

REPORT ON MACHINERY.

Received at London Office

2 AUGUST 1884

To. 350

No. in Survey held at

Dundee

Date, first Survey 31/3/84

Last Survey 5th August 1884

Reg. Book.

(Number of Visits)

13.72

on the

Wood Steamer "Dewdrop" (Trawler)

Tons

54.84

Master J. Smith

Built at Anstruther

By whom built W. Jarvis

When built June 1883

Engines made at

Dundee

By whom made

W. B. Thompson

when made

1884

Boilers made at

Dundee

By whom made

W. B. Thompson

when made

1884

Registered Horse Power

36

Owners

W. H. Burn, Esq.

Port belonging to St. Andrews

ENGINES, &c.—

Description of Engines

Direct Acting Compound Invt. Cys Surface Condensing

Diameter of Cylinders

16" & 27"

Length of Stroke

16"

No. of Rev. per minute

130

Point of Cut off, High Pressure

1/2

Low Pressure 1/2

Diameter of Screw shaft

5"

Diam. of Tunnel shaft

5"

Diam. of Crank shaft journals

5"

Diam. of Crank pin

5"

size of Crank webs 3 1/2" x 3 1/2" x 6"

Diameter of screw

5" 6"

Pitch of screw

7" 0"

No. of blades

4

state whether moveable 20" total surface 16 feet

No. of Feed pumps

one

diameter of ditto

3"

Stroke

6"

Can one be overhauled while the other is at work

No. of Bilge pumps

one

diameter of ditto

3"

Stroke

6"

Can one be overhauled while the other is at work

Where do they pump from

Hold, (in engine room)

No. of Donkey Engines

one

Size of Pumps

5" x 5" x 2 1/4"

Where do they pump from

Sea Hotwell Bilges. 15

Boiler on Deck & thru ship side

Are all the bilge suction pipes fitted with roses

yes

Are the roses always accessible

yes

Are the sluices on Engine room bulkheads always accessible

none

No. of bilge injections

none

and sizes

—

Are they connected to condenser, or to circulating pump

How are the pumps worked

air & circulating direct from piston crossheads Feed & Bilge from end of shaft

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

What pipes are carried through the bunkers

none

How are they protected

—

Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times

yes

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges

yes

When were stern tube, propeller, screw shaft, and all connections examined in dry dock

on slip

Is the screw shaft tunnel watertight

none

and fitted with a sluice door

—

worked from

—

BOILERS, &c.—

Number of Boilers

one

Description

Circular Tubular

Whether Steel or Iron

Steel & Iron Tubes

Working Pressure

80 lbs

Tested by hydraulic pressure to

160 lbs

Date of test

18th July 1884

Description of superheating apparatus or steam chest

none

Can each boiler be worked separately

—

Can the superheater be shut off and the boiler worked separately

—

No. of square feet of fire grate surface in each boiler

20.5 feet

Description of safety valves

Direct Spring

No. to each boiler

two

Area of each valve

7 1/4"

Are they fitted with easing gear

yes

No. of safety valves to superheater

—

area of each valve

—

Are they fitted with easing gear

—

Smallest distance between boilers and bunkers or woodwork

6" x 9"

Diameter of boilers

9" 0"

Length of boilers

7' 3"

description of riveting of shell long. seams

Lap 8. 1/2"

circum. seams

Lap 8. 1/2"

Thickness of shell plates

7/16"

Diameter of rivet holes

1"

whether punched or drilled

drilled

pitch of rivets

3 1/2"

Lap of plating

4 3/4" x 3"

Per centage of strength of longitudinal joint

69.2 & 73%

working pressure of shell by rules

77 lbs

size of manholes in shell

17" x 13"

Size of compensating rings

4" x 4" x 3/4"

No. of Furnaces in each boiler

two

Outside diameter

30 1/2" 27"

length, top

5' 4"

bottom

5' 4"

thickness of plates

7/16"

description of joint

butt 8. 1/2"

Greatest length between rings

—

working pressure of furnace by the rules

107 lbs

combustion chamber plating, thickness, sides

1/2"

Pitch of stays to ditto, sides

7' x -

back

9' x 8 1/2"

top

7 1/2' x -

If stays are fitted with nuts or riveted heads

multi both ends

working pressure of plating by

rules

Pitch of stays to ditto

13' x 13 1/2"

how stays are secured

thru ends multi

working pressure by rules

93 lbs

diameter of stays at

smallest part

1 3/4"

working pressure by rules

—

Greatest pitch of stays

—

working pressure by rules

—

Diameter of tubes

3"

pitch of tubes

4 1/2"

thickness of tube

—

plates, front

1/2"

back

1/2"

how stayed

lubes

pitch of stays

9' x 9"

width of water spaces

1 1/4"

Diameter of Superheater or Steam chest

none

length

—

thickness of plates

—

description of longitudinal joint

—

diam. of rivet holes

—

Pitch of rivets

—

working pressure of shell by rules

—

diameter of flue

—

thickness of plates

—

If stiffened with rings

—

Distance between rings

—

working pressure by rules

—

end plates of superheater, or steam chest; thickness

—

how stayed

—

Superheater or steam chest; how connected to boiler

—

DONKEY BOILER— 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 _____ if fitted with easing gear _____ if steam from main boilers can enter the donkey boiler _____

diameter of donkey boiler _____ length _____ description of riveting _____

Thickness of shell plates _____ diameter of rivet holes _____ whether punched or drilled _____ pitch of rivets _____ lap of plating _____

per centage of strength of joint _____ thickness of crown plates _____ stayed by _____

Diameter of furnace, top _____ bottom _____ length of furnace _____ thickness of 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 plates _____ thickness of water tubes _____

SPARE GEAR. State the articles supplied:— Two each Top & Bottom end connecting rod bolts. Two main bearing bolts. Feed & bilge pump valves. Four coupling bolts. Lb of bolts assorted 5 each Condenser & boiler tubes. &c &c

The foregoing is a correct description,

The foregoing is a correct description,
Geo. W. B. Munroe Manufacturer.
Geo. W. B. Munroe

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel*
has been built under special survey. The material & workman-
are of the best description.

The engine and boiler had been tested under steam and the safety valves set to 80 lbs per square inch working pressure, and in my opinion all are in good and safe working order and eligible to be classed with the destination mark. ✕ I.M.C. 8.84.

It is submitted that this record
be eligible to have the notification
of LMC recorded M 25/8/84

The amount of Entry Fee .. £ / : 0 : 0 received by me,

Special

Donkey Boiler Fee £

Certificate (if required) . . £

To be sent as per margin.

(Travelling Expenses, if any, £

FRIDAY 29 AUGUST 1884

TUESDAY 26 AUGUST 1884

Committee's Minute

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

Sunder District

$m + \text{Lub. S. Sz.}$