

Lloyd's Register of British & Foreign Shipping

Port of Messina

April 12th 1892.

This report must bear only the signature of Surveyors to Lloyd's Register of Shipping.

This is to Certify that
Francis Ducoster, the
undersigned Surveyor to this Society did at the
request of Messrs Pierce Becker and Hardi, owners
of the Steamship "Città di Messina", floating
in the Port of Messina on the 14th March and
subsequent days, I proceeded on board the said ves-
sel, assisted by Mr Robert Queiroli, master of
the Steamship "Sicilia", for the purpose of holding
on board the said steamer the survey No 3, necessary
for reclassing her.

Having this day 16th March found ready for the
survey the decks, I begin to survey these.

The "Città di Messina", is provided with two
decks, one of which, the lower one, is in iron plates,
and is in very good order, but it requires to be scraped
and painted, while the other, the upper one, is covered
with red pine wood, in some places of which, the
planks are partially worn, especially round the
hatchways where they are naturally more used,
and in some other places where the planks are in
contact with the skinger plates, the wood had been
decomposed, becoming rotten.

For this deck I suggested to plane the whole,

reducing it to a uniform thickness (which would be about 3 in $\frac{3}{4}$) changing all those planks that are defective in strength and thickness.

The same job has been done for the Poop deck, for castle deck and bridge deck, but these were in much better condition than the main upper deck.

The two lateral passages under the bridge house, I suggested to make nearly new, they being more worn out on account of the continual traffic through them, as also for the trimming of the coals, which reduced the planks, round the coal bunkers holes and in some other points, very thin. Fore and aft compartments, four in number.

In the fore and aft compartments of the upper and lower deck, cleared from all the holds and peaks, and all the close ceilings removed for the purpose of exposing clearly all the rivets of the inner surface of the plating, stringers, water tight bulkheads, the whole frames, and all the ends of the beams, placed in these four compartments, and having beaten and scraped all, for removing all the oxidation formed on the surfaces of the said parties.

On day 16th March being all ready, I proceeded to the examination of the whole, for assuring myself as to ^{the} soundness of all the details, which having been minutely visited, I found every thing in good order, but I suggested to paint the whole surface with two coats of soapstone paint.

The cement coated in the bottom of the plating,

between the frames, had been all inspected, having chipped a portion of it in different places, and found the same in very good state, and was adhering to the plates as hard, as iron, for which reason I dispensed its removal.

Water Ballast Tanks.

The steamer is provided with three water ballast tanks, one of which, the largest, is built in the bottom of the ship, at the after part of the engine room water tight bulkhead, and is of 113 tons capacity. This tank has been cleared entirely, having taken away from the top part of it all the coverings that were on, after it had been scraped and cleaned internally and externally, and I visited it internally and externally in all its details, which I found in very good order, with the exception of two plates of the top part, on which I observed two corrosions, through which, the plates were thinner than the other, and therefore I suggested to cut off the thinner parts of these plates and replacing with new proper material, rivetted, and couked on.

Further I proceeded to test for its water tightness, filling it directly from the sea, which produced in the tank a water pressure, corresponding to the head of the light water line of the ship, which in this case was nearly $10\frac{1}{2}$ ft, and with this pressure no leakage I observed.

The same procedure has been done for the other two smaller tanks, of which, one is of $14\frac{1}{4}$ tons, built at the fore part, and the other of 18 tons is built

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in the after part of the ship, both of which having myself visited and tested with the same pressure, I found them in very good state, without showing any leakage

After that I suggested to paint them externally and internally with two coats of soapstone paint and laying on the top outside part of the largest Tank a stratum of coal tar, mixed with cement, which has been considered by Mr Marchant, Master of the ship, a good stuff for keeping the plates free from rust —

Engine and Boilers Compartments

These two compartments, have also been chipped and cleared off all the inside rivets, plates, flat of bottom the whole of the frames, floor plates, Keelsons, engines and boilers bearers, water tight bulkheads and all the inner surfaces of the plating belonging to these two compartments, have all been examined and verified by me personally, and I have found in very perfect condition.

I have also inspected and tested carefully in different places the cement coated in the bottom of the plating of these two compartments, having chipped some of it, which I found very sound, adhering to the surfaces of the plates as hard, as iron, for which reason I dispensed with its removal.

Coal Bunkers.

The inside of the coal bunkers plating, rivets, ends of beams, frames and stringers, had been entirely chipped and visited in all its details, which I

found in very good order with the exception of the vertical plating inside the stoke hole compartments which plates had the bottoms corroded, and I suggested to cut off the portion of the corroded plates, replacing them with new material.

On day 10th April and subsequent days I proceeded to the dry dock, where I found the steamer "Città di Messina" already placed in blocks of sufficient height to examine the whole bottom, and proper stages were formed alongside the vessel, to examine the whole plating.

The whole surface of the outside plating, had been all scraped off from the oxidation and painting previously smeared on. The surface of the plates, came out after the scraping, very sound, smooth, and bright, free of any signs of corrosion, just like new plates, the rivet heads are in such good condition that it was very difficult to perceive the plates were they are rivetted, only 5 or 6 of them, which fix the collision water tight bulk head to the hull, showed some corrosion on their heads, for which reason I suggested to replace them.

All the rivetting of the plates that connects the keel, stern post and stem, had been thoroughly visited, the same has been done for the rudder and its pintles which had all been found in very perfect state. In one word all the outside part of the vessel is kept so good, that it seems a new ship and therefore I deemed necessary to drill only 10 holes to

the different plates, about the midship line on each side.

The holes drilled $\frac{5}{8}$ in diameter, are two on the Garboard strake, which the plates of which are fully $\frac{11}{16}$ inch in thickness, four holes had been drilled on the flat bottom plates, between the Garboard and the lower edge of the sheer strake, which plates are $\frac{10}{16}$ thick, two holes had been drilled on the sheer strake plates of which are $\frac{12}{16}$ thick and the other two holes had been drilled on the plates about the floating water line, which are $\frac{8}{16}$ thick.

During the time that the steamer was in dry dock, the water ballast tanks were filled, for the purpose of testing if was any leakage through the rivetting of the outside part of the ship.

I further carefully examined the vessel's sea connections, fixed on the bottom of the ship, and found the same in very good order.

The propeller had been disconnected and the tail shaft shifted and cleaned. The same was minutely examined together with the keys, and found to be all in excellent state of preservation showing no flaws and practically no deterioration.

The lignum vitae in the stern bush being in a very good state having not more than $\frac{1}{16}$ worn, because only 18 months ago, when they provided the steamer with a new tail shaft, they replaced also the lignum vitae in the stern bush.

Having this day 13th April finished the survey of the hull, they proceeded to paint the copper with

three coats of Hartman Rathjens compositions, and on the subsequent day the steamer went out of the dry dock.

On the 14th April I visited all the water ways, flat of decks with their fastenings, and found the same in good order with the exception of a few repairs of little importance which were required to the bulwarks and parapets, which all had been done to my entire satisfaction.

The upper deck, Poop deck, Bridge house deck and fore castle deck, after having been entirely planed, had been entirely coulked and pitched, the mean thickness of the planks of the upper main deck is about $3\frac{3}{4}$ inches.

The four steam winches fixed on the upper main deck, I found in very excellent state, they having undergone a very exhaustive reparation having made to them new brasses and bushes to all the shafts of the gearings and a general readjustment to all the connecting rods, and reversing gear.

The same had been done for the steam steering Engine and rudder gearing, which also is in very excellent state.

The windlass also had been examined, and found in very good order with the exception of two new bushes that were required to the main shaft which had been done to my satisfaction.

All the masts and spars had been visited and found in very good conditions, but as the steamer

goes always under steam, because with rough weather she rolls very much, therefore they go only with the masts, keeping all the spar on deck, and the sails in the hold.

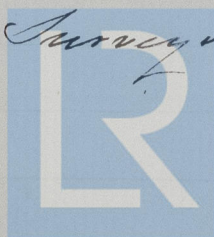
The chain cables had been ranged on deck and found in very good state, quite new, they are one of nearly 280 fathoms stud chain cables of $1\frac{11}{16}$ full, and one of 75 fathoms stream stud chain cables of $1\frac{1}{16}$ bare.

I examined also 4 steel wire cables, and hemp ropes of $3\frac{1}{2}$ size the steel wire cable, and $7\frac{1}{2}$ inches bowline and Howsers Hemp ropes, which are all in very good state.

Having this day 19th April made a general examination of the equipment in addition to a final survey of some other little repairs made, that I suggested and finding the former all in order, and the latter to my satisfaction, I am of opinion that the vessel is in a good and efficient state, and fit to carry dry and perishable cargoes to and from all parts of World, and that I propose to continue her in her present class 100 A I in the Register Book of this Society, but subject to the periodical survey as per rule.

F. Ducroix

Engineer Surveyor to the Lloyd's Reg.



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