

IRON OR STEEL SHIP.

(Received at London Office **29 AUG 1890**)

Date of writing Report **26th August** Port of **Hull**

No. **446** Survey held at **Hull** Date, First Survey **May 23rd** Last Survey **Aug. 26th** 1890

On the **s/s "Mandalay"** Rig **Net** Master **Dier**

KNAGGE under Tonnage Deck
 between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk.
 Total under Upper Dk. **140.67**
 of Engine Room **7.12**
 of Raised Or. Dk. or Break
 of Bridge House
 of Houses on Deck
 of excess of Hatchways
 of Forecastle
 Gross Tonnage **147.79**
 Crew Space **19.85**
127.94
 Engine Room **79.66**
 Register Tonnage **48.28**
 out on Beam

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

Half Breadth (moulded) **10.0** Feet.
 Depth from upper part of Keel to top of Upper Deck Beams **12.33**
 Girth of Half Midship Frame (as per Rule) **17.75**
 1st Number **40.08**
 1st Number, if a 3 Decked Vessel deduct 7 feet
 Length **102.0**
 2nd Number **4088**
 Proportions— Breadths to Length **5.1**
 Depths to Length— Upper Deck to Keel **8.2**
 Main Deck ditto

Year of appointment **1890**
 Built at **Hull**
 When built **1890** Launched **19/7/90**
 By whom built **Woolf, Bolton & Gummell**
 Owners **George Beeching**
 Managers
 (If desired to be entered in Reg. Book.)
 Residence
 Port belonging to **Hull**
 Destined Voyage **Fishing purposes**
 If Surveyed while Building, Afloat, or in Dry Dock. **While building & afloat**

LENGTH on deck as per Rule **102.0** Feet. Inches. **102.0** BREADTH— Moulded **20.0** Feet. Inches. **20.0** DEPTH top of Floors to Upper Deck Beams **11.0** Feet. Inches. **11.0** Power of Engines **50** Horse. N^o. of Decks with flat laid **one** N^o. of Tiers of Beams **one**

Dimensions of Ship per Register, length, **102.2** breadth, **20.0** depth, **11.0** Moulded depth **11.10**

	Inches in Ship.	Inches per Rule.	16ths or 20ths in Ship.	Inches per Rule.	16ths or 20ths per Rule.
KEEL , depth and thickness	<i>Bull</i> 7 1/2 x 1 1/4	7 1/2 x 1 1/4			
STEM , moulding and thickness	<i>Bull</i> 7 1/2 x 1 1/4	7 1/2 x 1 1/4			
STERN-POST for Rudder do. do.	6 x 2 1/2	6 x 2 1/2			
" " for Propeller	6 x 2 1/2	6 x 2 1/2			
Distance of Frames from moulding edge to moulding edge, all fore and aft	20	20			
FRAMES , Angle Iron, for 2/3 length amidships	3 2 1/2 x 5	3 2 1/2 x 5			
Do. for 1/3 at each end	3 2 1/2 x 5	3 2 1/2 x 5			
REVERSED FRAMES , Angle Iron	2 1/2 x 2 1/2	4 2 1/2 x 2 1/2			
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	16 x 6	16 x 6			
" thickness at the ends of vessel	5	5			
" depth at 2/3 the half-bdth. as per Rule	<i>as per approved sheet.</i>				
" height extended at the Bilges					
BEAMS , Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	5 1/2 x 3	5 1/2 x 3			
Single or double Angle Iron on Upper edge					
Average space	40	42			
BEAMS , Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron					
Single, or double Angle Iron, on Upper Edge					
Average space					
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 intercostal, plates	7 1/2 x 7	7 1/2 x 7			
" Rider Plate					
" Bulb Plate to Intercostal Keelson					
" Angle Irons	4 x 3	4 x 3			
" Double Angle Iron Side Keelson					
" Side Intercostal Plate					
" do. Angle Irons					
" Attached to outside plating with angle iron					
BILGE Angle Irons	3 x 3	3 x 3			
" do. Bulb Iron	6 x 3	6 x 3			
" do. Intercostal plates riveted to plating for length					
BILGE STRINGER Angle Irons	3 x 3	3 x 3			
Intercostal plates riveted to plating for length					
SIDE STRINGER Angle Irons					

The **FRAMES** extend in one length from **Keel** to **Gunnwale** Riveted through plates with **3/4** in. Rivets, about **5.6** apart.

The **REVERSED ANGLE IRONS** on floors and frames extend **across** middle line to **from bilge to bilge** and to **alternately**

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? **Yes** And butts properly shifted? **Yes**

PLATING. Garboard, double riveted to Keel, with rivets **7/8** in. diameter, averaging **4 3/8** ins. from centre to centre.

" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets **3/4** in. diameter, averaging **2 3/4** ins. from centre to centre.

" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets **3/4** in. diameter averaging **2 1/2** ins. from centre to centre.

" Butts of **one** Strakes at Bilge for **half** length, treble riveted with Butt Straps **1/16** thicker than the plates they connect.

" Edges from Bilge to Main Sheerstrake, worked clencher, **double** riveted; with rivets **5/8** in. diameter, averaging **2 3/4** ins. from cr. to cr.

" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets **5/8** in. diameter, averaging **2 1/2** ins. from cr. to cr.

" Edges of Main Sheerstrake, double **single** riveted. **Upper Sheerstrake, double or single riveted.**

" Butts of Main Sheerstrake, **double** riveted for **whole** length amidships. Butts of Upper or Spar Sheerstrake, treble riveted **length** amidships.

" Butts of Main Stringer Plate, **double** riveted for **5/8** length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for **length**.

" Breadth of laps of plating in double riveting **4 1/2** Breadth of laps of plating in single riveting **2 1/4**

Butt Straps of Keelsons, Stringer and Tie Plates, **treble**, double **single** Riveted? **as per rule** No. of Breasthooks, **3** Crutches, **12**

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? **Plates—Stockton, Middlesbrough**

Manufacturer's name or trade mark **Angles—Dorman Long & Hull Forge**

The above is a correct description **Woolf, Bolton & Gummell**

Builder's Signature, **W. Gummell** Surveyor's Signature, **W. Gummell** Surveyor to Lloyd's Register of British and Foreign Shipping.

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

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

HULL 403-0008

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed*
 Do the edges of the carvel work and of 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* 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 the plating? *A few*

Masts, Bowsprit, Yards, &c., are *Wood* 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 *✓*

Number for Equipment	CABLES, &c.				Test per Certificate. Tons.	Fathoms & Inches per Rule.	Machine where Tested and Superintendent, also Name of Chain Maker.	ANCHORS.				
	Letter for do.	Number of Certificate.	Fathoms.	Inches.				Number of Certificate (State if any and which Anchors are Stockless.)	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested and Superintendent, also Name of Anchor Maker.
N ^o . SAILS.	11324	61	15 1/2	10 1/2	21	75	15 1/2	28187	4-2-06	17-2-0	4-2-0	<i>Always P.H. Metterson dated 17/5/90. G. G. Davis</i>
Fore Sails,	11341	15	15 1/2	10 1/2	21			27324	4-0-13	6-10-0	4-0-0	
Fore Top Sails,	<i>tested as per rule</i>											
Fore Topmast Stay Sails,	<i>Iron Stream Chain or Steel Wire .. 180 3 1/2 Stitt wire</i>											
Main Sails,	<i>Hempen Str'm Cable 60 5 1/2 Manila</i>											
Main Top Sails, and quality	<i>TOWLINE—Hemp or Steel Wire. 60 3 1/2 "</i>											
Hawser												
Warp												

Standing and Running Rigging *Winch Hauls* sufficient in size and *good* in quality. She has *one* Long Boat *and* ✓
 The Windlass is *English oak* Capstan ✓ and Rudder *good* Pumps *good*
Engine Room Skylights.—How constructed? *Leak framing* How secured in ordinary weather? *Bolted to iron coaming*
 What arrangements for deadlights in bad weather? *Solid teak shutter with glass bullseyes in same.*
Coal Bunker Openings.—How constructed? *Cast iron* How are lids secured? *studs* Height above deck? *flush*
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Three ports and five scuppers on each side.*
Cargo Hatchways.—How formed? *Iron coamings* Hatches, If strong and efficient? *2 1/2*
 State size **Main Hatch** ✓ Forehatch *3-6 x 4-0* Quarterhatch ✓
 If of extraordinary size, state how framed and secured... ✓ What arrangement for shifting beams? ✓

Order for Special Survey No. *481* Date *6/5/90*
 Order for Ordinary Survey No. ✓ Date ✓
 No. *53* 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. *Built under S.S. & sun during construction 1890. - May 23, Jun 29, 17, 23, Jul 5, 18, Aug 13, 25, 26*
 2nd. On the plating during the process of riveting
 3rd. When the beams were in and fastened, and before the decks were laid...
 4th. When the ship was complete, and before the plating was finally coated or cemented...
 5th. After the ship was launched and equipped
 State dates of letters respecting this case *17/5/90* Total No. of Visits *10*

General Remarks (State quality of workmanship, &c.) *This one decked vessel for fishing purposes has been built in accordance with the approved sketch of midship section and in other respects in conformity with the rules and the Secretary's letter dated 17/5/90. The workmanship throughout is good.*

The approved tracing forwarded to London on the 27/8/90

How are the surfaces preserved from oxidation? Inside *Portland cement paint* Outside *paint*

Particulars for Record in R.B.—Length of Poop ✓ ft., R.Q.D. ✓ ft., Bridge Dk., ✓ ft., F'castle ✓ ft.; No. of Dks. (excluding spar, awn, &c.) *one*
 Material of dks. *Wood* If spar, awn, dk., &c. ✓ Material of spar, awn, dk., &c. ✓; No. of tiers of beams (with and without dks. laid) *one*
 Official No. *95845*; Signal Letters _____ If double bottom, state particulars on separate form.

I am of opinion this Vessel should be Classed ** 100 A 1 "Steamer"*
 The amount of the Entry Fee£ *1* : - : - is received by me. *8/9/90*
 Special£ *8* : *8* : - *8/9/90*
 (to be sent as per margin). Certificate ...
 Travelling Expenses, if any, £ _____

Committee's Minute *TUES 2 SEPT 1890*
 Character assigned *100 A 1 Steam Rawler 12k*
La sep + Lmb 8/90
 Surveyor to Lloyd's Register of British and Foreign Shipping. *A Williamson*
 It is submitted that this vessel appears eligible to be classed 100. A 1 "Steam Rawler" as recommended.
 1. dk. *Foundations*
29/8/90

Reference should be made to any correspondence connected with the case.
 Certificate to be sent to the Surveyors of Hull