

STEEL STEAMER or MOTORSHIP.

Received at London Office 12 JUL 1941

State if Report has been sent on the Freeboard of the Vessel *Yes.*State if Report is sent on the Machinery of the Vessel *Yes.*

Date of completion of report

June 1941.

Port of *LONDON.*No. *109,702*

Survey held at

Faversham

Date First Survey

1st March 1940

Last Survey

*17th June**1941.*

On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw)

Single Screw.

Motor Vessel.

"EMPIRE CRAG"

(Machinery aft)

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings)

*Full Scantling.*State Type of Erections *Peep + Sunk Faste*

TONNAGE under Tonnage Deck...

*244.25*CLASS *100 A.1.*

State if with freeboard as condition of Class

No.

Built at

Faversham, Kent.

Do. of space or spaces between Tonnage Dk. and Upper Dk.

Total

Gross Tonnage

331.69

Register Tonnage

152.93

REGISTERED DIMENSIONS.

FEET.

Length

130.2

Breadth

25.2

Depth

9.05

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a)

L *130.2*

Breadth (greatest moulded)

B *25.0*

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)

D *10.77*

1st Longitudinal Number (L x D)

1406

2nd Number L x (B + D)

4670

Framing Depth "d," at middle of length. See Sec. 3 (1d)

8.5

Proportions—Depth to Length—Uppermost continuous deck to top of keel

12.1

Draught Moulded

*9'-10"*Launched *15 Mar 1941.* Yard No. *1777.*Builders *Messrs. James Pollock & Co. Ltd.*Owners *The Ministry of Shipping.*Managers *T. J. Metcalf*

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

Residence *London.*Port of Registry *London.*

If surveyed while building, afloat, or in dry dock

Building & afloat.

FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	21"	As app'd.	Bracket Floors, Frame		
" " from $\frac{3}{4}$ length amidships to Collision bulkhead	21"	" "	" " Reversed Frame		
" " in peaks	21"	" "	" " Vertical Struts		
SIDE FRAMING.			Centre Girder, depth and thickness amidships	27" x .33	As approved
Frame Amidships, Angle, [or]	5 3 .30	" "	" " top Angles	2 1/2 2 1/2 .29	" "
" " Extends up to	Upper Deck	" "	" " bottom Angles	3 2 1/2 .38	" "
Reversed Frame Amidships, Angle			Side Girders, No. each side and thickness	One .26	" "
" " Extends up to			Margin Plate depth (each of flange) and thickness	40" x .29	" "
Depth of Framing Girder	5"	" "	" " Vertical Angle to Tank side	3 2 1/2 .28	" "
Frames in Uppermost Continuous 'tween Decks, Angle, [or]			" " Bracket abaft 1/4 len. from stem	3 2 1/2 .28	" "
" " Second 'tween Decks, Angle, [or]			" " Vertical Angle to Tank side	3 2 1/2 .28	" "
" " Third " " " "			" " Bracket from forward 1/4 len. from stem to Panting Area		
" " from 1/4 len. for'd. to 15% len. from Stem	5 3 .30	" "	" " Gussets, spacing and scantling abaft 1/4 len. from stem		
" " In way of double Bottom	2 1/2 x 2 1/2 .30	" "	" " Gussets, spacing and scantling from forward 1/4 len. from stem to Panting Area		
" " in Peaks, Angle	4 2 1/2 .28	" "	Tank Side Brackets, height above base line at toe of Frame and thickness	48" x .32	As approved
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	3/4 1/2 5/4	" "	INNER BOTTOM PLATING.		
State if Frame Joggled	No		Breadth and thickness of Middle Line Strake	39" x .36	" "
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	Deep framing as approved	" "	Thickness of remainder in Holds	2 1/2 .34	" "
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	Frames doubled in AB. Additional Keelsons 3/4 1/2 .38 Seams d/d riveted	" "	Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	None	" "
SINGLE BOTTOM.			BEAMS.		
Floors, Depth and thickness at mid-line in Holds	37" x .40	" "	Uppermost Continuous Deck, amidships in Wells, Angle, [or]	5 3 .30	" "
Height of Brackets at side above base line at toe of frame	Floors continuous Level across	" "	" " in way of Bridge, Angle, [or]	5 3 .30	" "
Middle Line Keelson, on Floors, Angles, [or]			Spacing	21"	
" " Through Plate or Intercoastal Plate			Second Deck, amidships, Angle, [or]		
" " Foundation Plate on Floors	24" x .75	" "	Spacing		
" " Flat Plate Keel Angles			Third Deck, amidships, Angle, [or]		
Side Keelsons, No. each side	One	" "	Spacing		
" " thickness of Intercoastal Plate	.40	" "	Fourth Deck, amidships, Angle, [or]		
" " Angles	4 1/2 x 4 1/2 .71	" "	Spacing		
DOUBLE BOTTOM.			Peep Deck, Angle, [or]	5 3 .30	As approved
Solid Floors, thickness and spacing	.28 p 21"	" "	Spacing	3 1/2 3 .28	" "
" " Are Frame and Reversed Frame joggled?	No	" "	Bridge Deck, Angle, [or]		
Bracket Floors, breadth and thickness at middle line			Spacing		
" " breadth and thickness at margin plate			Forecastle Deck, Angle, [or]	5 3 .30	" "
			Spacing	21"	" "

PILLARS AND DECKS.

		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.				INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.	
PILLARS, No. of Rows.....		<i>Equivalent to one Row. As approved</i>				Stringer Plate, breadth and thickness in way of Bridge					
" in 'tween Decks, Size and Spacing.....		<i>Steel casings & girders</i>				Thickness of Plating abreast Deck openings in way of Wells					
" " " " " "						Thickness of Plating abreast Deck openings in way of Bridge					
" in Holds		<i>Girders on C.L.</i>				Thickness of Plating within line of openings...					
" " " " " "		<i>Cantilever Brackets to hold framing</i>				If Sheathed, material and thickness					
Centre Line Bulkhead.						Third Deck.					
Stiffeners and Spacing.....						Stringer Plate, breadth and thickness.....					
Plating, thickness of						If Plated, state thickness.....					
STRINGERS AND DECKS.						Fourth Deck.					
Uppermost Continuous Deck.						Stringer Plate, breadth and thickness.....					
Stringer Plate, breadth and thickness in Wells		<i>54 x .36</i>				If Plated, state thickness					
" " " " " "		<i>Poep 65 x .36</i>				Poep Deck.					
" " " " " "		<i>44 at break of poep; 40 at break of bulk</i>				Stringer Plate, breadth and thickness		<i>54 x .25</i>		<i>As app'd</i>	
" Angle in Wells		<i>3 1/2 x 3 .36</i>				Plating, Sheathing, material and thickness		<i>Steel .25</i>		<i>+ 2" J.D. Composition</i>	
Thickness of Plating abreast Deck openings in way of Wells		<i>.36</i>				Bridge Deck.					
Thickness of Plating abreast Deck openings in way of Bridge		<i>.28</i>				Stringer Plate, breadth and thickness.....					
Thickness of Plating within line of openings...		<i>.28</i>				Plating, Sheathing, material and thickness		<i>.20-P</i>			
If Sheathed, material and thickness		<i>Inside Poep 3/4</i>				Forecastle Deck.					
Second Deck.						Stringer Plate, breadth and thickness.....		<i>58 x .28</i>		<i>✓</i>	
Stringer Plate, breadth and thickness in Wells...		<i>✓</i>		<i>✓</i>		Plating, Sheathing, material and thickness		<i>Steel .28</i>		<i>✓</i>	

SHELL PLATING.

SCANTLINGS.						RIVETING.						
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.	NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.	
	Breadth.	Thickness.	Thickness.	Thickness.					Diam.	Spacing cr. to cr.		Diam.
	Inches.	Inches.	Inches.	Inches.								
FLAT PLATE KEEL	<i>37</i>	<i>.45</i>	<i>.42</i>	<i>.40</i>	<i>As approved</i>	<i>Double</i>	<i>3/4</i>	<i>3"</i>	<i>Treble</i>	<i>3/4</i>	<i>2 5/8</i>	<i>Lapped</i>
" DBLG. (if any)												
BOTTOM PLATING, No. of Strakes	<i>2</i>	<i>.35</i>	<i>.35</i>	<i>.28</i>	<i>" "</i>	<i>Single</i>	<i>3/4</i>	<i>3"</i>	<i>Double</i>	<i>3/4</i>	<i>2 5/8</i>	<i>"</i>
BILGE PLATING, No. of Strakes	<i>2</i>	<i>.35</i>	<i>.30</i>	<i>.28</i>	<i>" "</i>	<i>"</i>	<i>3/4</i>	<i>3"</i>	<i>Double</i>	<i>3/4</i>	<i>2 5/8</i>	<i>"</i>
SIDE PLATING, No. of Strakes	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>								
UPPER DECK, Sheer-strake in Wells.....	<i>53</i>	<i>.38</i>	<i>.28</i>	<i>.30</i>	<i>" "</i>	<i>Single</i>	<i>3/4</i>	<i>3"</i>	<i>Treble</i>	<i>3/4</i>	<i>2 5/8</i>	<i>"</i>
UPPER DECK, Sheer-strake in Bridge ...		<i>.54 at break</i>			<i>" "</i>	<i>"</i>	<i>3/4</i>	<i>3"</i>	<i>Double</i>	<i>3/4</i>	<i>2 5/8</i>	<i>"</i>
STRAKE BELOW Sheer-strake in Wells.....		<i>.36</i>	<i>.28</i>	<i>.30</i>	<i>" "</i>	<i>"</i>	<i>3/4</i>	<i>3"</i>	<i>Double</i>	<i>3/4</i>	<i>2 5/8</i>	<i>"</i>
STRAKE BELOW Sheer-strake in Bridge ...												
POOP SIDE PLATING				<i>.24</i>	<i>" "</i>	<i>Single</i>	<i>5/8</i>	<i>2 1/2</i>	<i>Double</i>	<i>5/8</i>	<i>2 1/4</i>	<i>"</i>
BRIDGE SIDE PLATING				<i>.24</i>	<i>" "</i>	<i>Single</i>	<i>5/8</i>	<i>2 1/2</i>	<i>Double</i>	<i>5/8</i>	<i>2 1/4</i>	<i>"</i>
FORECASTLE SIDE PLATING				<i>.24</i>	<i>" "</i>	<i>Single</i>	<i>5/8</i>	<i>2 1/2</i>	<i>Double</i>	<i>5/8</i>	<i>2 1/4</i>	<i>"</i>

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel	<i>9</i>
Extending to Upper Deck (Sec. 3 c)	<i>✓</i>
" Deck next below	<i>✓</i>
As per Rule	<i>9</i>

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any Departure from Approved Plans to be Noted.
KEEL, Bar				
STEM	<i>Roller bar</i>	<i>6 x 1 1/2</i>	<i>As app'd</i>	
STERN FRAME	<i>Propeller Post Forging</i>	<i>5 1/2 x 2 1/4</i>	<i>Black</i>	<i>" "</i>
	<i>E.W. Design</i>			
	<i>Rudder</i>	<i>Steel</i>		
Speed of Vessel	<i>9 knots loaded</i>			
RUDDER—Type	<i>Semi Balanced</i>			
" A x D				
" Diam. of head	<i>4</i>			
" Mainpiece at top pintle	<i>4 1/2</i>			
" " heel	<i>3</i>	<i>3 1/2</i>	<i>see plan</i>	
" how constructed	<i>3</i>	<i>Armo</i>	<i>✓</i>	
" double or single plate	<i>.66</i>			
" coupling, vertical or horizontal	<i>horizontal</i>			

	Plating Thickness.	STIFFENERS.			
		VERTICAL.		HORIZONTAL.	
		Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD, Upper tween decks	<i>✓</i>				
" " Second	<i>✓</i>				
" " Third	<i>✓</i>				
" " Holds	<i>Fr. 19</i>	<i>32-28</i>	<i>5 x 3 x 38</i>	<i>30</i>	<i>✓</i>
COLLISION	<i>Fr. 63</i>	<i>32-28</i>	<i>5 x 3 x 34</i>	<i>24</i>	<i>5 x 3 x 38 (One)</i>
AFTER PEAK	<i>Fr. 5</i>	<i>36-28</i>	<i>5 x 3 x 30</i>	<i>24</i>	<i>✓</i>

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)	<i>Dorman Long</i>
<i>x Colville. (Open hearth)</i>	
Has the Steel been tested as required by the Rules?	<i>Yes.</i>

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

List of Plans.

- (1) Midship Section
- (2) Plan of Decks, Bulkheads &c.
- (3) " " Sternframe & Rudder
- (4) " " Shell Expansion Keelsons &c.
- (5) Steering Gear Details
- (6) Motor Seating Plan
- (7) Life boats & davits
- (8) Oil Fuel Tanks
- (9) Arrangement of Bolted Quadrant Tiller.

Also General Arrangement Plan.

THIS VESSEL

Sister of EMPIRE CREEK No. 1776.

In test sternframe & Rudder forgings see Forgings Rpts attached to London Rpt No. 100,539.

PARTICULARS OF ELECTRIC WELDING (if employed)

The stern frame is built up of separate forgings connected by electric welding using an approved electrode. After welding frame annealed; & hammer & drop tests applied with satisfactory results.

Reinforcing parts, e.g. Vent coverings, bollard stools, bulwark stanchions to deck, brackets to engine seating girders, lugs to take ceiling & deck composition, electric welded with the approved plans.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book

The Notations:

"Cargo battens not fitted." "Quinner stern" & "Oil Engine" should be recorded in the R.B.

Particulars of Drop Test of Cast Steel Anchors, viz.:—
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower
2nd "
3rd "

Wt = 5 cwt. 1 q. 10 lb. N. H. H. Cert. No. 10307; 18th Sep. 1939
Wt = 5 cwt. 0 q. 6 lb. P. E. Cert. No. 10454; 24th Oct. 1939
STEAM ANCHOR Wt = 2 cwt. 0 q. 20 lb. N. H. H. Cert. No. 10212; 6th Sept 1939

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 37.2 ft., R.Q.D. ft., Bridge ft., Forecastle 19.1 ft.

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated

Official No. 168183. Signal Letters Extreme Breadth over Belting (Circ. 1611) Over-all Length (Circ. 1703) 136'-0"

No. and Material of Decks 1 PL (SK)

Parts of Bottom of Vessel coated with cement or approved composition Fore & After Peaks, & Engine Room. Cemented and coated with bituminous solution. Double bottom tanks coated with bituminous solution.

Particulars of composition (if fitted) and of approval J. D approved composition on Prop deck and inside poop

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included.)

Where Fitted.	Length. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	38.5	59.	Fore peak tank,	19.0	50
Double bottom, under Engines and Boilers,			After peak tank,	9.25	25.
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,	38.5	53.5	Other tanks, if fitted, 2 portable tanks in E.R. for fuel oil.		
Total length (if continuous), and Capacity	77.0	112.5	(If necessary, furnish further information by sketch.)		

Order for Special Survey No. 11: 4: 41

Dates of Surveys held while building

1940: Mar 1. 25. May 7. 31. June 13. 21. July 5. 12. 24. Aug 9. 30. Sep 5. 6. 27. Oct 1. 15. Nov 1. 7. 20. 25. 30.
Dec 9. 16. 23

1941: Jan 8. 15. 25. 29. Feb 6. 13. 20. Mar 4. 8. 13. 15. Apr 23. May 1. 8. 15. 23. 29. June 7. 12. 17

Total No. of Visits 44

Lloyd's Register Foundation