

IRON OR STEEL SHIP.

(Received at London Office, 29 MARCH 1890)

20

No. 20

Survey held at

Date of writing Report

Port of

Middleborough

Date, First Survey

June 26th 1889

Last Survey

March 24th 1890

1890

On the

Steel Screw Steamer

CROYDON

Rig

Schooner 2 Masts

Master

Robert Turnbull

Year of appointment

(1) As master in service of owner of present vessel: 1882
(2) As master of this vessel: 1890

Built at

Middleborough

When built

1889-90

Launched July 24th 1890

By whom built

H. Harkness Son

Owners

H. J. Connor & Co

Managers

(If desired to be entered in Reg. Book.)

Residence

London

Port belonging to

London

Destined Voyage

Surveyed while Building, Afloat, or in Dry Dock.

TONNAGE under Tonnage Deck 838.19
Do. between Tonnage Dk. and 2nd, 4th, Spar or Awning Dk. 241.91
Total under Upper Dk. 1080.10
Do. of Poop
Do. of Raised Qr. } 78.12
Dk. on Deck }
Do. of Bridge House
Do. of Houses on Deck 3.95
Do. of excess of Hatchways 12.37
Do. of Forecastle
Gross Tonnage 1174.54
Less Crew Space 33.59
Master, Ch. Rm. Store 16.06 49.65
Less Engine Room 375.85
Register Tonnage 749.04
as out on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL,
Part SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) 15.90
Depth from upper part of Keel to top of Upper Deck Beams 18.41
Girth of Half Midship Frame (as per Rule) 30.50
1st Number 64.81
1st Number, if a 3-Decked Vessel deduct 7 feet ✓
Length 220.33
2nd Number 142.79
Proportions— Breadths to Length 6.9
Depths to Length— Upper Deck to Keel 11.90
Main Deck ditto

LENGTH on deck as per Rule 220 4
BREADTH Moulded 31 10
DEPTH top of Floors to Upper Deck Beams 15 7
Power of Engines 128
Horse 128
Nº. of Decks with flat laid 1
Nº. of Tiers of Beams 1 tier

Dimensions of Ship per Register, length, 220.5 breadth, 32.0 depth, 15.6

KEEL, depth and thickness 8 x 2 3/8
STEM, moulding and thickness 7 1/2 x 2 3/8
STERN-POST for Rudder do. do. 7 1/2 x 4 3/4
" " for Propeller 7 1/2 x 4 3/4
Distance of Frames from moulding edge to moulding edge, all fore and aft 23

FRAMES, Angle Iron, for 3/4 length amidships 4 3 7 4 3 7
Do. for 1/2 at each end 4 3 6 4 3 6
REVERSED FRAMES, Angle Iron 3 3 6 3 3 6

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 34" deep
" thickness at the ends of vessel 34" deep
" depth at 3/4 the half-bdth. as per Rule 34" deep
" height extended at the Bilges 34" deep

BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 4 3 6 4 2 6
Single or double Angle Iron on Upper edge 23
Average space 23

BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 5 2 3 8 5 2 3 8
Single or double Angle Iron on Upper edge 23
Average space 23

BEAMS, Lower Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron
Single or double Angle Iron on Upper edge
Average space

BEAMS, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron
Single or double Angle Iron on Upper edge
Average space

KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates
" Rider Plate
" Bulb Plate to Intercoastal Keelson
" Angle Irons
" Double Angle Iron Side Keelson
" Side Intercoastal Plate
" do. Angle Irons
" Attached to outside plating with angle iron

BILGE Angle Irons
" do. Bulb Iron
" do. Intercoastal plates riveted to plating for length

BILGE STRINGER Angle Irons
Intercoastal plates riveted to plating for length

SIDE STRINGER Angle Irons

The **FRAMES** extend in one length from bilge to top height

The **REVERSED ANGLE IRONS** on floors and frames extend across middle line to bilges & bilge to main

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes

PLATING. Garboard, double riveted to Keel, with rivets 1/8 in. diameter, averaging 5 5/8 ins. from centre to centre.

" **Edges of Garboards** and to upper part of Bilge, worked clench, double riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from centre to centre.
" **Butts from Keel to turn of Bilge**, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 2 7/8 ins. from centre to centre.
" **Butts of** / Strake at Bilge for 2 length, treble riveted with Butt Straps 2 thicker than the plates they connect. 1 lapped & 3/4
" **Edges from Bilge to Main Sheerstrake**, worked clench, double or single riveted; with rivets 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.
" **Butts from Bilge to Main Sheerstrake**, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 2 7/8 ins. from cr. to cr.
" **Edges of Main Sheerstrake**, double or single riveted. 3/4 in. diameter, averaging 3 1/4 ins. from cr. to cr.
" **Butts of Main Sheerstrake**, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
" **Butts of Main Stringer Plate**, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted 1 No. of Breasthooks, 3 Crutches, deep floors

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Siemens-Martin

Manufacturer's name or trade mark, Black & White

The above is a correct description.

Builder's Signature, J. M. Williams

Surveyor's Signature, J. M. Williams

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

State clearly where plating is of alternate thicknesses—as distinguished from diminished thickness at ends of vessel.

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

No. 1 for Iron or Steel Ships—250—8/11/89—Transfer Int.

Do the edges of the carvel work and the butts lay close together throughout their length without requiring any making good of deficiencies? *Yes*
Are the fillings between the ribs and plates solid single pieces? *Yes*
to plate, &c., conform well to each other? *Yes*
from the lying surfaces? *Yes*
Do the holes for riveting plate to frames, butt straps, or plate
Are the rivet holes well and sufficiently countersunk in the plate and punched
Do any rivets break into or through the seams or butts of the plating? *A few*

Masts, Bowsprit, Yards, &c., are *Pitch Pine* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings of
Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials,
and if stamped with Maker's name.
State also Length and Diameter of Lower Masts and Bowsprit

2nd Mast 66 ft x 19" diam at deck
Main " 64 " x 19 " "

Number for Equip- ment 16063		CABLES, &c.				Machine where Tested and Superintendent, also Name of Chain Maker.		ANCHORS.		Machine where Tested and Superintendent, also Name of Anchor Maker.		
Letter for do. N	Number of Certificate.	Fathoms.	Inches.	Test per Certificate. Tons.	Fathoms & Inches per Rule.	Test per Certificate.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Test per Certificate	W'ght req'd per Rule.	
No. SAILS. Fore Sails, Fore Top Sails, Fore Topmast Stay Sails, Main Sails, Main Top Sails, and quality son	8099	240	1 3/16	40 1/2	240. 1 3/16	Riv. Iron Com	19607	21. 3. 0	22. 3. 3. 0	21. 0. 0	Riv. Iron Com	
	Linnason 16. 2			Makers	J. Hartness	19605	21. 0. 0	21. 12. 2. 0			J. Hartness	
	Calif. coast.				Sup	19606	18. 2. 0	19. 8. 3. 0			Sup	
	Iron Steam Chain } Steel Wire ... }	75	1 5/16	15 3/16	75. 1 5/16	do						Linnason 16. 2
	Hemp Steel Wire											Makers
	TOWLINE— Hemp Steel Wire	90	3 1/4	22	90 3 1/4							
	Hawser ... do ...	90	2 3/4	15 1/2	90 8" hemp							
Warp ... do ...	90	2	7	90 5 1/2								
							Collective Weights	61. 1. 0			60. 0. 0	
Stream							7. 1. 0	9. 9. 1. 14	7. 1. 0			do
Kedge							3. 3. 14	6. 5. 1. 7	3. 2. 0			do
2nd Kedge....							1. 3. 7	4. 7. 0. 21	1. 3. 0			do

Standing and Running Rigging *More hemp* sufficient in size and *good* in quality. She has *2* Life Boats and *one* other.

The Windlass is *Iron* Capstan *✓* and Rudder *Iron* Pumps *son*

Engine Room Skylights.—How constructed? *Plate coming ship* How secured in ordinary weather? *Plate flaps with thick glass lights.*

Coal Bunker Openings.—How constructed? *Plate coming* How are lids secured? *Plate flaps* Height above deck? *56"*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *On quarter deck 3 ports each side 30 1/2" x 16 1/2" + 3 scuppers.*

Cargo Hatchways.—How formed? *Plate coming, Nos 1 + 2. 19" high, No 3 32"* Hatches, If strong and efficient? *2 1/2 solid pine*

State size *Not Hatch 15' 2" x 13' 8" No 2 20' 11" x 14' 0" No 3 22' 8" Quarter hatch x 14' 0"*

If of extraordinary size, state how framed and secured. *No 1. 1 inch 13 pine rafters. Nos 2 + 3. 2 inch + 3 pine rafters* What arrangement for shifting beams?

Order for Special Survey No. *1397* 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*
Date *June 3rd 89* *2nd. On the plating during the process of riveting*
Order for Ordinary Survey No. *✓* *3rd. When the beams were in and fastened, and before the decks were laid...*
Date *✓* *4th. When the ship was complete, and before the plating was finally coated or cemented..*
No. *121* in builder's yard. *5th. After the ship was launched and equipped* *1st visit June 26th 1889*
State dates of letters respecting this case *May 20th 89 M. Sept 12th 89 P. + M.* *last - March 24th 1890* Total No. of Visits *47*

General Remarks (State quality of workmanship, &c.) *The vessel has been built under special license in accordance with the plans approved, and the rule for steel vessels. The workmanship and materials are good, steel tested as per rule.*

The freeboard has been marked on the vessel in accordance with that assigned in the Secy's Ltr of Sept 12th 89, as follows viz Summer 8' 2", Winter 8' 4", Allowance for Fresh Water 4", all measured to top of part along dk stringer; the freeboards also recorded in the Register Book, and on the certificate of classification.

How are the surfaces preserved from oxidation? Inside *Portland Cement Paint* above Outside *Paint.*

Particulars for Record in R.B.—Length of Poop *✓* ft., R.Q.D. *77* ft., Bridge Dk., *144* ft., Beam *4* ft., No. of Dks. (excluding spar, awn., &c.) *1*
Material of dks. *steel* If spar, awn. dk., &c. *✓* Material of spar, awn. dk., &c. *Iron* ; No. of tiers of beams (with and without dks. laid) *1* ;
Official No. *98061*; Signal Letters *✓* If double bottom, state particulars on separate form.

I am of opinion this Vessel should be Classed *+ 100 A 1, Part along dk Steel.*

The amount of the Entry Fee£ *4* : : is received by me, *R. H. D.*
Special£ *53* : *10* : *6* *28. 3* 1890

(to be sent as per margin). Certificate ...
(Travelling Expenses, if any £ ...).

Committee's Minute

Character assigned

+ 100 A 1 8 ft. Part along dk

subject to freeboard

10 ft. 8 ft. web frames

up along dk Iron

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

It is submitted that this vessel appears eligible to the Classed 100 A 1 (Steel) Part along dk with the notation "Frame part Iron" as recommended. The full particulars of the vessel to be inserted in the Classification Certificate and forwarded to the Registrar of Shipping, the Registrar of the Port of London, and the Registrar of the Port of Liverpool, for their respective records.

all other particulars appended