _____

Number of D _____

Number of M _____

Rigged ... _____

Stern ... _____

Build ... _____

Galleries _____

Head ... _____

Framework & vessel ... _____

Number of E _____

Number of w and their c _____

Total to quantity at side am _____

No. of Engines _____

Two _____

Under Tonn _____

Closed-in spa _____

Space or s _____

Poop ... _____

Forecastle _____

Round H _____

Other clo _____

Spaces for _____

Deductions _____

Name _____

No. of Own _____

Name, Res _____

Dated _____

