

REPORT ON MACHINERY.

No. 6092

(Received at London Office Rec'd 3rd May, 1883)

No. in Survey held at Glasgow

Date, first Survey Jan 21st 1882

Last Survey April 28th 1883

Reg. Book.

(Number of Visits)

2414

on the Screw Steamer

Kent

Tons 1620

Master Babbot

Built at

Glasgow

When built 1882-3

Engines made at

Glasgow

By whom made

London & Glasgow Co^{rs}

when made

1882-3

Boilers made at

do

By whom made

do

when made

1882-3

Registered Horse Power

300

Owners

Messrs Money, Wigram & Co^{rs}

Port belonging to

Glasgow

ENGINES, &c.—

Description of Engines

Inverted Direct Acting Compound Surface Condensing

Diameter of Cylinders

38 & 68

Length of Stroke

48

No. of Rev. per minute

65

Point of Cut off, High Pressure

5/8

Low Pressure

5/8

Diameter of Screw shaft

12 3/4

Diameter of Tunnel shaft

11 3/4

Diameter of Crank shaft journals

12 3/4

Diameter of Crank pin

12 3/4

size of Crank webs

14 3/4 x 9

Diameter of screw

16-6

Pitch of screw

18-6

No. of blades

Four

state whether moveable

yes

total surface

76 sq ft

No. of Feed pumps

Two

diameter of ditto

4

Stroke

27

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

Two

diameter of ditto

4

Stroke

27

Can one be overhauled while the other is at work

yes

Where do they pump from

Fore & Aft Holds & Engine Room

No. of Donkey Engines

One & hand

Size of Pumps

8 1/2 hp 8 1/2 hp

Where do they pump from

Fore & Aft Holds & Engine Room

also the hull & sea

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

yes

No. of bilge injections

One

and sizes

5

Are they connected to condenser, or to circulating pump

Circulating

How are the pumps worked

By levers from crosshead of L. P. engine

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

Below

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

Before launching

Is the screw shaft tunnel watertight

yes

and fitted with a sluice door

yes

worked from Engine Room at deck

BOILERS, &c.—

Number of Boilers

Two

Description

Cylindrical Multitubular All steel

Working Pressure

80 lbs

Tested by hydraulic pressure to

160 lbs

Date of test

February 27th 1883

Description of ~~superheating apparatus~~ steam chest

Cylindrical Horizontal

Can each boiler be worked separately

yes

Can the superheater be shut off and the boiler worked separately

—

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

92 sq ft

Description of safety valves

Direct acting springs

No. to each boiler

Two

area of each valve

23.76

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

12

Diameter of boilers

12-9

Length of boilers

16-6

description of riveting of shell long. seams

Bull double riveted circum. seams

Lap Double

Thickness of shell plates

3/4

diameter of rivet holes

1 1/16

whether punched or drilled

Drill

pitch of rivets

4 3/8

Lap of plating

5 1/2

per centage of strength of longitudinal joint

75

working pressure of shell by rules

90

Size of manholes in shell

16 x 12

size of compensating rings

Angle iron 14 x 3 x 1/2

No. of Furnaces in each boiler

Two

outside diameter

4-1

length, top

6-3

bottom

16-6

Thickness of plates

17/32

description of joint

Bull

if rings are fitted

yes

greatest length between rings

6-3

Working pressure of furnace by the rules

82 lbs

Combustion chamber plating, thickness, sides

15/32

back

—

top

1/2

Pitch of stays to ditto, sides

8 1/2

back

—

top

8 1/2 x 7 7/8

If stays are fitted with nuts or riveted heads

Nuts

working pressure of plating by rules

93 lbs

Diameter of stays at smallest part

1 3/8 screw

working pressure of ditto by rules

100 lbs

End plates in steam space, thickness

3/4

pitch of stays to ditto

15 x 14

how stays are secured

Nuts

Working pressure by rules

90 lbs

diameter of stays at smallest part

2 1/4

working pressure by rules

100 lbs

Front plates at bottom, thickness

5/8

Back plates, thickness

—

greatest pitch of stays

—

working pressure by rules

—

(State if Port is also sent on the Hull of the Ship)

[Form No. 8-21/5/82 1000.]

Lloyd's Register
GLS148-0022

6092 ges

Diameter of tubes $3\frac{1}{2}$ " pitch of tubes $4\frac{3}{4}$ " thickness of tube plates, front $\frac{11}{16}$ " back $\frac{5}{8}$ "
How stayed Stay tubes pitch of stays $14\frac{1}{2} \times 9\frac{1}{2}$ " width of water spaces 5"
Diameter of Superheater or Steam chest 3-6" length 16-6"
Thickness of plates $\frac{1}{2}$ " description of longitudinal joint Lap double diameter of rivet holes $\frac{13}{16}$ " pitch of rivets $2\frac{5}{8}$ "
Working pressure of shell by rules 120 lbs 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 $\frac{9}{16}$ " How stayed Ends dished
Superheater or steam chest; how connected to boiler Iron neck 16" dia $\frac{3}{4}$ " thick.
DONKEY BOILER— Description Cylindrical - Multitubular.
Made at Glasgow By whom made London & Glasgow 6-2 L^d when made 1883. Tested March 6th
Where fixed On deck working pressure 60 lbs Tested by hydraulic pressure to 120 lbs No. of Certificate 1024
Fire grate area $16\frac{1}{2}$ sq ft Description of safety valves Dried springs No. of safety valves One area of each 9.62 sq in
If fitted with easing gear Yes If steam from main boilers can enter the donkey boiler No
Diameter of donkey boiler 7-6" length 7-2" description of riveting Double - Lap.
thickness of shell plates $\frac{1}{2}$ " iron diameter of rivet holes $\frac{15}{16}$ " whether punched or drilled Punched.
pitch of rivets $3\frac{1}{8}$ " lap of plating $4\frac{1}{2}$ " per centage of strength of joint 70
thickness of ~~comb cham~~ plates $\frac{7}{16}$ " steel stayed by $1\frac{1}{4}$ " stays 878 pitch
Diameter of furnace, top 3-7" bottom — length of furnace 4-9"
thickness of plates $\frac{7}{16}$ " steel description of joint Butt.
thickness of ~~End plates~~ plates 58 steel stayed by 2" stays 16" pitch
Working pressure of shell by rules 60 lbs working pressure of furnace by rules 80 lbs
diameter of tubes $3\frac{1}{2}$ " thickness of plates 58" thickness of water tubes $4\frac{3}{4}$ "

The foregoing is a correct description,
Wm. Henderson & Co. Engineers
Glasgow Shipbuilding Co. Limited, Manufacturer.

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

These Engines + Boilers have been constructed under special survey - they are of good material & workmanship. They have been well fitted on board & satisfactorily tested under steam. I am therefore of opinion that they are eligible to be classed "LLOYD'S M.C." 4-83 in the Register Book.

that the vessel
submitted to me
is in accordance
with the rules
of Lloyd's
I signed
at Glasgow
25/5/83

The amount of Entry Fee £ 3: 0: 0 received by me,
Special .. £ 35: 0: 0
Certificate (if required) .. £ gratis 2/5/1883
To be sent as per margin.
(Travelling Expenses, if any, £ ..)

Committee's Minute
Friday, 4th May 1883.

Walter E. Robson
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.