

FOR OFFICIAL USE

(No. 7789.)

RIO PRETO (S.S.).

THE MERCHANT SHIPPING ACT, 1894.

REPORT OF COURT.

In the matter of a Formal Investigation held at the Law Courts, Cardiff, on the 24th, 25th, 26th, and 28th days of May, 1923, before Sir THOMAS LEWIS, Stipendiary Magistrate, assisted by Captain DAVID DAVIES and Captain H. C. FENWICK, O.B.E., R.D., R.N.R., into the circumstances attending the stranding of the British steamship "Rio Preto," of London, about three miles from St. Quentin Point, coast of France, on the 18th day of December, 1922, whereby she became a total loss.

The Court having carefully inquired into the circumstances attending the above-mentioned shipping casualty, finds for the reasons stated in the Annex hereto, that the stranding and consequent loss of the vessel were due to continuing too long to navigate her on a course set and steered from an erroneously assumed position at her point of departure and neglecting until too late to verify her position by the use of the lead.

For his neglect to use the lead the Master is censured.

Dated this 28th day of May, 1923.

THOMAS LEWIS, *Judge.*

We concur in the above Report.

DAVID DAVIES, }
H. C. FENWICK, } *Assessors.*

ANNEX TO THE REPORT.

This Inquiry was held at the Law Courts, Cardiff, on the 24th, 25th, 26th, and 28th days of May, 1923. Mr. L. H. PRATT (Vachell and Co), appeared for the Board of Trade, and Mr. GILBERT ROBERTSON for the Master.

The "Rio Preto," Official No. 115123, was a single screw steamer, built of steel, at West Hartlepool, by the Irvine's Shipbuilding and Dry Dock Company, Ltd., in 1901; and was registered at the port of London. She was of the following dimensions, viz.:—Length 345 feet, breadth 47·9 feet, and depth in hold from tonnage deck to ceiling amidships 27·6 feet; and was built to Class 100 A 1 at Lloyd's. When built her registered tonnage was 2,612·42 tons, and gross tonnage 4,026·38 tons. The registered tonnage was reduced to 2,564·49 tons in April, 1916. She had one deck and two masts, was schooner rigged, and of the three island type, viz.:—Poop 38·7 feet in length, and bridge 99·8 feet in length. She had a fore-castle head, under which was the usual accommodation for the seamen and firemen. She had six watertight bulkheads, and a steel cellular double bottom which was divided into six watertight ballast tanks, having a capacity of 977 tons. When built she was named the "Birmingham," which was changed to "Rio Preto" on the 6th February, 1915.

She was fitted with inverted direct acting triple expansion surface condensing engines, having three cylinders of 25 inches, 40 inches, and 67 inches dimensions; the length of stroke being 45 inches. She was fitted with two steel boilers, working at a pressure of 160 lbs. The engines and boilers were constructed by Messrs. Richardson, Westgarth and Company, Ltd., of Hartlepool, in 1901, and were designed to give her a speed of nine knots.

The vessel was owned by Messrs. Thomas Samuel Lewis, Tom Lewis, Samuel Lewis, and Willie Lewis, of Cardiff, and Mr. Samuel Lewis, of Rothesay Chambers, Cardiff, was designated Managing Owner under

advice received the 3rd March, 1922. She was purchased by them in November, 1919, for £116,000, and about £3,400 was subsequently spent on repairs and renewals. When she sailed on her last voyage the Managing Owner states that he estimated her market value was about £27,000.

She carried four boats—two being lifeboats—which were fully equipped according to the requirements of the Board of Trade. She had three compasses—a standard compass on the top of the wheelhouse by which the vessel was navigated; a steering compass in the wheelhouse; and a compass on the bridge deck. The compasses were last adjusted by Mr. T. L. Ainsley, at Port Talbot, on the 18th September, 1922, when a deviation card was supplied to the Master. She carried a patent taffrail log and a patent sounding machine, which were in good working condition.

The "Rio Preto" left Poti for Boulogne on the 19th November last with a cargo of about 6,400 tons of manganese ore. Her draught of water on leaving was 24 feet 3 inches mean. She had a crew of 30 hands all told, and was under the command of Mr. John Jones, who held a certificate of competency as Master, No. 023439. She proceeded on her voyage, and called at Algiers for bunkers. After coaling she proceeded, and about 6.30 a.m. on the 11th December, passed Europa Point. Light north-east winds and fine weather were experienced up to Finisterre, when the wind shifted to south and south-west, and increased in force to a fresh wind, and afterwards veered round to the N.W.

At 11.30 a.m. on the 16th December she passed Ushant, which bore S. 50 deg. E., distant four miles. The course was then altered to N. 70 deg. E. magnetic for the Casquets. About 4.30 p.m. Isle-de-Bas lighthouse was passed, distant about 12 miles. About 2.20 a.m. on the 17th Hanois Light was passed, distant about 10 miles.

At 4.50 a.m. the Casquets Light was abeam, distant five miles, which was ascertained by four point bearing. The course was then altered to N. 81 deg. E. magnetic, with a view to making the "Royal Sovereign." The patent log registered 125 miles. There was a strong N.W. wind with moderate sea. At 6.20 a.m. she passed Cape La Hague, distant about 11 miles, and proceeded on the same course, viz., N. 81 deg. E.

At noon, similar weather prevailed as at 4.50 a.m., and the log registered 178 miles. At 12.10 p.m. the Isle of Wight was in sight, and a bearing was taken—presumably of the highest point about the middle of the Island—by which it was assumed that St. Catherine's Lighthouse bore N. $\frac{1}{4}$ W. The Master estimated by the eye that the vessel was about 20 miles S. $\frac{3}{4}$ E. from the Isle of Wight. The wind was then S.W., and freshening with frequent rain squalls. The vessel continued on the same course.

About 3.30 p.m. a wireless message from Niton Station was received on the vessel giving warning of a southerly gale with the wind likely to reach force seven to eight; in the Bristol Channel, Scilly Isles and round the East Coast to Spurn Head. After consultation with his officers the Master abandoned the intention of making for the "Royal Sovereign" as, in the event of the gale, he would not have adequate shelter at Beachy Head; and decided to make for the French coast, where he expected to have greater shelter from the gale. The vessel's barometer had been falling since 8 a.m.

At 4.10 p.m. the Master estimated, from dead reckoning and after making allowance for tide and current, that the vessel's position was latitude 50 deg. 24 min. N. and longitude 0 deg. 40 min. W. The course was altered to S. 76 deg. E. magnetic for a point where the Haut Banc Light (with a visibility of 16 miles) and the Touquet Light (with a visibility of 19 miles) intersected. The Master states that he estimated the distance to be run from his assumed position to such point of intersection was about 68 miles, and that the vessel would be within range of the

lights about midnight. He made an allowance of $1\frac{1}{2}$ knots for tide and current. The wind was then south-west and force five, with frequent rain squalls. The Master estimated that the average speed of the vessel was about seven knots.

About 11 p.m., the Master states that he saw the lights of a steamer which passed astern about two miles distant, and appeared to be making for Dieppe, and also the lights of another steamer which crossed ahead from starboard to port. The weather—according to the Chief Officer's log—was misty with poor visibility.

The Chief Officer, who was on watch from 6 p.m. to midnight, states that the Master was with him on the bridge most of this time, and told him (the Chief Officer) that he intended taking soundings at midnight when the Second Officer came on deck. Having regard to the state of the weather, to the positions assumed by the Master at 12.10 and 4.10 p.m., and to the uncertain velocity of the tide and currents, soundings should have been taken about 11 p.m. If they had been taken the Master would have ascertained that the vessel had been deflected from her course and was closer to the shore than he had anticipated.

About 11 p.m. Haut Blanc and Touquet Lights should have been visible if the weather had been clear, but owing to the mist and rain, the lights were not seen. About midnight the Second Officer came on the bridge.

The evidence as to the time the first sounding was taken is dealt with in the answer to No. 8 of the questions submitted by the Board of Trade. The Court considers that the weight of evidence is that the first sounding was taken about 12.5 or 12.10 a.m. of the 18th. The first sounding reported was $7\frac{1}{2}$ fathoms, and sandy bottom. The Master then stopped the vessel in order to verify the sounding, and the second cast of the lead showed seven fathoms. The helm was immediately ordered to be put hard-a-starboard and the engines slow ahead. She came up about three points under the starboard helm and took the ground. The Master states that she took the ground silently, but some of the witnesses state that they felt two bumps or tremors. The engines were immediately put full speed astern and were kept going astern for about two hours when they brought themselves up through the bearings becoming hot and the metal running out. The wind was increasing, with the sea rising and a falling tide. Both anchors were let go, and all the boats were swung out in readiness.

Shortly after the vessel grounded the Master states he saw the Hourdel Light, which bore S. by W. $\frac{1}{4}$ W., and the Haut Banc Light, which bore N.E. by N. $\frac{3}{4}$ N. Having regard to the position fixed by the Master as the place of stranding, i.e., about three miles off St. Quentin Point, those bearings can only be regarded as approximate.

About 5 a.m. the Chief Engineer reported to the Master that she was making water in the engine-room just above the main injection valve. On examination with the Chief Engineer, the Master found that the engine-room bulkhead was buckling badly, and that the bridge deck was cracking right across. A wireless message was then sent out asking for assistance. The wind continued to increase, and about 10 a.m. it was blowing a fresh westerly gale. In answer to the wireless call tugs came to render assistance, but could not get near the vessel owing to the high breaking seas and fierce gale, and were therefore unable to render any assistance.

About 4 p.m. she was high and dry and all the crew were able to walk on the beach; and they remained on shore during the night. About 6 a.m. on the 19th the crew returned to the vessel and found that the rudder was gone, and she had 9 feet of water in the after holds and 5 feet of water in the fore holds. The vessel was driven further towards the shore at every high water, and finally got embedded in the sand and broke up. She was abandoned on the evening of the 19th when she was about a quarter of a mile from high-water mark. The crew saved their effects, but

some of the ship's papers, including the official log, the Mate's scrap log, the Engineer's log, and the deviation book, were not saved. The Master, Officers and two Engineers remained in the vicinity until December 23rd, when it was found impossible to save the vessel, and she was consequently abandoned.

At the conclusion of the evidence Mr. Pratt submitted, on behalf of the Board of Trade, that there was a case of default against the Master.

He also submitted the following questions upon which he desired the opinion of the Court:

1.—When and for what amount was the vessel purchased by her Owners?

What was her value when she sailed on her last voyage?

What insurances were effected upon and in connection with the ship?

2. What number of compasses had the vessel? Were they in good order and sufficient for the safe navigation of the vessel, and when and by whom were they last adjusted?

3.—Did the Master ascertain the deviation of his compasses by observations from time to time? Were the errors correctly ascertained and the proper corrections to the courses applied?

4.—Was the patent log on board in good working order, and did it record correctly the distances run from time to time?

5.—Were proper measures taken at or about 4.50 a.m. of the 17th December last to ascertain and verify the position of the vessel?

Was a safe and proper course thereafter steered and was due and proper allowance made for tide and currents?

6.—Was a safe and proper alteration made in the course at or about 4.10 p.m. of the 17th December last and was due and proper allowance made for tide and currents?

7.—Having regard to the state of the weather after 4.10 p.m. of the 17th December last, was the Master justified in proceeding for so long on his course without taking soundings?

8.—At what time on the morning of the 18th December last were the first soundings taken?

On the result of the soundings being reported to him, did the Master take prompt and proper measures for the safety of the ship?

9.—Was a good and proper look-out kept?

10.—At what time and where did the vessel strand?

11.—What was the cause of the stranding and loss of the vessel?

12.—Was the vessel navigated with proper and seamanlike care?

13.—Was the stranding and loss of the s.s. "Rio Preto" caused by the wrongful act or default of her Master, Captain John Jones?

The Court then considered the questions, and answered as follows:—

(1) The "Rio Preto" was purchased by her owners for £116,000 in November, 1919. About £3,400 was expended in repairs and renewals subsequently to her purchase. Her value was estimated by the Managing Owner to have been about £27,000, when she sailed on her last voyage.

The following insurances were effected upon and in connection with the vessel:—

Hull and Machinery	£45,000
Freight	6,750
Disbursements	4,500
Premiums Reducing	3,500

Total £59,750

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The insurances—with the exception of £2,000 effected with the clubs on hull and machinery—were effected on the 6th December, 1922.

(2) The vessel had three compasses which were in good order and sufficient for her safe navigation. They were last adjusted by Mr. Thomas L. Ainsley, of Cardiff, on the 18th September, 1922.

(3) The Master ascertained the deviation of his compasses by observation from time to time. The errors were correctly ascertained, and the proper corrections applied to the courses.

(4) The patent log on board was in good working order, and correctly recorded the distances run from time to time.

(5) Proper measures were taken at or about 4.50 a.m. of the 17th December last, to ascertain and verify the position of the vessel. She was then about 5 miles abeam of the Casquets Light. The course was then altered from N. 65 deg. E. to N. 81 deg. E. magnetic with the "Royal Sovereign" as the objective, and was thereafter steered until 4.10 p.m. Such course was safe and proper until 4.10 p.m.

Due and proper allowance was made at 4.50 a.m. for tide and currents.

(6) About noon, the Master estimated by the eye that the vessel was about 20 miles S. $\frac{1}{4}$ E. from the Isle of Wight, and that St. Catherine's Lighthouse bore N. $\frac{3}{4}$ W. The Lighthouse could not be seen, but he considered that he was taking his observation of a point about the middle of the Island.

About 3.30 p.m. a wireless warning of an approaching southerly gale was received on the vessel. The Master consulted with his Officers, and decided to abandon the intention of making for the "Royal Sovereign" as, in the event of the gale, he would not have adequate shelter near Beachy Head.

About 4.10 p.m. he altered the course to S. 76 deg. E. magnetic. He states that he had estimated the vessel had proceeded about 20 miles over the ground since estimating the position at noon. This course was set with a view to making the point where the extreme ranges of Touquet and Haut Banc Lights intersect on the French coast.

There had been no observation of the sun on the 17th, there had been no opportunity of taking a four point bearing since 4.50 a.m., and the soundings in the vicinity of the assumed position of the vessel at 4.10 p.m. were not of a character to afford guidance, hence the only material available for fixing the position at 4.10 p.m. were dead reckoning and the 12.10 p.m. eye estimate of 20 miles from the Isle of Wight. About eight hours later than the 4.10 position, i.e., about 12.20 a.m. on the 18th, whilst still on the S. 76 deg. E. magnetic course, the vessel stranded. The allowance of $1\frac{1}{2}$ knots for the set of the easterly current to the Straits of Dover was probably insufficient, inasmuch as immediately preceding a S.W. gale, there is probably a body of water flowing from the Atlantic towards the Straits of Dover which has the effect of accelerating the easterly set of the current. Hence, through an error of judgment, the point of departure at 4.10 p.m. having been inaccurately ascertained, and through an omission—not meriting censure—to anticipate the acceleration of the easterly current, the alteration of the course at 4.10 p.m. was not safe and proper nor was the allowance for current sufficient.

(7) Between 4.10 p.m. and midnight the wind decreased from a fresh to a moderate breeze with rain squalls. According to the Chief Officer's log, about 11 p.m. the weather was misty with poor visibility. The Master states that about 11 p.m. he saw the lights of two steamers; one of them passed astern, and the other crossed the bow. He states that he estimated the vessel which passed astern was about two miles distant, and she appeared to be making for Dieppe from the Straits of Dover.

The Master states that about midnight he expected to be within range of the Touquet and Haut Banc Lights, and that he would thus have been about 68 miles from his assumed position at 4.10 p.m., and about 12 miles from the French coast. The vessel took the ground about 12.20 a.m. on the 18th at a point seven miles distant from the Haut Banc Light, which has a range of sixteen miles. This Light was not seen until after the vessel grounded. Therefore the vessel proceeding at seven knots had been within range of the Light for over an hour before it was seen. Moreover, the Master's evidence and that of other witnesses prove that there was mist and some fog after 4.10 p.m. on the 17th. Hence, the Master was not justified, having regard to the state of the weather, in proceeding so long on his course without taking soundings.

(8) The evidence is conflicting as to the time on the morning of the 18th December last when the first soundings were taken, as to the lights seen, and as to the exact time the vessel grounded. According to the evidence of the Master and the deck Officers, it was arranged to take soundings at midnight. The Master states that, at 12.5 a.m., a cast of lead was taken by the Second Officer while the vessel was proceeding at full speed, and a sounding of $7\frac{1}{2}$ fathoms was reported; that she was stopped a minute after, and a second sounding was taken, when a report of seven fathoms was made; that the engines were put slow ahead and the helm hard-a-starboard; and that she came around about three points and then stopped and silently took the ground. He further states that she did not bump, and that he saw no shore lights, nor were any reported to him, until after she struck. The evidence of the Master as to the time of the first sounding and to the absence of bumping is corroborated by the Chief and Second Officers. The Master is also corroborated by the Chief Engineer, who states that at 12.5 a.m. he had the order to stand by, then stop, easy ahead, and at 12.10 a.m. stop, and after stopping, full astern at 12.20 a.m. The Chief Engineer, however, states that he felt a slight bump after the first order to "stand by."

On the other hand, the Third Engineer states that he made a copy of the entries recorded on the slate in the engine-room, which were as follows:—12.25 stand by, 12.26 stop; 12.34 easy ahead, and 12.36 full astern. He also states that at 12.17 a.m. he felt a bump, then a second bump, and afterwards the order was given to stand by. A sailor in the forecabin states that he felt two bumps—the first being about 12.15 a.m.

The man at the wheel states that at about 12.15 a.m. a light was reported by the man on the forecabin head, but he cannot say whether the light was reported before or after the Master directed the Second Officer to take the first soundings. He also states that about 12.25 a.m. he felt a tremor, and about two minutes later another tremor; and that after the vessel struck the Master ordered the helm to be put hard-a-starboard.

Although the inferences which may be drawn from the evidence of the Third Engineer are that the first sounding was made about 12.25 a.m., and that the orders to the engine-room followed the bumping, yet having regard to the strong corroboration of the Master by the deck Officers and the Chief Engineer the Court considers that the weight of evidence is that the first sounding was taken about 12.5 or 12.10 a.m.

On the result of the soundings being reported, the Master took prompt and proper measures for the safety of the vessel.

(9) A look-out was stationed on the forecabin head, and the Master and an Officer were on the bridge. A good and proper look-out appears to have been kept.

(10) The vessel stranded about 12.20 a.m. about three miles from St. Quentin Point.

(11) After 4.50 a.m. on the 17th December (when the position of the vessel was ascertained by a four point bearing of the Casquets) there had been no opportunity of ascertaining her position with precision. Therefore, as her precise position at her point of departure when the course was altered at 4.10 p.m. was uncertain, and the weather as above stated was misty, the Master ought not to have continued to proceed until midnight without attempting to verify his position by using his lead. The use of the lead between 11 p.m. and 12 p.m. on the 17th would have warned him that he was running into danger; and the casualty might then have been averted. The vessel was therefore not navigated with proper and seamanlike care and her stranding and consequent loss

were caused by the default of the Master. The Master has had a long and honourable career, has borne a high character as a master mariner and man; and after being twice torpedoed during the war he courageously and dutifully continued his services to his country by proceeding to sea, and it is, therefore, with reluctance and deep regret that this Court feels constrained to censure him for his negligent navigation of the "Rio Preto."

THOMAS LEWIS, *Judge.*

We concur.

DAVID DAVIES,
H. C. FENWICK, } *Assessors.*

(Issued by the Board of Trade in London
on Friday, the 6th day of July, 1923.)

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