

Loss of S.S. "John Harrison"

Second day

Witness:- Mr. H. Harrison. Examination continued.

{Cross-examination by Mr. Burton}

Re: Captain's letter of 27/10/24. On the 1st voyage the vessel did 7.2 knots on 13 tons of coal. Do you consider this satisfactory? — Yes, for a new ship.

The Captain writes — "This ship has not got power to steam in such weather" { N.E. winds & heavy sea; light ship }
What did this report signify to you? — I think the Captain was anxious because he was forced to put into Brest for extra bunkers.

A letter was here put in from the Chief Engineer of the ship stating that the Engines and Boilers were quite satisfactory. Also a statement showing that at the designed revolutions (89) the vessel's speed was $8\frac{1}{2}$ knots.

Do you think the vessel has insufficient power? — No.

The letter from the Captain dated 6/12/24. states that on the voyage from Amsterdam to Southampton with fresh head winds, light ship, a speed of 6.7 knots was obtained with a consumption of 11 tons. — That is so.

Did you instruct the Master re: loading? — No.

Were 2 extra firemen taken on before the vessel left on her last voyage? — Presumably so as she had her full complement of 107 all told.

Have you drawn any inference as to the loss of the vessel considering the position in which the lifeboat was found? — No. That was about 15 days after the presumed date of the catastrophe. The Captain probably shaped a direct course from Harwich Head instead of keeping near the land.

Cross-examination by Capt. Tait & Messrs. Lloyd's Register

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What induced you to build a ship without rise of floor? You know the general objection is that the holds can never be thoroughly drained: — I cannot answer as I am not a technical expert.

Witness — M^r Alex Fairfold, Assistant Superintendent Engineer.

Had you the supervision of the John Harrison during construction? — Yes, from time to time.

You were at the trials, and found everything satisfactory? — Yes.

The vessel was fully ballasted and drew 6' 3" forward and 10' 11" aft? — Yes.

She attained a speed of 9.76 knots? — Yes.

When did you last see the "John Harrison"? — at Swansea on Nov^r 11th 1924.

Was the Board of Trade life saving equipment in order? — The first officer saw it was correct and signed for it.

Had the vessel sufficient reserve buoyancy forward? — Yes.

The auxiliary steering gear was ready for use? — Yes.

The vessel had one dinghy in excess of Board of Trade requirements? — Yes.

Examination by Captain Tait. (Assessor)

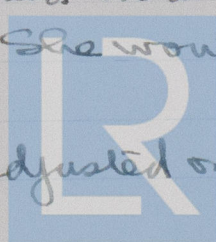
Suppose the vessel was 5 or 6 in down by the head and down to her marks what should be done? — Nothing.

Do you consider it proper to trim by using the afterpeak? — Yes. — well I can tell you that it brings extra strains on the ship and shafting.

There is no protection for the casings and deck houses? — No.

In bad weather the Raised Quarter Deck would be continually flooded? — She would ship a lot of water.

The Compasses were adjusted on the day of the trial.



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trials? - Yes

Witness:- Mr Blackbourne. Director of the Chartering firm

This witness gave no evidence of importance

Witness:- Mr G. Barrals. Staitheeman at Howden.

You were aboard the vessel at 1. p.m. on 24th Dec^r 1924? Yes.

What did you see? - No 2 and 3 holds were filled and the hatches and tarpaulins on but I did not notice any lashing ropes.

at 3.p.m. from the staithe I saw No 1 full to the top of the hatch coaming, and preparations being made to cover No 1 hatch. No 4 hatches were on.

All hatches except No 4 were level with coal to the top of the coaming.

Witness:- Mr Thomas Beech - Chartering Clerk.

The cost of trimming the hatches in a self-trimming collier is $2\frac{1}{2}$ per ton less $33\frac{1}{3}\%$ i.e. per ton of total coal cargo.

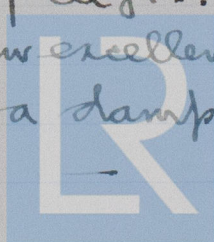
North-Country coal varies from 43 to 52 cubic foot per ton. Cramington is from 48 to 50.

The gross cubic capacity of the John Hainson was 118,448 cu. ft.:

The nett capacity of the ship as a self-trimmer taking 35° as the angle of repose of the coal was 107,738 cu ft.:

The actual space occupied by cargo on this voyage was 110,557 cu ft.:

This represented an excellent stowage. The cargo was shipped in a damp condition.



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Witness:- Mr William Robson - Traffic Manager
Cramlington Coke Co.:

Witness described the screening and washing operations. The coal is washed to get rid of stone and is separated into 3 different sizes by 1 in mesh, $\frac{5}{16}$ " mesh, and smaller before washing in running water and subsequently mixed together again before trucking.

When the coal passes to the wagons it carries 8 per cent of water, but when it reaches the weighing machine immediately prior to being teamed into the holds the water, which is known as 'adhesive water' is reduced to 3 per cent.

This 3 per cent is an allowance which is deducted from the gross weight as found at the weighing machines to determine the quantity of coal to be paid for.

He had calculated the angle of repose of Cramlington wet small coal and found it to be 38° with the horizontal.

Witness:- Mr John Scorer, Staithes Manager.

The tons of coal in each hold were:-

No 1	-	530 Tons
" 2	-	790 "
" 3	-	613 "
" 4	-	365 "
		2298 "

Witness then stated that this was the weight shown on the bills after making the 3 per cent allowance. The weighing machine weight was 2,369 tons, and really this weight of coal and water went into the ship.

Note. This statement was confirmed by Lloyd's Register Foundation

the previous witness and caused a mild sensation because all the calculations of stability and draught had been made on the nett weight of 2,298 tons. Moreover the draughts on this basis were stated to agree with the witnesses evidence re: actual draughts noted. The difference of 71 tons makes 3 in difference in draught.

Witnesses also confirmed that the cargo as delivered agrees with the nett weight after deducting the 3% for water; but the opinions as to what happened to this water, amounting to say 70 tons, were very indefinite.

This witness, with 35 years experience of loading colliers also made the following important statement:-

With self trimming colliers the only spaces left are those around the sides of the hatches, and it is possible to fill the hatches right up. With a collier requiring hand trimming it is possible to fill the centre holds but the end holds remain $\frac{2}{3}$ rds full when the vessel is fully laden. Thus a self trimmer is actual less liable than a trimmed collier to suffer from shifting of cargo

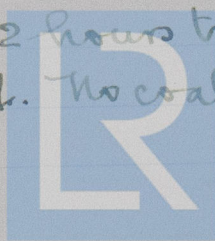
Witness:- M^r Adam Bell - Foreman coal trimmer

Witness stated there was no difficulty in trimming the 'John Harrison'.

The holds were loaded in the following order:-
No 3, No 2, No 4, No 1.

The ship had no list.

It takes from 1½ to 2 hours to trim each hatch, and 8 men are employed. No coal is pushed under the coamings.



Witness:- Mr James Bathy - Assistant Dock Master
Howden

This witness was uncertain and gave no evidence of any value.

— " —
Witness:- Mr Irue Britton Burn - Pilot.

Witness brought the vessel in to the Tyne; took her to the buoys at 11.45 p.m. on Christmas Eve, and took the vessel out on 25th December.

The crew were all aboard, no signs of the festive season were evident. The vessel was delayed because she was two firemen short. The vessel answered the helm easily and the Chief Officer told him she was a satisfactory ship.

When the ship sailed the sea was calm.

— " —
Witness:- Mr J. West. Formerly Chief Boatswain of the
"John Harrison"

Witness sailed in the vessel on her first voyage.

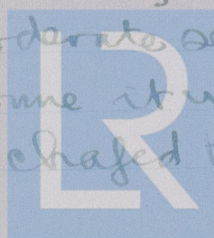
The well deck was often full of water, and at times the well filled again before it was free from the previous water.

One washport burst on the first voyage and later another was broken by the sea.

When going from Bayonne to Brest, light ship, the speed of the vessel was very much decreased by heavy weather.

On the way to Bayonne loaded the Captain threw to and a lot of water was shipped fore and aft. No 1 hatch took a lot of heavy water. The fore well filled even in a moderate sea. © 2020

On arrival at Bayonne it was found that the locking bars had chafed the



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slightly. No water got down the hatch or into any part of the ship.

When going from Bayonne to Swansea, light ship, the vessel was uncomfortable. With the N. E. wind and heavy sea prevailing the ship tumbled about, did not make much headway but made a lot of leeway. In the end it was found necessary to make for Brest for bunkers. When light the vessel shipped practically no water.

Witness left the ship because he held a 1st mate's certificate and his time as Chief Boatswain did not count towards a Master's ticket.

Conclusion of 2nd Day. O.K.



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