

Greenock.

March 20th 1896

Sidney A. G. Nash

Mr Stuart, Superintending Engineer on behalf of the Owners, Messrs Russell and Son, survey the iron screw steamer "Strathleven" of Glasgow, 2436 tons register, H. Gormack master, for the purpose of ascertaining the extent of damage stated to have been sustained (1) through grounding on the East coast of Japan on the 26th July 1894 while on a voyage from Hakodate to Yokohama (2) through stress of weather from about the 12th to 16th January while on a voyage from New York to Liverpool. For further particulars see Log Book and Protest.

On examination, while in the Port Glasgow Dry Dock on the 7th February and subsequent dates, found, the plating of the flat of bottom, considerably set up in way of the fore end of Boiler room on both sides of the ship especially on

the Port side, and, in addition to the foregoing, set up and indented on the Port side in way of Engine room, spare bunkers, No 2 hold and the after hold respectively, the badly set up and indented plates being as follows, viz:- On Port side -

- (1) In way of Boiler room - two plates in the garboard strake (Nos 12 & 13 counting from forward), three plates in the strake adjoining the garboard or A strake (Nos 12, 13 & 14), two plates in B strake (Nos 13 & 14) and one plate in C strake (No 14)
- (2) In way of Engine room - two plates in A strake (Nos 15 & 16)
- (3) In way of spare bunkers - one plate in A strake (No 11)
- (4) In way of No 2 hold - one plate in A strake (No 10) and one plate in B strake (No 10)
- (5) In way of after hold - one plate in A strake (No 20)

On Starboard side - two plates in A strake (Nos 12 & 13) and two plates in B strake (Nos 13 & 14).

Also found the following plates adjacent to the above damaged ones slightly set in along their edges, viz. on Port side, one plate in B strake (No 21), one plate in C (No 13) and two plates in garboard strake (Nos 14 & 15) slightly unfast along their upper edge



©2018

Lloyd's Register
Foundation

and on the Starboard side two garboard plates (12 & 13) and two plates in C strake along the edges contiguous to the badly set up plates in A & B strakes.

I recommended all the badly set up and indented plates enumerated above to be removed, and the following ones found fractured after that recommendation has been put into effect to be removed, viz., on Port side:-

one plate in garboard strake (13),
five plates in A strake (12, 13, 14, 15, & 16)
and one plate in B strake (10);

on Starboard side:- one plate in A strake (12);
the remainder of the badly set up plating to be fired, faired and replaced, viz.,
one plate in garboard strake (12),
three plates in A strake (10, 11, and 21),
two plates in B strake (13 and 14), and
one in C strake (14), all on the Port side,
with one plate in A strake (13) and two
in B strake (13 and 14) on the starboard side,

Also recommended the following slightly indented plates to be faired in place, viz., on Port side - one plate in B strake at indent at lower edge; one plate in C strake (13) along its upper edge, the rivets in that edge being cut out where required to effect this; and the upper edge of two



© 2018

Lloyd's Register
Foundation

garboard plates (114 & 115) before the adjacent plates in H stroke are replaced;

on the Starboard side - two garboard^(112 & 113) plates (112 & 113) and two plates in C stroke, & the rivets in the frames cut out where necessary to allow of the plates being set down fair, and to enable the frames in way to be properly faired.

On further examination after the damaged plating had been removed, found four floor plates buckled, one being very badly damaged; the framing in way of the Boiler room considerably set up for a length of about twelve frame spaces on the Port side and ten on the Starboard and a number of the rivets through these frames and their floor plates slack and started - four of the frames on the Port side were found temporarily repaired by rivets put in between the original ones which had been sheared, and besides these, six frames on the Port side and two on the Starboard side found fractured, in way of the spare bunker and No 2 hold, thirteen frames set up in way of the plates in H stroke. The rivets through the floors being all slack or loose, and in way of the Engine room eight frames slightly set up in way of H stroke, and the

and the rivets through the floors started.

Also in the same locality but nearer the bilge about twenty rivets in the frames started, and the riveting in the lugs connecting the intercostal plates of the side keelson to the shell for twelve frame spaces in the engine room started or loose.

Recommended one floor plate to be renewed for about four feet on each side of the middle line and to be efficiently connected to the remainder of the original plates, and the other three on Port side to be forced and faired in place; of the damaged framing ten on the Port side and five on the Starboard side to be renewed from the middle line to the bilge so as to give a proper shift of bulks on each side of the bilge keelson, the lengths of these frames averaging about fourteen and eleven feet alternately; one other fractured frame to be renewed for about five feet, and three frames at their bulks to be efficiently strapped with back bars; two frames on the Port side, and six on the Starboard side to be set fair in place after the cutting out of the rivets from the middle line to about the bilge keelson; and further to ensure the fairness of bottom in

Boiler

© 2018



Lloyd's Register
Foundation

Boiler room the frames to be set fair by means of ribbands before the plates are replaced, thirteen frames in way of the spare bunker and No 2 hold, and eight frames in engine room to be heated and faired in place after cutting out the rivets, about eight in each frame.

The started frame rivets in engine room to be renewed; the best pieces to the frames at the middle line where damaged and in way of the renewed and faired frames to be renewed, about twelve in number, and three others set fair and rivetted; all the angle chocks to both the bilge and side keelsons to be renewed where damaged or set up and as required in way of the faired and renewed plating.

Further recommended the cement of bottom in way of the damaged plating to be renewed, and the whole of the new work recoated as required. The engine room bilges to be cleaned out for the examination of the cement and riveting on Star side, and all the work consequent upon the effecting of the foregoing repairs, such as the clearing of the bunker and lifting the close ceiling in same, the lifting of the stokehold, and part of the engine room platforms, the spar and close ceiling



©2018

Lloyd's Register
Foundation

ceiling in the hold in way of damage, and the removal of piping, fresh water tank and other fittings to be effected, and all the work and fittings thus disturbed to be replaced or made good where damaged by removal. The bottom to be recoated.

(2) Damage through heavy weather.

Among the wood bulkheads to forecastle wing-house on Port side started and damaged, the wood panelling to same and the door being badly broken; the cast iron butt on Starboard side of forecastle deck for shank painter broken; the wood bulkhead at the front of bridge with that of the side of the Port alleyway forming the chief engine room started, the panelling damaged, and the coamings of the bulkhead started and reported to have been leaking; the wood casing to steam pipe in Port alleyway broken; the iron steam pipe covers in way of the foremast, just abaft the bridge and round the crane near the after hatch with several chains to same broken;

The glass of one circular light in bridge bulkhead and of the window in poop bulkhead broken; the copper water service pipe both before and abaft the bridge broken.

The brass caps to same missing, and several of the clips connecting this pipe to ship's side broken;



© 2018

Lloyd's Register
Foundation

the port lifeboat stove in, and the chocks
to same damaged; the steering gear strained
the threads on ends of steering rods being
stripped; the door of No 2 gangway, port
side, and the bulwark plate just abaft it
set in, the main rail angle in way broken
and some of the rivets in same sheared,
the wood stringback to gangway broken
and two bulwark stanchions started from
riveting in bulwark plate.

Recommended, the wood bulkheads
to forecabin wing-hatch be made watertight
and the paneling and the door renewed;
the plank painter built on forecabin renewed;
the paneling of the bulkheads of chief
engineer's room to be renewed as required.
The bulkhead made watertight, the coamings
renewed in front of bridge and alleyways.
The wood cover to steam pipe in alleyway
to be partly renewed; the iron steam pipe
cover in way of foremast and abt bridge
to be renewed, about twenty five feet, with
several short lengths in way of crane, and
five stub to same renewed; the glass of
bridge light and poop window to be renewed
the hen coop and wooden deck repaired;
two lengths of copper water service pipe
forward and two aft to be removed and
repaired, the caps to be renewed, and the



©2018

Lloyd's Register
Foundation

cleps, stow in number, to be stowed;
four planks of the bridge lifeboat to be
stowed, and the boat overhauled in way
and the boat checks re-filled; the
storing gear overhauled, and the ends
of the rods renewed; the riveting of the
hinges connecting gangway door to
bulwark plate to be cut out, and the door
taken off and set fair, the bulwark plate
joined in place, eight feet of the main-rail
angle renewed, the door re-hung, the
struts refastened, and the wood
strongback renewed.

The whole of the foregoing
recommendations to be carried out in
such a manner as to place the vessel
in the same good and efficient ^{condition} as she
was in prior to sustaining the damage
by alleged grounding and heavy weather.

S. A. Vash.
Clyde Sumner.

Amount
£ 5-0
11-0
16-0