~~IRON~~ Steel SHIP.

No. 21546 Survey held at Newcastle Date, First Survey 27th Sept/87 Last Survey 2nd June 1888 (Received at London Office, THU 7 JUN 88)

21546

on the Screw Str 600 "Mei Shih" Schooner rigg'd

TONNAGE under Tonnage Deck	1015·23
of Third, Spar, or Awning Deck	– – –
of Poop, or Raised Qr. Dk.	– – –
of Houses on Deck	345·17
Trunk of Forecastle	33·36
Gross Tonnage	1393·76
Less Crew Space	66·61
	1327·15
Less Engine Room	623·70
Register Tonnage as cut on Beam	703·45

Official Number

~~ONE, OR~~ TWO DECKED, & Shade ~~THREE~~ DECKED VESSEL, ~~SPAR, OR AWNING DECKED VESSEL.~~

	Feet.
Half Breadth (moulded)	16·93
Depth from upper part of Keel to top of Upper Deck Beams	17·70
Girth of Half Midship Frame (as per Rule)	33·26
1st Number	69·89
1st Number, if a 3-Decked Vessel .. deduct 7 feet	✓
Length	248·58
2nd Number	17373
Proportions— Breadths to Length	7·3
Depths to Length—Upper Deck to Keel	12·6
Main Deck ditto	✓

Master Wm Robt Jordan
Built at Hebburn on Tyne
When built 1887 & 8 Launched 29 Feb/1888
By whom built R & W. Hawthorn, Leslie & Co.
Owners Formosa Trading Corporation
Residence Formosa
Port belonging to Formosa
Destined Voyage Formosa
If Surveyed while Building, Afloat, or in Dry Dock.

Report recd 5/6/88 sent to Lon 8/6/88

LENGTH on deck as per Rule	Feet. 248	Inches. 6	BREADTH— Moulded	Feet. 33	Inches. 10	DEPTH top of Floors to Upper Deck Beams / Do. do. Main Deck Beams	Feet. 18	Inches. 0	Power of Engines	Horse. 300	No. of Decks with flat laid 2 / No. of Tiers of Beams 2

Dimensions of Ship per Register, length, 250·5 breadth, 34·2 depth, 18·0 Moulded depth 19"0"

	Inches in Ship			Inches per Rule		
KEEL, depth and thickness	–	–	–	–	–	–
STEM, moulding and thickness	8½ x 2½			8½ x 2½		
STERN-POST for Rudder do. do.	8½ x 5			8½ x 5		
" " for Propeller	✓			✓		
Distance of Frames from moulding edge to moulding edge, all fore and aft	24 ins			24 ins		
	Inches. In Ship.	Inches. In Ship	20ths. In Ship	(Class 100 A) Inches per Rule	Inches per Rule	20ths per Rule
FRAMES, Angle ~~Iron~~ Steel, for ⅗ length amidships	4½	3	7	4½	3	7
Do. for ⅕ at each end	4½	3	6	4½	3	6
REVERSED FRAMES, Angle ~~Iron~~ Steel	3	3	7	3	3	7
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	–	21	9	–	21	9
" thickness at the ends of vessel	–	–	7	–	–	7
" depth at ¾ the half-bdth. as per Rule	–	11	–	–	10½	–
" height extended at the Bilges	twice middle depth					
BEAMS, Upper, ~~Spar, or Awning~~ Deck ~~Single or d'ble Ang. Iron, Plate or~~ Tee Bulb ~~Iron~~ Steel	8	5	8	8	5	8
Single or double Angle Iron on Upper edge	–	–	–	–	–	–
Average space	alternate frames					
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~~ Steel	8	5	8	8	5	8
Single or double Angle Iron on Upper Edge	–	–	–	–	–	–
Average space	alternate frames					
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 and	–	–	10	–	–	10
	–	17	12	–	17	12
Rider Plate		10¾	12	–	10¾	12
Bulb Plate to Intercostal Keelson	–	–	–	–	–	–
Angle ~~Irons~~ Steel	5	4	9	5	4	9
Double Angle ~~Iron~~ Steel Side Keelson	5	4	9	5	4	9
Side Intercostal Plate		–	8	–	–	8
do. Angle ~~Irons~~ Steel	5	4	9	5	4	9
Attached to outside plating with angle ~~Iron~~ Steel	3	3	7	3	3	7
BILGE Angle ~~Irons~~ Steel	5	4	9	5	4	9
do. Bulb ~~Iron~~ Steel ⅗ length	–	8	8	–	8	8
do. Intercostal plates riveted to plating for length	–	–	–	–	–	–
BILGE STRINGER Angle ~~Irons~~ Steel	5	4	9	5	4	9
Intercostal plates riveted to plating for length	–	–	–	–	–	–
STRINGER Angle Irons	–	–	–	–	–	–

	Inches. In Ship.	16ths. In Ship.	Inches. per Rule	16ths. per Rule
Flat Keel Plates, breadth and thickness	36	15	36	15
PLATES in Garboard Strakes, br'dth & thickness	36	11	36	11
,, From Garboard to upper part of Bilges	–	10	–	10
,, Of d'bling at Bilge, or increased thickness, and length applied 2 strakes	–	11	–	11
,, From up. prt of Bilge to lr. edge of Sh'rstrake	–	10	–	10
,, Main Sheerstrake, breadth and thickness	40	14	40	14
,, Of d'blng at Sh'stk. & lng. applied in way of Ports	–	10	–	10
,, From M'n. to Upr. or Spar Dk. Sh'rstrake				
,, Up. or Spar Dk Sh'rstrake, brdth & thickn'ss	–	–	–	–
Butt Straps to outside plating, breadth & thickness	10½ & 21	9½ & 17	9¾ & 21	9½ & 17
Lengths of Plating	6 frame spaces			
Shifts of Plating, and Stringers	2 frame spaces			
Gunwale Plate on ends of ~~Awning, Spar~~, or Upper Deck Beams, breadth and thickness	36	10	36	10
Angle ~~Iron~~ Steel on ditto	4 x 4 x	9	4 x 4 x 9	
Tie Plates fore and aft, outside Hatchways	Steel deck ½ length			
Diagonal Tie Plates on Beams No. of Pairs			–	–
Flat of Up., ~~Spar, or Awning~~ Dk.* 6/20 steel &	3½ & 4 pine		–	6
How fastened to Beams Galvanized iron	–	3½	–	
	Screw bolts & nuts			
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness	–	–	–	–
Is the Stringer Plate attached to the outside plating?	–	–	–	–
Angle Irons on ditto, No.	–	–	–	–
Tie Plates, outside Hatchways	–	–	–	–
Diagonal Tie Plates on Beams, No. of pairs	–	–	–	–
Flat of Middle Deck* do. do.	–	–	–	–
How fastened to Beams	–	–	–	–
Stringer Plates on ends of Lower Deck, ~~Hold or Orlop~~ Beams	32	9	32	9
Is the Stringer Plate attached to the outside plating?	Yes			
Angle ~~Irons~~ Steel on ditto, No. 2	4 x 4 x	9	4 x 4 x 9	
Stringer or Tie Plates, outside Hatchways				
Flat of Lower Deck* Steel in aft hold, 3" pine forward	–	5/16	–	5/16
Ceiling betwixt Decks, thickness and material	½ round iron			
" in hold do. do.	2½ pine			
Main piece of Rudder, diameter at head	6¼	–	6¼	–
do. at heel	3¼	–	3¼	–
Can the Rudder be unshipped afloat?	Yes			

Bulkheads No. 5 No. per Rule 4
" Thickness of 6/20
" Height up Upper deck, After one to lower deck
" How secured to sides of ship Between double frames
" Size of Vertical Angle ~~Irons~~ Steel 4½ x 3 x 7/20 and distance apart 30 ins.
" Are the outside Plates doubled two spaces of Frames in length? Yes

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 is laid thereon.

FRAMES extend in one length from Keel to Gunwale Riveted through plates with 7/8 in. Rivets, about 6½ apart.

REVERSED ANGLE IRONS on floors and frames extend near middle line to Main deck and to Upper deck 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 1 in. diameter, averaging 4 ins. from centre to centre.
" Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3½ ins. from centre to centre.
" Butts from Keel to turn of Bilge, worked carvel, ~~double~~ treble riveted; with rivets 7/8 in. diameter averaging 3 1/16 ins. from centre to centre.
" Butts of 8 Strakes at Bilge for ½ length, treble riveted with Butt Straps 2/20" thicker than the plates they connect.
" Edges from Bilge to Main Sheerstrake, worked clencher, double ~~or single~~ riveted; with rivets 7/8 in. diameter, averaging 3 7/16 ins. from cr. to cr.
" Butts from Bilge to Main Sheerstrake, worked carvel, ~~double~~ treble riveted; with rivets 7/8 in. diameter, averaging 3 1/16 ins. from cr. to cr.
" Edges of Main Sheerstrake, double ~~or~~ single riveted. ~~Upper Sheerstrake, double or single riveted.~~
" Butts of Main Sheerstrake, treble riveted for ½ length amidships. ~~Butts of Upper or Spar Sheerstrake, treble riveted length amidships.~~
" Butts of Main Stringer Plate, treble riveted for ½ length amidships. ~~Butts of Upper or Spar Stringer Plate, treble riveted for length.~~
" Breadth of laps of plating in double riveting 5¼ & 6 Breadth of laps of plating in single riveting Nil

Butt Straps of Keelsons, Stringer and Tie Plates, treble ~~double or single~~ Riveted? throughout No. of Breasthooks, 4 Crutches, 3 & Transom

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Frames & Plates by Palmers Co.

Manufacturer's name or trade mark, Jarrow iron Co. Iron by Stockton malleable Iron Co.

The above is a correct description.

Builder's Signature, for R. & W. HAWTHORN, LESLIE & Co. LIMITED [signature] Surveyor's Signature. James Sibun
Surveyor to Lloyd's Register of British and Foreign Shipping.

ROBERT EDMUND TAYLOR & SON, Commercial and General Steam Printers, 19, Old Street, Goswell Road, London, E.C.

2000—16 8/85—Trans.

Workmanship. Are the butts of plating planed or otherwise fitted? *Butts, & Edges of outer strakes Planed*

Do the edges of the carvel work and of the butts fay 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 very well*

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 very few*

Masts, Bowsprit, Yards, &c., are *of Iron &* in *good* condition, and sufficient in size and length. *If of Iron or Steel give Scantling, 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 Material, and if stamped with Maker's name.*

State also Length and Diameter of Lower Masts and Bowsprit *Pole masts. Main mast 68'.0" by 20 ins Diam. at partners; Foremast 76'.0" by 20 ins at partners; Plates 10'.0" in length × 6/16 at deck and 5/16 at head – double rivetted edges, and Butt straps 1/16 thicker than plates & treble rivetted. Makers of Iron Palmers Co*

NUMBER & LETTER for EQUIPMENT *19544 P*

SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested and Superintendant, also Number of Certificate.
No. *Complete Suit*	Chain (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendant.)	*150*	*1 5/8*	*66 1/2* *47 1/2*	*1 10/16*	*Marked L.P.H. – L.W. 5502; 5511 & 5506 respectively and certificates signed Robert Burnell*
Fore Sails,		*120*	*1 5/8*	*66 1/2* *47 1/2*		
Fore Top Sails,	Iron Stream Chain or Steel Wire	*75*	*1*	*27 7/8*	*1*	
Fore Topmast Stay Sails,	or Hempen Strm Cable					
	Towline, Hemp.	*90*	*3 1/4*	*Steel wire tested as per rule*	*3 1/4*	
Main Sails,	or Steel Wire	*90*	*8 1/2*		*8 1/2*	
	Hawser	*90*	*6*		*6*	
Main Top Sails, and	Warp	*90*	*5 1/2*			
quality *good*		*90*	*5*			

ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate	W'ght req'd per Rule.	Machine where Tested, Superintendant, also Number of Certificate.
Bower Anchors (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendant.)	*1*	*25.3.14*	*25.10.1.7*	*25.2.0*	*Marked L.P.H. – L.W. 10555; 10554; 10556; 10429 & 10360 respectively signed Robert Burnell ✻ R.W.C.P.T.S. 16040*
	1	*25.3.14*	*25.10.1.7*	*25.2.0*	
	1	*21.2.14*	*22.1.3.14*	*21.3.0*	
Stream Anchor	*1*	*9.1.0*	*11.6.3.14*	*8.2.0*	
Kedge	*1*	*4.1.14*	*6.15.0.0*	*4.1.0*	
2nd Kedge	*✻1*	*2.1.7*	*4.17.2.0*	*2.1.0*	

Standing and Running Rigging *Wire & hemp* sufficient in size and *good* in quality. She has *4* ~~Long~~ *the* Boats and *2 others & 2 life rafts*

The Windlass is *good* Capstan *good* and Rudder *good* Pumps *metal & good*

Engine Room Skylights.—How constructed? *On Shade deck* How secured in ordinary weather? *with thumb Screws*

What arrangements for deadlights in bad weather? *Solid Teak shutters & thick glass with strong wire guard*

Coal Bunker Openings.—How constructed? *in deck house* How are lids secured? *hinged & Locking bars* Height above deck? *–*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *6 Scuppers & 6 Ports on each side*

Cargo Hatchways.—How formed? *Teak comings and Headledges on Shade deck*

State size **Main Hatch** *8'.0" × 6'.0"* Forehatch *8'.0" × 10'.0"* Quarterhatch *8'.0" × 6'.0"*

If of extraordinary size, state how framed and secured? *—*

What arrangement for shifting beams? *—*

Hatches, If strong and efficient? *2½ solid hatches*

Reference should be made to any correspondence connected with the case.

Order for Special Survey No. *2013*

Date *9th Sept /87*

Order for Ordinary Survey No.

Date

No. *279* 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	*1887 Sept 27 Oct. 4. 6. 11. 13. 18. 24. 26. 28. Nov. 2. 1...*
2nd.	On the plating during the process of riveting	*16. 18. 29. Dec 5. 9. 12. 15. 16. 21. 28. 30. Jan 4*
3rd.	When the beams were in and fastened, and before the decks were laid	*10. 13. 17. 19. 24. 26. Feb 1. 3. 6. 10. 13. 17. 22. 23. 2...*
4th.	When the ship was complete, and before the plating was finally coated or cemented	*Apl 19. 26 May 2. 7. 10. 16. June 2 – 1888*
5th.	After the ship was launched and equipped	

State dates of letters respecting this case *18 August /87 & 10 Feby /88*

General Remarks (State quality of workmanship, &c.) *This vessel has been built of Steel, & in accordance with the rules and approved tracing ~~Constructed~~ with a sunk forecastle 46 ft in length, and a shade deck extending from the after end of Forecastle, Aft, and the Scantlings set forth on the tracing of midship sec... The upper surface of the wood flat of Shade deck is covered with strong canvas & painted, and fitted with iron Stanchions & rods. Is fitted with Twin Screws, and the bracket on each side for supporting the Propellors, are of cast Steel, and have been tested and examined in the usual way and proved satisfactory.*

The materials & workmanship throughout are of a good description. This is a Sister Ship to the S.S. "Chia Shih" Newcastle report 21545 and the freeboard as set forth in the Secretary's letter dated 18 August /87 marked on the sides of the vessel, punched in & verified as follows

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form.)

How are the surfaces preserved from oxidation? Inside *Portland cement to upper turn of bilges & paint above* Outside *Several coats of paint*

I am of opinion this Vessel should be Classed *✻ 100 A.1.*

The amount of the Entry Fee ......£ *4 : – : –* is received by ~~me~~ *us* *[signature]*

Special ......£ *58 : 3 : 6* *9/6/ 1888*

(to be sent as per margin). Certificate *Gratis – : –*

(Travelling Expenses, if any, £ ____).

James Gibson

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

FRI 8 JUN 88

It is submitted that this vessel appears eligible to be classed 100 A.1 "Steel" "pt Shade deck" as recommended with a freeboard of 6 ft – 10 ins from top of wood deck inserted in Certificate of classification and recorded in the Register Book 2 Dks (1 pt Steel) GRM 7/6/88

Committee's Minute

Character assigned *100 A1 Steel pt Shade dk freeboard 6 ft 10 2 Dks 1 pt Stl*

+ LMC 5/88

Larcp

Certificate to be sent to HULL CERTIFICATE WRITTEN

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