

REPORT ON MACHINERY.

No. 29954

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Reg. Book. on the steel screw trawler Cornelius Buckley (Number of Volls 41)

Master Built at Alby By whom built Cochran & Sons Ltd (No 692) Tons Gross 248 Net 96

Engines made at Hull By whom made Earle's & Co Ltd 711210 When built 1917-5

Boilers made at Hull By whom made Earle's & Co Ltd 711210 when made 1917-5

Registered Horse Power Owners British Admiralty Port belonging to

Nom. Horse Power as per Section 28 72 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders Three No. of Cranks 3

Dia. of Cylinders 12"-20"-32" Length of Stroke 24" Revs. per minute 115 Dia. of Screw shaft as per rule 7.16 Material of screw shaft Iron as fitted 7.12

Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes Is the after end of the liner made water tight in the propeller boss yes If the liner is in more than one length are the joints burned If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 34"

Dia. of Tunnel shaft as per rule 6.41 Dia. of Crank shaft journals as per rule 6.736 Dia. of Crank pin 6 3/4" Size of Crank webs 3 1/2" x 4 1/2" Dia. of thrust shaft under collars 6 3/4" Dia. of screw 8'-8" Pitch of Screw 11'-3" No. of Blades 4 State whether moveable no Total surface 27 1/2"

No. of Feed pumps one Diameter of ditto 2 3/4" Stroke 10" Can one be overhauled while the other is at work

No. of Bilge pumps one Diameter of ditto 2 3/4" Stroke 10" Can one be overhauled while the other is at work

No. of Donkey Engines one 7 3/4" gya. Sizes of Pumps 6", 3" x 6" Flywheel No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room one 2" dia. In Holds, &c. one 2" dia. in each compartment

All suction also connected to gya.

No. of Bilge Injections one sizes 3 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size 3" gya.

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 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 Forward suction How are they protected strong wooden casings

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

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S) Manufacturers of Steel John Spencer & Sons Ltd

Total Heating Surface of Boilers 1300 # Is Forced Draft fitted no No. and Description of Boilers one single ended

Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 20-4-17 No. of Certificate 3207

Can each boiler be worked separately Area of fire grate in each boiler 33.5 # No. and Description of Safety Valves to each boiler two spring loaded Area of each valve 3.14 # Pressure to which they are adjusted 205 Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 8" dia. lagged Mean dia. of boilers 150" Length 10'-3" Material of shell plates steel

Thickness 1 5/32" Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams double long. seams R.A.B. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 2/6" Lap of plates or width of butt straps 1 1/2"

Per centages of strength of longitudinal joint rivets 92.2 Working pressure of shell by rules 206 Size of manhole in shell 16" x 12"

Size of compensating ring 9' x 1 1/32" No. and Description of Furnaces in each boiler two plain Material steel Outside diameter 41 3/4"

Length of plain part top 76 # bottom 68" Thickness of plates crown 13/16" Description of longitudinal joint welded No. of strengthening rings

Working pressure of furnace by the rules 200 Combustion chamber plates: Material steel Thickness: Sides 3/4" Back 23/32" Top 1/16" Bottom 3/4"

Pitch of stays to ditto: Sides 9 1/2" x 8 1/2" Back 9 1/4" x 9" Top 9" x 8 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 214

Material of stays steel Area at smallest part 2.4" Area supported by each stay 106.75 # Working pressure by rules 203 End plates in steam space:

Material steel Thickness 15/32" Pitch of stays 17 3/4" x 16 3/4" How are stays secured R. H. Working pressure by rules 201 Material of stays steel

Area at smallest part 6.10 # Area supported by each stay 297.5 # Working pressure by rules 213 Material of Front plates at bottom steel

Thickness 1" Material of Lower back plate steel Thickness 15/16" Greatest pitch of stays 14 1/2" x 9" Working pressure of plate by rules 202

Diameter of tubes 3 1/2" Pitch of tubes 4 15/16" Material of tube plates steel Thickness: Front 1" Back 7/8" Mean pitch of stays 9 3/8"

Pitch across wide water spaces 14 1/2" Working pressures by rules 206 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 9 3/4" x 1 3/4" Length as per rule 35.34" Distance apart 9" Number and pitch of stays in each three 8 1/2"

Working pressure by rules 206 Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

UPERHEATER. Types Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

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