Spar, ~~or Awning~~ Dk. ~~IRON OR~~ STEEL STEAMER.

No. 12697

State if Report is also sent on the Machinery of the Vessel Yes

Port of WEST HARTLEPOOL. Date of completion of Report 1st Sept 1905 Received at London Office SAT. 2 SEP 1905

Survey held at West Hartlepool Date, First Survey 23rd February Last Survey 1st Sept. ~~18~~1905

On the S.S. "Apollo" Rig Schooner

TONNAGE under Tonnage Deck...	
Do. between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk.	
Total under Upper Dk.	3547·87
Do. of Poop	✓
Do. of Bridge House	✓
Do. of Forecastle	44·61
Do. of Houses on Deck	85·89
Do. of excess of Hatchways	44·99
Do. above Crown of ...om ..	50·63
...nage	3773·99
...pace	80·52
...rown of ...oom ..	50·63
...r Fees...	3642·84
...Room	1207·68
...tion Spaces	47·79
...Tonnage ...Beam....	2443·00

SPAR, ~~AWNING OR PART AWNING~~ DECKED VESSEL, ~~or a Vessel having a continuous Shade Deck.~~

CLASS 100 A

	Feet.
Half Breadth (moulded)	23·41
Depth from upper part of keel to top of Main Deck Beams	23·83
Girth of Half Midship Frame (as per Rule)	42·66
1st Number	89·90
Length	338·16
2nd Number	30400
Proportions—Breadths to Length	7·22
Depths to Length—Main Deck to top of Keel	14·19

Destined Voyage Genoa

Master S. Shirley

Year of Appointment (1) As Master in service of owner of present vessel: ~~18~~ 1904; (2) As Master of this vessel ~~18~~ 1905

Built at West Hartlepool

When built 1905 Launched 17th June

By whom built Furness, Withy & Co. Ltd

Owners Harris & Dixon Ltd

Managers (Where necessary to be entered in Reg. Book.)

Residence London

Port belonging to London

~~If~~ Surveyed while Building, Afloat, & in Dry Dock

...on Deck ...ule..	Feet. 338	Inches. 2	BREADTH—Moulded	Feet. 46	Inches. 10	DEPTH, top of Floors to Spar ~~or Awn.~~ Dk. Beams / Do. do. Main Deck Beams ...	Feet. 27	Inches. 4½	Power of Engines	Horse.	No. of Decks with flat laid One / No. of Tiers of Beams Two

...s of Ship per Register, Length 340·1 breadth 47·1 depth. 27·4 Spar ~~or Awn.~~ Dk. / ✓ Main Deck. Moulded depth, ft. 22 ins. 10 To Main Dk. / " " 29 10 - Spar " Round up of Beam, ~~Main~~ Spar Dk. 12 ins.

FRAMING.	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as	Inches per Rule Approved	20ths per Rule
..., ~~Angles, or~~ ... Bars, for ½ length amidships	7	3½	12	7	3½	12
...r ⅛ at each end	7	3½	11	7	3½	11
... way of Double Bottoms at Solid Floors .. at intermdt. Bkts.	Floors flanged top and bottom.					
... of Frames from moulding edge to ...ing edge, all fore and aft		28			28	
...sed Frame, Angles						
~~...Framing, depth of girder~~						
~~...s, depth and thickness of Floor Plate at mid-line for ½ length amidships~~						
~~in way of Engines and Boilers~~						
~~thickness at the ends of vessel~~						
~~depth at ⅓ the half-bdth. as per Rule~~						
~~height extended at the Bilges~~						
...rs & Brackets, in Cell Dble Bottoms	41		9	41		9
Distance apart		28			28	
...re Girder, in Double bottom, depth and thickness	41		10	41		10
" Angles, Top	4	4	9	4	4	9
" Bottom	4	4	12	4	4	12
...Girders, number and thickness Intercostal, One			9	One		9
Angles .... Vertical	3½	3½	8	3½	3½	8
...in Plate, depth (exclusive of flange) and thickness	33		9	33		9
Angles	4	4	9	4	4	9
...r Bottom Plating, breadth and thickness of Middle Line Strake	60		10	60		10
			10			10
" thickness in Engine and Boiler space			11			11
Remainder in Holds			8·7			8·7
...s, Spar ~~or Awning~~ Deck, ~~Single Angle,~~ Bulb Angle, ~~Plate or Tee Bulb~~	9	3	12	9	3	12
Angles on upper edge	✓					
Average space		28			28	
...s, Main Deck, ~~Single Angle, Bulb Angle,~~ Plate ~~or Tee~~ Bulb	12		12	12		12
	3½	3½	10	3½	3½	10
Angles on upper edge	As per profile.					
Average space						
~~...s, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb~~						
~~Angles on upper edge~~						
~~Average space~~						
~~...s, Hold, or Orlop, Plate or Tee Bulb~~						
~~Angles on upper edge~~						
~~Average space~~						
...s, Poop Deck, ~~Angle~~, Bulb Angle, ~~Plate or Tee Bulb~~	6	3	9	6	3	9
Angles on upper edge	✓					
Average space		28			28	
...ms, Bridge Deck, ~~Angle~~, Bulb Angle, ~~Plate or Tee Bulb~~	7	3	10	7	3	10
Angles on upper edge	✓					
Average space		28			28	
...ms, Forecastle Deck, ~~Angle~~ Bulb Angle, ~~Plate or Tee Bulb~~	6	3	9	6	3	9
Angles on upper edge	✓					
Average space		28			28	
...lars, In 'tween Deck, size and spacing	2⅞	56		2⅞	56	
" " Hold " "	5¼	56		5¼	56	
" Quarter, ~~'tween Dks.~~ " "						
" in Hold In way of hatchways	5					
Web Frames, In Fore Body, No. and spacing	7 As per profile.					
" " " brdth. & thicknss	18 & 24		9	18 & 24		9
" No. of Side Stringers " "	3	18 & 24	11	3	18 & 24	11
Web Frames, In E. & B. Space, No. & spacing	5 As per profile.					
" " brdth. & thickness	18		9	18		9
Web Frames, In After Body, No. and spacing	7 As per profile					
" " " brdth. & thicknss	18 & 24		9	18 & 24		9
" No. of Side Stringers " "	3	18 & 24	11	3	18 & 24	11
" Size of Angles ~~or Tee Bars~~ to Web Frames	6	4	12	6	4	12
Bracket Plates to Stringers between Web Frames, depth and thickness	18		9	18		9

Side stringers flanged on inner edge.

FORGINGS AND CASTINGS.	Inches in Ship.	Inches per Rule. Or as Approved.
Keel, Bar or Side Plates, depth and thickness	✓	
Stem, moulding and thickness Cast & forged	11 × 2¾	11 × 2¾
Stern-Post for Rudder do. do. Cast	11 × 6½	11 × 6½
" " for Propeller "	11 × 6½	11 × 6½
Main Piece of Rudder, diameter at head Cast &	9	9
do. at heel forged.	6¾	6¾

Rudder, how constructed single plate as per approved plan.

Can the Rudder be unshipped afloat? Yes.

KEELSONS AND STRINGERS.	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as	Inches per Rule Approved	20ths per Rule
~~Centre Line Keelson, Vertical Plate above floors, Through Plate, or Intercostal Plate~~						
~~" Rider Plate~~						
~~" Bulb Plate to Intercostal Keelson~~						
~~" Horizontal Plates on Floors~~						
~~" Angles~~						
~~Side Keelson, Angles~~						
~~" Bulb or Plate above floors, for lng.~~						
~~" Intercostal Plate, for length~~						
~~" Attached to outside plating with Angle~~						
~~Bilge Keelson, Angles~~						
~~" Bulb or Plate above floors, for lng.~~						
~~" Intercostal Plate, for length~~						
~~" Attached to outside plating with Angle~~						
~~Bilge Stringer Angles~~						
~~" Bulb Plate, for length~~						
~~" Intercostal Plate, for length~~						
~~" Attached to outside plating with Angle~~						
~~Side Stringer Angles~~						
~~" Bulb or Intercostal Plate, for lng.~~						
~~" Attached to outside plating with Angle~~						
Spar, ~~or Awning~~ Deck Stringer Plates, breadth and thickness	53		11	53		11
" Angle on ditto	4 × 4		9	4 × 4		9
" Tie Plates, fore and aft, outside Hatchways	✓					
" Diagonal Tie Plates, No. of prs.	✓					
" Deck.* Iron ~~or~~ Steel, for whole lng.	7/16		7	7/16		7
" Wood Deck. Material & thickness	✓					
Main Deck Stringer Plate, breadth & thickness	60		12	60		12
" Angles on ditto, No. 2	4 × 4		9	4 × 4		9
" Tie Plates, ~~outside Hatchways~~ at centre	34		10	34		10
" Diagonal Tie Plates, No. of prs.	✓					
" Deck.* Iron or Steel, for lng.	✓					
" Wood Deck. Material & thickness	✓					
~~Lower Deck Stringer Plates, br'dth & thickn's~~						
~~" Angles on ditto, No.~~						
~~" Tie Plates, outside Hatchways~~						
~~" Deck.* Material and thickness~~						
~~Hold, or Orlop Stringer Plate, br'dth & thckn's~~						
~~" Angles on ditto, No.~~						
~~" Tie Plates, outside Hatchways~~						
~~" Deck. Material and thickness~~						
Poop Deck Stringer Plate, breadth & thickness	Iron 5/16			5/16		
" Angles on ditto	3½ × 3½		8	3½ × 3½		8
" Tie Plates						
" Deck. Material and thickness	Iron 5/16		8	5/16		8
Bridge Deck Stringer Plate, br'dth & thickness	50			50		
" Angle on ditto	3½ × 3½		9	3½ × 3½		9
" Tie Plates						
" Deck. Material and thickness	Iron 5/16			5/16		
Forecastle Deck Stringer Plate, b'dth & th'kns	4/16			4/16		
" Angle on ditto	3½ × 3½		8	3½ × 3½		8
" ~~Tie Plates~~ Iron deck	4/16			4/16		
" Deck. Material and thickness	2½ Y. pine			2½		

* If Iron or Steel Deck, state if whole or part, and if wood deck is laid thereon.

BULKHEADS.	Number In Vessel.	Number Per Rule.	Thickness. 20ths.	Stiffeners Horizontal. Inches.	Stiffeners Vertical. Inches.	Stiffeners Spacing Inches.	Single or Double Frames.	Height up.
W. T. BULKHEADS	6	6	7·6	7½ × 3 × 11/20 B.A.	7½ × 3 × 11/20 B.A.	48	Dble	Spar dk.
PARTITION "	✓							
LONGITUDINAL "	✓							

Are the outside Plates doubled two spaces of Frames in length? Diamond liners.

Form No. 1C.

PLATING.

STRAKES.	AS IN SHIP. Amidship. Breadth.	Amidship. Thickness.	Forward. Thickness.	Aft. Thickness.	PER RULE OR AS APPROVED. Amidship. Breadth.	Amidship. Thickness.
	Inches.	20ths	20ths	20ths	Inches.	20ths
Flat Plate Keel (If Bar Keel, state Riveting)	48	21	13	13	48	21
Garboard or A Strake	66	13	12	12	66	13
B "	66	12	9	9	66	12
C "	66	12	10	10	66	12
D "	66	13	10	10	66	13
E "	66	13	10	10	66	13
F "	67	13	10	10	67	13
G "	70	12	10	10	70	12
H " (main sheer)	60	12	10	10	60	12
J "	72	12	10	10	72	12
K " (upper Sheer)	40	13 to 20	10	10	40	13 to 20
L "						
M "						
N "						
O "						
P "						
Q "						
Doubling of Flat Plate Keel						
Length and thickness of Bilges						
Length and thickness of Sheerstrakes						
Length and thickness of Strake below						
Poop Sides			7		7	
Bridge Sides	10				10	
Forecastle Sides		7			7	

See approved sketch

RIVETING.

Lower EDGES.

Single or Double.	Breadth of Lap.	Rivets. Diam.	Rivets. Spacing cr. to cr.
	Inches.	Inches.	Inches.
Trble.			
Double	6	1	4
Trble.	5¼	⅞	3½
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"
"	6	1	4
Sgle.	3	¾	3¼
"	3	⅞	3½
"	3	¾	3¼

BUTTS.

Double or Treble and for what Length.	Rivets. Diam.	Rivets. Spacing cr. to cr.	Straps. Breadth.	Straps. Thickness.	If Lapped. Breadth.	If Lapped. For what Length.
	Inches.	Inches.	Inches.	Inches.	Inches.	Feet.
Trble. whole	1⅛	4	21½	9/15/13	—	—
Trble.	½	2⅛	3½	—	12	Whole
"	"	"	"	—	"	"
"	"	"	"	—	"	"
"	"	"	"	—	"	"
"	"	"	"	—	"	"
"	¾	"	"	—	"	"
"	"	"	"	—	"	"
"	½	"	"	—	"	"
"	"	"	"	—	"	"
"	¾	1	4	—	14	—
Extends of Bridge		1⅛	4½	—	16	
Dble.	¾	2⅝	—	—	5	Whole.
"	¾	3⅜	—	—	6	"
"	¾	2⅝	—	—	5	"

Manufacturer's name or trade mark of the ~~Iron or~~ Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c.? South Durham; Consett; Palmers, Lanarkshire; and Steel Co. of Scotland. Siemens process.

Iron :- South Durham.

Spar ~~or Awning~~ Stringer Plate { **Butts,** ~~treble~~ Trble. riveted for half length amidship. **Straps,** ~~single, double or~~ overlapped for whole length ~~amidship~~.

Main Stringer Plate { **Butts,** treble riveted for whole length ~~amidship~~. **Straps,** ~~single, double or~~ overlapped for whole length ~~amidship~~.

Butts of ~~Bilge & Side Stringers and~~ Tie Plates, ~~treble or~~ double riveted?

Inner Bottom Plating, riveting of **Edges** Dble. & Sgle. **Butts** Double

Centre Girder Butts, treble riveted **Keelson Butts,** — riveted.

Frames, riveted through Plates with ⅞ in. Rivets, about 5¼ apart.

Rivets, state whether Iron or Steel Iron

FRAMES extend in one length from trunk margin plate to deck. (Floors flanged top and bottom)

REVERSED FRAMES on floors and frames extend from Bulb angle frames.

MASTS, SPARS, &c.

	Material.	Total Length	Diameter and Thickness. At Partners.	Heel.	Hounds.	Head.	No. of Plates in round.	Angles. Number.	Angles. Size.	Riveting. Seams.	Riveting. Butts.
Lower Masts.... Fore	Steel	50-0	19" 7/20	18" 6/20		15½" 6/20	2	✓	✓	single	Treble.
Main	"	50-6	"	"		"	"	✓	✓	"	"
Mizen	✓										

Bowsprit ✓

Topmasts, ~~Yards~~ and Remainder of **Spars** Pine

Rigging, Material and Size, **Shrouds** Wire 4" **Stays** Wire 4½"

Sails. One Suit of Sails, ~~and the following spare sails~~

EQUIPMENT No. 37354 LETTER W. ANCHORS.

Number of Certificate.	Anchors.	Weight, Ex. Stock. Cwts.	qrs.	lbs.	Weight of Stock. Cwts.	qrs.	lbs.	Test, per Certificate. Tons.	cwts.	qrs.	lbs.	Weight Req. by Rule. Cwts.	qrs.	lbs.	Description of Anchor.	Makers.	Where and when tested and Superintendent.
27799	1st Bower	52	2	21	Stockless			44	-	1	7	52	2	-	Britannia	R. Sykes & Son Ltd	Lipton 13th April 1905 C. E. Perrins.
27801	2nd "	52	2	-	"			43	18	3	-	52	2	-	"		
27800	3rd "	44	2	7	"			38	18	3	-	44	3	2 -	"		
	Collective weight	149	3	-								149	3	2 -	Cast Steel Heads	tested at Dusseldorf by J. Meyer.	
27859	Stream	14	-	7	3	2	5	15	12	2	-	14	-	-	Ordinary	John Green	Lipton. 22nd April 1905 C. E. Perrins
27858	Kedge	6	-	-	1	2	-	8	5	-	-	6	-	-	"	" "	
	2nd Kedge	✓															

If Patent state Name of Patentee.

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate. Tons.	Weight of Chain Cable. Supplied.	Weight of Chain Cable. Per Rule.	Fathoms and Size Per Rule.	Description.	Makers of Cables.	When and where tested, and Superintendent.
28720	270	2⅛	76½	76-1-12	57-2-14	270 · 2⅛	Stud	John Green	26-4-05, Lipton, C. E. Perrins.
~~Stream Chain~~ Steel Wire ...	90	4½	39			90 · 4½			

HAWSERS AND WARPS.

Material.	Fathoms.	Size.	Breaking Test of Steel Wire Towline.	Fathoms and Size Per Rule.
Towline S. Wire	120	4½	39 72	120 · 4½ 2 @ 90 · 7
Hawser Hemp	90	3⅞		
Warp 2 off "	90	7		2 @ 90 · 7

Boats 2 life and 1 other.

Pumps, Number One fly wheel pump connected to the steam bilge suction pipes in each compartment, & deck pump in forepark. Diameter of Barrel and Tail Pipe In efficient working order.

Windlass is Clarke, Chapman & Co. **Capstan,**

Engine Room Skylights.—How constructed? Steel on trunk bulkheads.

What arrangements for deadlights in bad weather? Bulls eyes in steel shutters.

Coal Bunker Openings.—How constructed? Steel coamings How are lids secured? By hatch bars. Height above deck? 12"

Number of **Scuppers,** and number and dimensions of **Freeing Ports, &c.** On each side, 7 scuppers, and 9 ports 36" × 15"

Ceiling in Holds, thickness and material 2½" U. pine. **Ceiling 'tween Decks,** thickness and material 6" × 2" U. pine sparring.

Cargo Hatchways.—How formed? Of plates and angles. **Hatches,** If strong and efficient? Solid 2½"

State size **No. 1 Hatch** (Forward) 25-4" × 16-0" × 48" **No. 2 Hatch** 25-8" × 16-0" × 45" **No. 3 Hatch** 25-8" × 16-0" × 48" **No. 4 Hatch** 25-8" × 16-0" × 33"

Number of **Web Plates, Shifting Beams** and **Fore** and **Afters** to each Hatch 2 deep web plates and 3 fore & afters.

No. of Breasthooks Nine **No. of Crutches** 28 deep floors.

Bulwarks, height above deck and description 3-6. Steel plating Main Rail, material and size Bulb angle 6" × 3" Stays 1¾" dia.

The above is a correct description.

Builder's Signature (here only.) For FURNESS, WITHY & CO., LIMITED.

Surveyor's Signature Jos. Thomson

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

Form No. 1C.

T. Jackson

SAT. 2 SEP 1905

Correspondence.—State dates and initials of letters respecting this case (*Reference should be made to any correspondence connected with this case*) 12th & 29th Dec. 1904.
24th Feb. 1905. M. 12th April 1905 E.

Workmanship. Are the butts of plating planed or otherwise fitted? Planed.

Is the riveted work properly closed? Yes.

Are the liners between the frames and plates solid single pieces? Yes. Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes. Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes. Do any rivets break into or through the seams or butts of plating? A few.

Are the butts of Plating, Stringers, &c., properly shifted and strapped? Yes.

General Remarks (State quality of workmanship, &c.) The workmanship throughout is good.
This vessel is built in accordance with photo. of approved midship section forwarded [from] London on 30th Aug. 1905, the accompanying pumping plan, the approved plans attached [to] 1st Entry Report on S.S. "Haverstoe", the Secretary's letters referred to above, and in general [c]onformity with the Rules for the Class contemplated.
The watertight doors are in efficient working order.
All the upper & weather decks have been tested as required by Rule with [s]atisfactory results.

Is a sister vessel to the "Archbank", Hpl. Report No. 12646

The Surveyor should state the Number of Report and Name of any Sister Vessel.

[PA]RTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 31 ft., R.Q.D. or Break ✓ ft., Bridge Dk. 105 ft., F'castle 31 ft. [(]in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated ✓

[...] and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it [s]hould appear in the Register Book) Spar dk. (pt. Steel & pt. Iron), 2 tiers of Beams & Web frames.

[O]fficial No. ; Signal Letters

[H]ow are the surfaces preserved from oxidation? Inside By cement and paint Outside By paint.

[PA]RTICULARS OF WATER BALLAST. ~~State whether~~ the Double bottom is constructed on the cellular system

Where fitted.	Length. Feet.	Water Capacity. Tons.	Where fitted.	Length. Feet.	Water Capacity. Tons.
[Dou]ble bottom, aft,	112	245	Fore peak tank,	✓	57
[Dou]ble bottom, forward,	130 2/3	314	After peak tank,	✓	80
[Dou]ble bottom, under Engines and Boilers,	51 1/3	149	Midship deep tank,	✓	
[Dou]ble bottom, if under Engines only,	✓		Other tanks, if fitted,	✓	
[Dou]ble bottom, if under Boilers only,	✓	708	(If necessary, furnish further information by sketch.)		

State whether the above have been tested as required by the Rules Yes.

[...]er for Special Survey No. 1973
Date 8th March 05
[...]er for Ordinary Survey No. 1
Date ✓
284 in builder's yard.

DATES of Surveys held while building as per Section 18.
1st. On the several parts of the frame, when in place, and before the plating was wrought: 1905. Feb. 23. 27. Mar. 1. 3. 6. 8. 13. 15. 20. 22. 24. 28. 31. April. 3. 5. 7.
2nd. On the plating during the process of riveting: 10. 12. 14. 17. 20. 26. May 1. 3. 5. 9. 12. 15. 17. 19. 22. 24. 26. 27. 29. 31. June 2. 5.
3rd. When the beams were in and fastened, and before the decks were laid: 8. 9. 10. 14. 15. 16. 21. 26. 30. July. 11. 19. 25. 28. August. 2. 3. 15. 17. 21. 25. 29.
4th. When the ship was complete, and before the plating was finally coated or cemented: 30. Sept. 1.
5th. After the ship was launched and equipped
Total No. of Visits 60

[Th]e amount of Entry Fee £ 5 : :
Special Survey Fee £ 116 : 1 : 1
Travelling Expenses, if any £ : :
Fees applied for, 31.8.1905
Received by me, 31.8.1905
Recd

Certificate to be sent to West Hartlepool

[I a]m of opinion this Vessel should be Classed ✠ 100 A1, "Spar Deck"
[Wi]th, ~~or without~~ Freeboard, as condition of Class

Jos. Thomson
Surveyor to Lloyd's Register of British and Foreign Shipping.

The Surveyors are requested not to write on or below the Committee's Minute.

TUES. 5 SEP 1905

Committee's Minute
Character assigned
100 A1
Spar dk with fbd 5. 6 0½

Lloyds A & C. P.
Write Hpl ✓
+ LMC 9.05.

Certificate Issued. 5/9/05

W777-0125 (2/2)