No. 1054

THE BRITISH CORPORATION FOR THE SURVEY

AND

REGISTRY OF SHIPPING.

Report No. 1038 No. in Register Book 1618.

"STRATTON CROFT"

EX

O.S.S. "Innisshannon"

Makers of Engines Wm Beardmore & Co Ld

Works No. 120

Makers of Main Boilers ✓

Works No. ✓

Makers of Donkey Boiler ✓

Works No. ✓

MACHINERY.

015020-015025-0007½

No.

THE BRITISH CORPORATION FOR THE SURVEY AND REGISTRY OF SHIPPING.

Report No. 1038 No. in Register Book 1618.

Received at Head Office 9/11/13.

Surveyor's Report on the New Engines, ~~Boilers~~, and Auxiliary Machinery of the Internal Combustion motor Vessel "Innisshannon"

Port of Registry Glasgow

Registered Owners Coasting Motor Shipping Co Ld

Surveyor's District Clyde

Date of Completion of Engines June 1913

" " " " Main Boilers ✓

" " " " Donkey " ✓

Trial Run at Skelmorlie Date 13·6·13

First Visit 26·6·12 Last Visit 20·6·13

Total Number of Visits 23

Speed 9¼ knots

ENGINES.

Made by Wm Beardmore & Co Ld

" at Dalmuir Works No. 120

Description Semi-Diesel, solid injection

No. of Cylinders, each Engine 4 Diars. 14 Stroke 14½"

Cub. feet in each L.P. Cylr. 1·29 Revols. per Min. 310 I.H.P. 250 (estimated)

Pressure in I.P. Receiver at full Power	✓		2nd I.P.	✓	L.P.	✓	
"		I.P.	✓	"	✓	"	✓
Thickness of Metal in H.P. Cylr.	✓						
" " " " Liner	✓	"	✓	"	✓	"	✓
" " " Valve Chest	✓	"	✓	"	✓	"	✓

Are Spring-loaded Relief Valves fitted to Top and Bottom of each Cylr.? No

" " " each Receiver? ✓

		I.P.	2nd I.P.	L.P
Number of Bolts / Studs in H.P. Cylr. Cover	8			
Eff. Diar. " " "	1·067	"	"	"
Pitch " " "	7½	"	"	"
Type of H.P. Valves (Piston or Slide)	✓	" ✓	" ✓	" ✓

" Valve Gear Worked by eccentric from Crank shaft

Diameter of Piston Rods (plain part) ✓ At Bottom of Thread

Makers " ✓ Material

Diameter of Connecting Rods (smallest part) 3 Material Steel

Makers " "

Diar. of Crosshead Gudgeons 5¼ Length of Bearing 7¼ Material Steel

No. of Top End Bolts (each Rod) ✓ Effective Diar. ✓ Material ✓

" Bot. " " 2 " ·942 " Steel

" Main Bearings 5 Lengths 10½

" Bolts in each 4 Effective Diar. ·622 Material Steel

No. of Holding Down Bolts, each Engine 18 No. of Metal Chocks 18

Eff. Diar. " " " ·84" Average Pitch 12 to 17"

Are the Engines bolted directly to the Tank Top? no tank

Are the Bolts tapped through the Tank Top and fitted with Nuts inside ✓

Date of Test of Tank by Water Pressure with Holding Down Bolts in place ✓

SKETCHES.

SKETCHES.

SHAFTING.

Are Crank Shafts Built? No No. of Lengths in each 1 Angle of Cranks 90°

Diar. of Crank Shafts by Rule 5·728" Actual 6¼" Diar. in Way of Webs ✓

Makers of " W Beardmore & Co Material Steel

Diar. of Crank Pins 6¼" Diar. in Way of Web ✓

Makers of " W Beardmore & Co Material Steel

Width across Crank Webs at Centre of Shaft 8½" Thickness 3⅛"

" " " " Crank Pins 8½" " 3⅛"

" " " Narrowest part 8½" " 3⅛"

Makers of Crank Webs W Beardmore & Co Material Steel

Diar. or Breadth of Keys in Crank Webs ✓ Length ✓

" of Dowel Pins in Crank Pins Length Screwed or Plain

No. of Bolts in each Coupling 6 Diar. at Mid Length 1½" Diar. of Pitch Circle 11"

Material of Coupling Bolts Steel

Crank Shafts Finished by W Beardmore & Co Ld

Greatest Distance from edge of Main Bearing to Crank Web 2¼"

Description of Thrust Blocks Horse shoe type

Number " " Rings 4

Diar. of Thrust Shafts by Rule 4·725" Actual (at bot. of Collars) 5⅜" Over Collars 9¾"

" " at Forward Coupling 5⅜" After Coupling 5⅜"

No. of Thrust Collars 4 Thickness 1½" Distance apart 2"

Thrust Shafts Forged by Material

" Finished by

Diar. of Intermediate Shafting by Rule ✓ Actual ✓

No. of Lengths, each Engine ✓ No. of Tunnel Bearings ✓

Diar. of Bearings ✓ Length ✓ Distance apart ✓

No. of Bolts, each Coupling ✓ Diar. at Mid Length ✓ Diar. of Pitch Circle ✓

Intermediate Shafts Forged by ✓ Material ✓

" " Finished by ✓

Diar. of Propeller Shafts by Rule 4·98" Actual 5" At Couplings

Are Propeller Shafts fitted with Continuous Brass Liners? No

Diar. over Liners 5 3/4" Length of After Bearings 1'-6"

Of what Material are the After Bearings composed? Lignum Vitae

Distance from After Bearing in Stern Tube to nearest Tunnel Bearing 7'-0"

Are the After Bearings lubricated with Oil or Sea Water? Sea water

What means are adopted to prevent Sea Water entering the Stern Tubes? ✓

Propeller Shafts Forged by W Beardmore & Co Material Steel

" " Finished by W Beardmore & Co

No. of Propellers 1 Diar. 4'-6" Pitch 3'-9"

" Blades, each Propeller 3 Fitted or Solid solid

Material of Blades Cast Iron Boss Cast Iron

Surface, each Propeller 8·6 ☐' Diar. of Propeller / Rule Diar. of Crank Shaft = = 11·43

Coefficient of Displacement of Vessel at ½ Moulded Depth ·8

The British Corporation for the Survey and Registry of Shipping.

Vessel's Name, "Inniskannon"

Built by Wm. Chalmers & Co. Rutherglen Ship No. 164

ENGINES, Single or Twin-Screw, Single Estimated B.H.P., 180

Built by Wm Beardmore & Co Ld Works No., 120

Description, Semi-Diesel, 2 stroke cycle, reversible, solid injection

No. of Working Cylinders (each Engine), 4 Cub. Ft., one Cyl.,

Diar. of " " 14" Stroke, 14½" Estimated Revs. per Min., 280

Diar. of Crank Shaft (made), 6¼" Thrust, 5 7/8" Intermed., ✓ Propeller, 5"

" " (by rule), " " "

No. of Main Bearings, 5 Length, 10½" Dist. between Edges, 18¼"

Thickness of Web (made), 3⅛" Breadth of Web, 8½"

" " (by rule), " "

Diar. of Propellers, 4'-6" Pitch, 3'-9" Surface (each), 8·6 □'

Coeff. of Displacement at 4/5th Mld. Depth,

Max. Initial Working Pressure, 300 lbs Estimated Mean Pressure,

No. of Scavenging Pumps, ✓ Diar., ✓ Stroke, ✓

Description, Air compressed in Crank case for scavenging

Pressure of Scavenging Air, about 3 lbs per □"

No. of Main Air Compressors, one No. of Stages (each), one

Stage 1 :—Diar., 4" Stroke, 1 5/8" Pressure, 300 lbs

Stage 2 :— " ✓ " ✓ " ✓

Description, Single acting, driven by eccentric on Crank shaft

No. of Auxiliary Air Compressors, one No. of Stages (each), 2

Stage 1 :—Diar., 5" Stroke, 4" Pressure,

Stage 2 :— " 2¾" " 4" " 300 lbs

Description, Reavell patent 2 stage duplex, driven by an 8 B.H.P. Coates semi-diesel Engine

No. of Compressed Air Reservoirs, 2 Working Pressure, 300 lbs Test Pressure, 600 lbs

Dimensions, 2'-10 3/4" int. diar. 6'-9" int. length, shell 5/8", ends 7/4" thick

Description, Cylindrical with dished ends

No. and Diar. of Safety Valves (each), None on Reservoirs, one on each compressor 1/2" diar.

Particulars of Fuel Pump, Single acting plunger pump 1 1/4" diar. 3/64" stroke (1 for each cylinder)

Particulars of Cooling Water Circulators, Single acting plunger pump 4 1/4" diar. 1 5/8" stroke. Regulating valve to each jacket

System of Governing, Hit & miss governor

System of Lubrication, Main bearings syphon feed, other bearings forced sight feed

Deck Winches and Capstans, how Driven? Ford, winch Coates Semi-Diesel Eng. Aft winch, Skandia Engine.

Refrigerator, ✓

Electric Light, ✓

AUXILIARY BOILER— ✓

Built by Works No.,

Description.

Number. Greatest Int. Diar., Height, Length, Pressure,

Heating Surface (each Blr.), Grate Surface (each Blr.),

No. of Safety Valves (each Blr.), Diar., Draught,

Fuel to be used, ✓

Further Particulars :—

Date of Harbour Trial, 6·6·13 Date of Trial Trip, 13·6·13 & 20·6·13

Trial Trip, where Run? Skelmorlie Speed, 9 1/4 Knots.

Max. Press. in Cylrs., 300 lbs Mean Press., Revs. per Min., 310 I.H.P., 250

B.H.P., 200

SKETCHES.

TURBINE ENGINES.

Type

No. of H.P. Turbines — No. of L.P. Turbines

No. of Astern ,, — How arranged

Revols. per Min. — Horse Power

Diar. of H.P. Turbine Drums — MATERIAL — THICKNESS OF METAL

Material of H.P. Turbine Casings — ,, ,,

Lengths of Blades in H.P. Turbines

No. of Rows of Blades of each Length

Pitch of ,, ,, ,,

Diar. of L.P. Turbine Drums — MATERIAL — THICKNESS OF METAL.

Material of L.P. Turbine Casings — ,, ,,

Lengths of Blades in L.P. Turbines

No. of Rows of Blades of each Length

Pitch of ,, ,, ,,

Diar. of Astern Turbine Drums — MATERIAL — THICKNESS OF METAL

Material of Astern Turbine Casings — ,, ,,

Lengths of Blades in Astern Turbines

No. of Rows of Blades of each Length

Pitch of ,, ,, ,,

Diar. of Turbine Spindles — Length of Bearing

No. of Thrust Collars on each Spindle — Thickness — Distance apart

Diar. of Spindles at Bottom of Collars — Diar. over Collars

Spindles Forged by — Material

,, Finished by

SKETCHES.

PUMPS, ETC.

No. of Air Pumps ✓ Diar. ✓ Stroke ✓

Type of " ✓

Diar. of Air Pump Rod ✓ Material ✓

How are Air Pumps Worked? ✓

No. of Centrifugal Circulating Pumps ✓ Maker ✓

" Reciprocating " " 1 Diar. 4¼" Stroke 1 5/8"

Diar. of Circulating Pump Rods ✓ Material ✓

How are Circulating Pumps Worked? From valve gear eccentric of Main Engines

Diar. of Circulating Pump Suction from Sea 2"

Has each Circulating Pump a Bilge Suction with Non-return Valve? ✓ Diar. ✓

No. of Feed Pumps on each Engine ✓ Diar. ✓ Stroke ✓

Where do they pump from? ✓

" " discharge to? ✓

Are Spring-loaded Relief Valves fitted to each Pump? ✓

Can one Pump be overhauled while the others are at work? ✓

No. of Bilge Pumps on each Engine 1 Diar. 4¼" Stroke 1 5/8"

Where do they pump from? Bilges

" " discharge to? Overboard

Can one Pump be overhauled while the others are at work? ✓

No. of Bilge Injections connected to Condensers ✓ Diar. ✓

Are all Bilge Suctions fitted with Roses? ✓

Are the Valves, Cocks, and Pipes so arranged as to prevent unintentional connection between Sea and Bilges? Yes

Are all Sea Connections made with Valves or Cocks fitted direct to the Hull Plating? Yes

Are they placed so as to be easily seen and accessible? Yes

Are the Discharge Chests placed above the Deep Load Line? Yes

Are they fitted direct to the Hull Plating and easily accessible? Yes

Are all Blow-off Cocks or Valves fitted with Spigots through the Hull Plating and Covering Plates or Flanges on the outside? ✓

Aux. pump for cooling circulation and bilges 4" diar. 6" stroke, driven by Aux Compressor Engine.

BOILERS.

Boilers made by

,, at

Works No.

Date when Plan approved

Boiler Plates, Iron or Steel

Makers of Shell Plates

,, Internal Plates

,, Furnaces

,, Stay Bars

,, Rivets

Material tested by (B.C., B.T., etc.)

No. of Boilers

Single or Double-ended

No. of Furnaces, each Boiler

Type of Furnaces

Approved Working Pressure

Hydraulic Test Pressure

Date of Hydraulic Test

,, when Safety Valves set

Pressure on Valves

Date of Steam Accumulation Test

Max. Pressure under Accumulation Test

System of Draught

Can Boilers be worked separately ?

Greatest inside Diar. of Boilers

,, ,, Length ,,

Square Feet of Heating Surface, each Boiler

,, Grate ,, ,,

No. of Safety Valves, each Boiler

Diar. ,, ,, ,,

Area ,, ,, ,,

Are the Valves fitted with Easing Gear ?

No. of Pressure Gauges, each Boiler

,, Water ,, ,,

,, Test Cocks,

,, Salinometer Cocks, ,,

Are Water Gauge Pillars attached by Pipes to Steam and Water Spaces ?

Are these Pipes connected to Boilers by Cocks or Valves ?

Are Blow-off Cocks or Valves fitted on Boiler Shells ?

No. of Strakes of Shell Plating in each Boiler

,, Plates in each Strake

Thickness of Shell Plates by Rule

,, ,, Approved

,, ,, in Boilers

Are the Rivet Holes Punched or Drilled ?

Are Rivets Iron or Steel ?

Are the Longitudinal Seams Butt or Lap Joints ?

Are the Double Butt Straps of equal width ?

Thickness of outside Butt Straps

,, inside ,,

Are Longitudinal Seams Hand or Machine Riveted ?

Are they Single, Double, or Treble Riveted ?

Diar. of Rivet Holes

Pitch ,,

Width of Overlap

Percentage of Strength in Longitudinal Seams

No. of Rows of Rivets in Centre Circumferential Seams

Are these Seams Hand or Machine Riveted ?

Diar. of Rivet Holes

Pitch ,,

Width of Overlap

No. of Rows of Rivets in End Circumferential Seams

Are these Seams Hand or Machine Riveted ?

Diar. of Rivet Holes

Pitch ,,

Width of Overlap

Size of Manholes in Shell

Dimensions of Compensating Rings

Thickness of End Plates in Steam Space by Rule

,, ,, ,, ,, ,, Approved

,, ,, ,, ,, ,, in Boilers

Pitch of Steam Space Stays

Eff. Diar. ,, ,, ,, by Rule

,, ,, ,, ,, ,, Approved

,, ,, ,, ,, ,, in Boilers

Material of ,, ,, ,,

How are Stays Secured ?

Diar. and Thickness of Loose Washers on End Plates

,, ,, Riveted ,, ,, ,,

Width ,, ,, Doubling Strips ,, ,,

Thickness of Middle Back End Plate by Rule

,, ,, ,, ,, ,, Approved

,, ,, ,, ,, ,, in Boilers

Thickness of Doublings in Wide Spaces between Fireboxes

Pitch of Stays at ,, ,, ,, ,,

Eff. Diar. of Stays by Rule

,, ,, ,, Approved

,, ,, ,, in Boilers

Material ,,

Are Stays fitted with Nuts outside ?

Thickness of Back End Plates at Bottom by Rule

,, ,, ,, ,, ,, Approved

,, ,, ,, ,, ,, in Boilers

Pitch of Stays at Wide Spaces between Fireboxes

Thickness of Doublings in ,, ,,

Thickness of Front End Plates at Bottom by Rule

,, ,, ,, ,, ,, Approved

,, ,, ,, ,, ,, in Boilers

No. of Long Stays in Spaces between Furnaces

Eff. Diar. of Stays by Rule

,, ,, ,, ,, Approved

,, ,, ,, ,, in Boilers

Material of ,,

Thickness of Front Tube Plates by Rule

,, ,, ,, ,, Approved

,, ,, ,, ,, in Boilers

Pitch of Stay Tubes at Spaces between Stacks of Tubes

Thickness of Doublings in ,, ,, ,,

,, Stay Tubes at ,, ,, ,,

Are Stay Tubes fitted with Nuts at Front End?

Thickness of Back Tube Plates by Rule

" " " Approved

" " " in Boilers

Pitch of Stay Tubes in Back Tube Plates

" Plain "

Thickness of Stay Tubes

" Plain "

External Diar. of Tubes

Material " "

Thickness of Furnace Plates by Rule

" " " Approved

" " " in Boilers

Smallest outside Diar. of Furnaces

Length between Tube Plates

Width of Combustion Chambers (Front to Back)

Thickness of " " Tops, by Rule

" " " " Approved

" " " " in Boilers

Pitch of Screwed Stays in C.C. Tops

Eff. Diar. " " by Rule

" " " Approved

" " " in Boilers

Material " "

Thickness of Combustion Chamber Sides by Rule

Thickness of Combustion Chamber Sides Approved

" " " " in Boilers

Pitch of Screwed Stays in C.C. Sides

Eff. Diar. " " by Rule

" " " Approved

" " " in Boilers

Material " "

Thickness of Combustion Chamber Backs by Rule

" " " " Approved

" " " " in Boilers

Pitch of Screwed Stays in C.C. Backs

Eff. Diar. " " by Rule

" " " Approved

" " " in Boilers

Material " "

Are all Screwed Stays fitted with Nuts inside C.C.?

Thickness of Combustion Chamber Bottoms

No. of Girders over each Wing Chamber

" " " Centre "

Depth and Thickness of Girders

Material of Girders

No. of Stays in each

No. of Stay Tubes, each Boiler

" " Plain " " "

Size of Lower Manholes

VERTICAL DONKEY BOILERS.

If the Donkey Boilers are Vertical the following particulars should be stated in addition to those on previous Pages applicable to such Boilers:—

Type of Boilers

Height of Boiler Crown above Fire Grate

Are Boiler Crowns Flat or Dished ?

Internal Radius of Dished Ends. Thickness of Plates

Description of Seams in Boiler Crowns

Diar. of Rivet Holes Pitch Width of Overlap

Height of Firebox Crowns above Fire Grate

Are Firebox Crowns Flat or Dished ?

External Radius of Dished Crowns Thickness of Plates

No. of Crown Stays Effective Diar. Material

External Diar. of Firebox at Top Bottom Thickness of Plates

No. of Water Tubes Int. Diar. " "

Material of Water Tubes

No. of Screwed Stays in Firebox Sides Eff. Diar. Material

Are they fitted with Nuts inside ? Outside ?

SUPERHEATERS.

Description of Superheaters

Where situated

Which Boilers are connected to Superheaters ?

Can Superheaters be shut off while Boilers are working ?

No. of Safety Valves on Superheaters. Diar. Area

Are " " fitted with Easing Gear ?

Date of Hydraulic Test Test Pressure

Date when Safety Valves set Pressure on Valves

SKETCHES.

MAIN STEAM PIPES.

No. of Lengths					
Material					
Brazed, Welded, or Seamless					
Internal Diar.					
Thickness					
How are Flanges Secured ?					
Date of Hydraulic Test					
Test Pressure					

REFRIGERATORS.

No. of Machines Makers

Description

When any part of the Vessel is to be used for the Carriage of Refrigerated Cargo the following particulars should be stated:—

Total Cubic Capacity of Refrigerated Spaces

Nature, Construction, Thickness, &c., of Insulation

Are all Pipes, Air Trunks, &c., well secured and protected from risk of damage ?

Are all Bilge, Suction, Sounding, and Air Pipes in Insulated Spaces properly insulated ?

Are Thermometer Tubes so arranged that Water cannot enter and freeze in the Tubes ?

Are Sluice Valves fitted on any of the Bulkheads of Insulated Spaces ?

Are these fitted with Brass Non-return Valves ?

Are they always accessible ?

Are the Bilges and Bilge Rose Boxes always accessible ?

Are the Steam Suctions to Bilges fitted with Non-return Valves ?

Is the Machine Room effectively separated from Insulated Spaces ?

" " properly Ventilated and Drained ?

No. of Steam Cylinders, each Machine Diars.

" Compressors, " "

Diar. of Crank Shafts No. of Cranks

Give particulars of Pumps in connection with Refrigerating Plant, and state whether worked by Refrigerating Machines or independently

Are Brine and other Regulating Valves placed so as to be accessible without entering the Insulated Spaces ?

Date of Test under Working Conditions

Fall of Temperature in Insulated Spaces

Time required to obtain this Result

Articles of Spare Gear for Refrigerating Plant carried on board

SKETCHES.

ELECTRIC LIGHTING.

Installation Fitted by

No. and Description of Dynamos

Makers of Dynamos

Capacity ,, Amperes, at Volts. Revols. per Min.

Current Alternating or Continuous

Position of Dynamos

,, Main Switch Board

No. of Circuits to which Switches are provided on Main Switch Board

Particulars of these Circuits:—

No. of Circuit.	Name of Circuit.	Number of Lights.	Candle Power.	Current Required. Amps.	Size of Conductor.	Current Density.	Conductivity of Conductor.	Insulation Resistance per Mile.

Total No. of Lights No. of Motors driving Fans, &c. No. of Heaters

Current required for Motors and Heaters

Positions of Auxiliary Switch Boards, with No. of Switches on each

Are Cut-outs fitted as follows ?—

On Main Switch Board, to Cables of Main Circuits

On Aux. ,, ,, each Auxiliary Circuit

Wherever a Cable is reduced in size

To each Lamp Circuit

To both Flow and Return Wires of all Circuits when the Double-Wire System is adopted

Are the Fuses of Standard Sizes ?

Are all Switches and Cut-outs constructed of Non-inflammable Material ?

Are they placed so as to be always and easily accessible ?

Smallest Single Wire used, No. S.W.G., Largest, No. S.W.G.

How are Conductors in Engine and Boiler Spaces protected ?

,, ,, Saloons, State Rooms, &c., ,, ?

What special protection is provided in the following cases ?—

(1) Conductors exposed to Heat or Damp

(2) ,, passing through Bunkers or Cargo Spaces

(3) ,, ,, Deck Beams or Bulkheads

Are all Joints in Cables properly soldered and thoroughly Insulated so that the efficiency of the Cables is unimpaired ?

Are all Joints in accessible positions, none being made in Bunkers or Cargo Spaces ?

Are all Hull Connections for Single-Wire Systems made with Screws of large Surface ?

Are the Dynamos, Motors, Main and Branch Cables, so placed that the Compasses are not injuriously affected by them ?

Have Tests been made to prove that this condition has been satisfactorily fulfilled ?

Has the Insulation Resistance over the whole system been tested ?

What does the Resistance amount to ? Ohms.

Is the Installation supplied with a Voltmeter ?

,, ,, ,, an Ampere Meter ?

Date of Trial of complete Installation Duration of Trial

EVAPORATORS.

No. Type Tons per Day

Makers

Working Pressure Test Pressure Date of Test

Date of Test of Safety Valves under Steam

FEED WATER HEATERS.

No. Type

Makers

Working Pressure Test Pressure Date of Test

DONKEY

No. of Donkeys

Type „

Makers „

Single or Duplex

„ Double-Acting

Diar. of Steam Cylinders

„ Pumps

Stroke of „

Where do they pump from?

Where do they discharge to?

Capacity, Tons per Hour of Ballast Donkey Diar. of Pipe required by Rule for

FEED WATER FILTERS.

No. Type Size

Makers

Working Pressure Test Pressure Date of Test

FORCED DRAUGHT FANS.

No. of Fans. Diar. Revols. per min.

How are Fans driven?

PUMPS.

largest Ballast Tank Velocity of Water in Pipe

SPARE GEAR.

No. of Top End Bolts	✓	No. of Bot. End Bolts	2
" Main Bearing Bolts	2	" Coupling Bolts	8
" Cylr. Cover ~~Bolts~~ Studs	8	" Valve Chest Cover Bolts Studs	✓
" Feed Pump Valves	✓	" Bilge Pump Valves	✓
" Safety Valve Springs	✓	" Fire Bars	✓
" Piston Rings	6	" Junk Ring Bolts Studs	✓
" Piston Rods	✓	" Connecting Rods	✓
" Valve Spindles	✓	" Air Pump "	✓
" Air Pump Valves	✓	" " " Buckets	✓
" Crank Pin Bushes	1	" Crosshead Bushes	1
" Crank Shafts	✓	" Propeller Shafts	✓
" Propellers	✓	" " Blades	✓
" Boiler Tubes	✓	" Condenser Tubes	✓

OTHER ARTICLES OF SPARE GEAR:—

1 Main Bearing bush
2 Combustion Chambers
1 Set Crank case air valves
1 Eccentric strap
1 Thrust shoe
20 Springs (various)
2 Injector nozzles
2 Burners for blow lamps
2 Nipples " " "

GENERAL CONSTRUCTION.

Have all the Requirements ~~under Sections 31 and 32~~ of the Rules been complied with? Yes

If not, give details of the points of difference, and state when these were sanctioned by the Chief Surveyor.

Are the Steam Pumping Arrangements in accordance with the approved Plan? Yes

If not, state in what respects they differ and when such differences were sanctioned by the Chief Surveyor

Are the Materials used in the Construction of Engines and Boilers, so far as could be seen, sound and trustworthy? Yes

Is the Workmanship throughout thoroughly satisfactory? Yes

The above correctly describes the Machinery of the S.S. "Innisshannon"

as ascertained by ~~us~~ me from personal examination

Jas Barr

Engineer Surveyor to the British Corporation for the Survey and Registry of Shipping.

Fees—

		£	s.	d.
Main Boilers.				
H.S.	Sq. ft.			
G.S.	,,			
Donkey Boilers.				
H.S.	Sq. ft.			
G.S.	,,			
		£		
Engines.				
L.P.C.	Cub. ft.	12	0	0
		£		
Testing, &c.				
		£		
Expenses				
Total ...		£ 12	0	0

It is submitted that this Report be approved,

J. Green King

Chief Surveyor.

Approved by the Committee, for the class of M. B.S.X. on the 12th Nov. 1913.

Fees applied for 23rd June 1913

Fees paid 30th June 1913

Robert Denning

Secretary.

Fees—

ROTOARTADE CARRIER

MAIN BOILERS.

H.P.

U.P.

INSERT BOILERS.

H.P.

U.P.

ENGINES.

L.P.G. Cat. G. 12 0 0

Testing, Surveys, Travelling Expenses, Fees, &c. (Specify in detail.)

Expenses

Total £ 12 0 0

It is submitted that this Report be approved.

Chief Surveyor

Approved by the Committee. for the class of
[illegible] on the 12th March 1913

Fee asked for 23rd June 1913

Fee paid 30th June 1913

Robert Stevenson

Secretary.