

(No. 7515.)

"DELHI" (S.S.).

IN the matter of a Formal Investigation held at the Caxton Hall, Caxton Street, in the City of Westminster, on the 15th, 16th, 22nd, and 23rd days of February, 1912, before ARTHUR HILL HUTTON, Esquire, assisted by Commander LUIS WOOD BAYLDON, R.N.R., and Captain WILLIAM ANDREW FAUSSET, into the circumstances attending the stranding and loss of the British steamship "DELHI," of Greenock, about 3½ miles south of Cape Spartel Lighthouse, coast of Morocco, on or about the 13th December last.

Report of Court.

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 loss of the British steamship "Delhi," of Greenock, about 3½ miles to the southward of Cape Spartel Lighthouse, coast of Morocco, on the 13th December last, was caused by the default of the master, William Hayward, (a) in failing to take soundings at or before 11.30 p.m. of the 12th December, when neither Trafalgar nor Spartel Light was visible, and thereafter assuming that the vessel was on a safe course when she was actually approaching danger; and (b) in making an improper alteration in the course of the vessel at 1 a.m. of the 13th December. Considering, however, his unblemished character during 29 years' service with the Peninsular and Oriental Steam Navigation Company, the trying circumstances under which he was placed, and the able manner in which he conducted operations after the casualty, thus ensuring the rescue of the whole of the crew and passengers, the Court refrains from dealing with his certificate.

Dated this twenty-third day of February, 1912.

ARTHUR HUTTON,
Judge.

We concur in the above Report.

L. WOOD BAYLDON, } Assessors.
W. A. FAUSSET, }

Annex to the Report.

This inquiry was held at the Caxton Hall, Caxton Street, in the City of Westminster, on the 15th, 16th, 22nd, and 23rd days of February, 1912. Mr. Butler Cole Aspinall, K.C., and Mr. Hubert Stuart Moore, barristers-at-law, instructed by Sir Robert Ellis Cunliffe, Solicitor of the Board of Trade, conducted the case on behalf of the Board of Trade. Mr. Alexander Thomas Miller, barrister-at-law, instructed by Messrs. Miller, Taylor, and Holmes, solicitors, appeared for the master, Mr. William Hayward; and the fourth officer, Mr. Richard David Jeffreys Evans, appeared in person. The owners, the Peninsular and Oriental Steam Navigation Company, were represented by Mr. Robert Hugh Balloch, barrister-at-law, instructed by Messrs. Freshfields, solicitors, and upon application were, by leave of the Court, also made parties to the inquiry.

The "Delhi," Official Number 117398, was a British twin-screw steamship, built at Greenock, in 1905, by Messrs. Caird and Company, Limited, of Greenock, and was of the following dimensions:—Length, 470 feet; breadth, 56.25 feet; and depth in hold, from upper deck to ceiling at midships, 32 feet. She was clincher built of steel, with three decks, was schooner rigged with two masts, and was propelled by two sets of quadruple inverted-cylinder engines, with eight cylinders, of which two were of 25½ inches diameter, two of 36½ inches, two of 52 inches, and two of 74 inches diameter, the length of stroke being 51 inches, the nominal horse-power 2,000, and the indicated

horse-power 8,000. She was fitted with six steel boilers, with a loaded pressure of 215 lbs. to the square inch. Engines and boilers were British built by Messrs. Caird and Company, Limited, of Greenock, in 1905, and were designed to give a speed of 16 knots. Her gross tonnage was 8,090.13 tons, and her registered tonnage 4,783.71 tons. She carried nine lifeboats of the aggregate capacity of 4,340 cubic feet, capable of accommodating 428 persons; two other boats of the aggregate capacity of 436 cubic feet, capable of accommodating 54 persons; 470 lifebelts and 12 lifebuoys.

By her certificate of survey, issued 14th March, 1911, by the Government of Bombay, she was certified to carry 80 second-cabin passengers, 163 saloon passengers, and a crew of 220. Under the Order in Council of 26th June, 1884, this certificate was of the same force as if it had been granted for the same purpose in the United Kingdom.

She carried three Lord Kelvin's patent compasses, viz., a standard compass on the top of the chart room (by which the vessel was navigated), a steering compass in the wheelhouse on the bridge, and a steering compass aft. These were last adjusted, on the 18th March, 1910, off the North Foreland, by Mr. R. B. Hutton, of Messrs. Kelvin and James White, Limited, and Hutton, of 11, Billiter Street, London, E.C. She was also supplied with such charts and sailing directions as the master considered necessary for the voyage; but the chart of "Cape St. Vincent to the Straits of Gibraltar," which was supplied and used, was the chart of 1905, though a chart corrected up to 1911 was published, and might have been obtained before the vessel sailed. In this later chart such material alterations had been made that the chart of 1905 may well be described as obsolete. The sailing directions supplied were those of date 1900, though the edition of 1910 could easily have been obtained. The "Monthly Current Charts for the Atlantic Ocean," also, should have been, but were not, supplied. These current charts, though on too small a scale, and necessarily approximate rather than definite in their information, afford valuable indications to the navigating officer as to the direction and force of the currents which may possibly be encountered in approaching the Straits of Gibraltar. The Current Chart for November, especially, shows southerly and south-westerly currents off Cape St. Mary, and nearer the entrance to the Straits, south-easterly currents, the latter confirming the statement in the 1910 edition of the Sailing Directions that "on approaching the Strait of Gibraltar a south-easterly set may generally be expected." This statement, it may be observed, does not appear in the 1900 edition of the Sailing Directions. In view of the master's explanation of his action, referred to below, it is important, however, to note that the January current chart which, with exceptions, is available for December, shows a local northerly set.

The "Delhi" was owned by the Peninsular and Oriental Steam Navigation Company, of 122, Leadenhall Street, London, E.C., and Herman Wilmot Uloth, of that address, was designated the person to whom the management of the vessel was entrusted by and on behalf of the owners, by advice received from the Secretary of the Company, on 28th July, 1906.

She left London for Bombay on the 8th December last, manned by a crew of 235 hands, all told, and carrying 86 passengers including children, with, it was stated, about 3,500 tons of general cargo. Her draught of water on leaving was 23 feet 8 inches forward, and 24 feet 3 inches aft. From the outset she encountered rough weather, with south-westerly gales. At mid-day of the 12th December, the vessel was off Cape St. Vincent, and at 1.10 p.m., the same day, was off Cape Sagres, at a distance of 1½ miles, as ascertained by sextant angle. From this position a departure was taken, and a course set S. 51° E. by standard compass (S. 67° E. true), the master intending to make a point about 10 miles N. of Cape Spartel. The weather was, at the time, overcast, with occasional rain squalls, a strong southerly wind, and a rough sea. The engines were at full speed, and according to the revolutions she was making, as recorded in the log book, about 14.5 knots through the water. The patent log registered only 13½ knots,

but in view of the rough weather, the master logged his speed in accordance with the revolutions, and was probably justified in doing so.

At 8 p.m. the course was altered to S. 52° E. by standard compass, to allow for variation, still making S. 67° E. (true). By this time the wind and sea had moderated slightly, but there were heavy rain squalls at times, and the vessel was shipping water, fore and aft. At 9 p.m., everything appearing to be in order, the master left the bridge in charge of the supernumerary second officer, Mr. Edward Percy Lyndon, who was officer of the watch, with instructions to call him when Cape Trafalgar light was sighted, or if it was not sighted before 11.30 p.m., to call him at that time. Assuming the vessel to have been making the course and speed intended, this light ought to have been seen at or before 11 p.m. At 11.20 p.m. the Trafalgar light had not been sighted, and heavy rain squalls coming on, the officer of the watch called the master, who came on the bridge immediately. The master explained that he attached no importance to the failure to pick up the Trafalgar light, and said he preferred to rely on the Cape Spartel light, which he expected to see about, or soon after, 11 p.m. By the time, or soon after the time, he arrived on the bridge (11.20 p.m.) the Spartel light should have been visible; and the weather conditions being such that the Trafalgar light was obscured, the master would have been justified in assuming that a similar difficulty in sighting the Spartel light might have been anticipated. He did not, however, take the precaution of sounding immediately, though reliable soundings should have been obtainable in the locality where he then was, or where he ought to have been, and must have been less easily obtained at a later hour. He did, at or about 11.20 p.m., order that a cast of the lead should be taken at 12 (midnight). This order was carried out by the fourth officer, the quarter-deck man, and three lascars; and at 0.20 a.m., of the 13th December, the result of the cast was reported to the master, on the bridge, as "No bottom at 73 fathoms." Before this result was reported, the speed of the vessel was, at 0.15 a.m., by order of the master, reduced to "Slow," and then to "Dead slow," and she was turned round under port helm, then heading to the westward, on a course of S. 73° W. (true), at a probable speed of about three to five knots. About 0.40 or 0.45 a.m. the master ordered another cast of the lead to be taken. This order was carried out by the fourth officer, as before, and the result reported on the bridge, just before 1 a.m., as "60 fathoms, sand." From this result, the master states, he erroneously concluded that, owing to a northerly set, and to having over-logged his speed, he was then within the 100-fathom line, seven or eight miles astern of his dead reckoning. It is difficult to understand how he could have arrived at this conclusion, as his dead reckoning would have placed him over, or in the neighbourhood of, The Ridge (shown on the chart of 1911), a position about eight or nine miles south-east of that in which he says he assumed he was, and about eight miles to the north of Cape Spartel.

Events proved that he was then, in fact, just within the 100-fathom line, about five miles to the westward of the Spartel light.

Mistaking his position, through relying upon a single cast of the lead, he again gave orders to turn the vessel round at 1 a.m., and proceeded on the original course of S. 67° E. (true), with the engines going "Dead slow." If he had been where he says he thought he was, such an alteration of course would have been safe and proper, provided he had kept the lead going. If he had been over The Ridge, where, according to his dead reckoning, he ought to have assumed he was, it would still have been safe, for the time being, provided frequent casts of the lead had been taken. But, being where he actually was, this alteration of course proved to be neither safe nor proper, and was the direct and immediate cause of the casualty. About 1.5 a.m. the master gave the order for the lead to be kept going. This order was subsequently conveyed to the fourth officer by the officer of the watch, and the fourth officer at once proceeded to get his staff ready to carry it out. About 1.15 a.m. the vessel was back on her original course. A few minutes later, and before the result of this sounding was reported on the bridge, the master and the officer of the watch saw breakers ahead, simultaneously. The master at once rang the telegraph "Full speed astern," while the officer of

the watch ordered the helm "Hard-a-port." Before she answered her helm, however, the ship grounded, at 1.32 a.m., and her head swinging round to the starboard, she was found, at daylight, to be stranded, 3½ miles to the southward of Cape Spartel light, which bore N. 20° E., with Mount Nipple on the port beam, bearing N. 80° E.

Up to the time of stranding, neither the Spartel light nor any other light had been seen by those on the bridge; and no fog signals had been heard by anyone on board, although the Cape Spartel fog signal gives one report every three minutes. The wind, however, was S.S.W., blowing strong, and it is possible signals might not have been heard, even if made.

The failure to make the light was attributed by the master to the land mist, which, occasionally, comes down "like a blanket" and effectually obscures it, the light being 312 feet above the sea level.

Directly after the vessel grounded, the fourth officer reported the result of the sounding taken to be 13 fathoms.

Evidence was given by an A.B., named Wigmore, who was on the look-out with a lascar on the upper bridge, owing to the fore-castle head being washed by heavy seas; and he stated that, between 1 a.m. and 1.15 a.m., he sighted a white fixed light, about two points off the port bow, apparently about two or three miles distant. He then, he declared, came down from the upper bridge and reported it to the master on the bridge, returned to the upper bridge and, again, saw the light in the same position, for a few seconds, before it disappeared altogether. A few minutes before the ship stranded, he said, he again saw a white fixed light, this time on the port quarter, and again reported it to the master. It might have been possible to have seen the Spartel light, off the port bow, after the ship got back to her course about 1.15 a.m., but it was not possible to have seen it on the port quarter at any time afterwards, as the course was not altered in the interval that elapsed before the stranding. The master also positively denied that any report had been made to him by Wigmore as to such a light, and his denial was corroborated by the officer of the watch, who was with the master on the bridge the whole of the time. Wigmore, too, admitted that the lascar said there was no light; and taking all the circumstances into consideration, the Court came to the conclusion that no lights were seen, or reported, by Wigmore, as he alleged.

When the vessel took the ground, the watertight doors were promptly closed, and the engines, with intervals, were kept going full speed astern, without result. She remained fast. The engines were stopped at 3.3 a.m. Five or six minutes after she grounded, she bumped heavily and fell over on her side. Directly after she grounded soundings were taken outside, which showed 2½ fathoms forward and four fathoms aft. The order to sound ship was also given, and it was reported she was not then making water. The port boats, being on the lee side, were immediately cleared away and provisioned. The passengers were summoned on deck, and hot refreshments served out to them in the music room. There was no panic, and no sign of panic. The passengers "behaved splendidly," and good discipline was maintained by the officers and crew. A wireless message was sent, *via* Cadiz, to Gibraltar for assistance, and a second wireless message was sent about 2.45 a.m. Distress signals were also sent up.

About 3.45 a.m. two of the starboard lifeboats, and before 4 a.m., three other boats, out of the 11 she carried, had been washed away.

About 4.20 a.m. a small steam tug arrived, and stood by till daylight, but the master refused assistance until he had first secured the safety of the passengers.

An attempt was made to pump out the bilges, but about 5.30 a.m. the sand came through and choked the pumps.

About 8 a.m. the French cruiser "Friant" came in sight, and about 8.45 a.m. she sent in a steam cutter to the assistance of the "Delhi." Directly after, the master sent a lifeboat ashore, with the second officer in charge, to establish communication with the shore by means of a line. With great difficulty they got to land, but the boat was swamped in the surf directly, and rendered useless. The line was, afterwards, fouled by the propeller of the French steam cutter, and it had to be cut.

Some ladies and children were taken off in the steam cutter. Others were put into one of the lifeboats, and this was, under difficult conditions, successfully towed by the cutter to H.M.S. "Duke of Edinburgh," which came up about 9.15 a.m. As the cutter came round the stern of the "Delhi," on her return journey, the surf broke into her. She was turned over, and three men of her brave crew were lost. At the same time, the crew of the lifeboat were washed ashore. These were all saved, and no other life was lost in the disaster.

Directly after the "Duke of Edinburgh" arrived, Admiral Cradock boarded the "Delhi," and at 11.30 a.m. the Royal party on board were, with great difficulty, landed in one of the war vessel's large rowing boats. At 4 p.m. the Gibraltar lifeboat arrived and took off some of the passengers, all of whom were landed that day, except 11 who remained on the ship and were taken off on the 14th December. Rescue operations were continued till the 15th, when the crew were all landed, except 43 hands who stood by the ship till the evening of the 16th, getting out specie and baggage. Master, officers, and crew worked admirably together, and did all that was possible for men to do, from the time the vessel stranded. They remained on the beach, working on board during the day, till the 20th December, when the master finally abandoned her.

The master attributed the disaster to a set to the southward, which he considered unusual in view of the prevailing south-west wind, and which carried him out of his course, after 7.20 p.m. of the 12th December, when he got into wireless communication with the steamship "Marmora," which passed him about two miles to the northward. As above stated, he expected a northerly set. The currents in the locality are, no doubt, variable, and it is possible that the master's explanation may, to some extent, account for the position in which he found himself at 1.30 a.m. of the 13th December; but it is also possible that it may have been due, to some extent, to the vessel making a more weatherly course through bad steering.

A difference of only two degrees in the course to the southward, from $1\frac{1}{2}$ miles south of Cape Sagres, would have led to the scene of the disaster.

These were the facts of the case. On the conclusion of the evidence for the Board of Trade, the following questions were put to the Court by Mr. Aspinall:—

1. 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?
2. Did the master ascertain the deviation of his compasses by observation from time to time, were the errors correctly ascertained, and the proper corrections to the courses applied?
3. Was the vessel supplied with proper and sufficient charts and sailing directions?
4. Were proper measures taken to ascertain and verify the position of the vessel when off Cape Sagres at or about 1.10 p.m. on the 12th December last, was a safe and proper course then set and thereafter steered, and was due and proper allowance made for tides and currents?
5. Were safe and proper alterations made in the course at or about 0.15 a.m. and 1 a.m. on the 13th December, and was due and proper allowance made for tides and currents?
6. Having regard to the state of the weather at and after 0.15 a.m. on the 13th December last—
 - (a) Was the vessel navigated at too great a rate of speed?
 - (b) Was the lead used with sufficient frequency and accuracy?
7. Was there any delay in taking and reporting the result of the last sounding taken before the ship struck?
8. Were two lights seen by Wigmore, A.B., between 1 a.m. and the time when the ship struck? What were they, and were these lights reported to the officer in charge of the bridge?
9. Was a good and proper look-out kept?
10. What was the cause of the stranding of the vessel, and was she seriously damaged thereby?

11. Was the vessel navigated with proper and seamanlike care?

12. Was serious damage to, or the loss of, the British steamship "Delhi" caused by the wrongful act or default of the master and the fourth officer or either of them?

The Court having expressed the opinion that no blame attached to the fourth officer, Mr. Balloch called evidence and addressed the Court on behalf of the owners, Mr. Miller addressed the Court on behalf of the master, and Mr. Butler Aspinall replied for the Board of Trade. The Court then gave judgment as follows:—

1. The vessel had three Lord Kelvin's patent compasses, viz., a standard compass, a steering compass, and an after-steering compass. They were in good order and sufficient for the safe navigation of the vessel. They were last adjusted on the 18th March, 1910, by Mr. R. B. Hutton, on behalf of Messrs. Kelvin and James White, Limited, and Hutton, of 11. Billiter Street, London, E.C.

2. So far as it was possible to do so, the master ascertained the deviation of his compasses by observation from time to time. There was no opportunity on this voyage to ascertain by observation the deviation on south-easterly courses; but the errors on such courses appear to have been ascertained on the previous voyage and recorded in the log, and the proper corrections to the courses were applied in accordance with the record thus available.

3. The vessel was not supplied with proper and sufficient charts and sailing directions. Though charts corrected up to 1911 and sailing directions dated 1910 were at the time published and obtainable, the chart actually supplied and used on the occasion of the disaster was dated 1905, and the sailing directions were those issued in 1900. The "Monthly Current Charts" for the locality in question were not supplied. Material alterations, it may be observed, had been made in the more recent editions of both chart and sailing directions.

4. Proper measures were taken to ascertain and verify the position of the vessel when off Cape Sagres at 1.10 p.m. on the 12th December last. A safe and proper course was then set, and up to about 11.30 p.m. was thereafter steered. From and after about 11.30 p.m. the course so set and thereafter steered was, under ordinary conditions, safe and proper, assuming the vessel to have been in the position in which the master believed her to be. Due and proper allowance was made for the tides and currents usually experienced.

5. At 0.15 a.m. on the 13th December last a safe and proper alteration was made in the course. The alteration again made in the course at 1 a.m. on the 13th December was not safe or proper. Due and proper allowance was made for the tides and currents usually experienced.

6. Having regard to the state of the weather at and after 0.15 a.m. on the 13th December—

- (a) The vessel was not navigated at too great a speed.
- (b) The lead was used with sufficient frequency and accuracy.

7. There was no delay in taking and reporting the result of the last sounding taken before the ship struck. A cast of the lead was actually being taken at the time of stranding.

8. Two lights were not seen by Wigmore, A.B., between 1 a.m. and the time when the ship struck. No report was made to the officer in charge of the bridge of two lights having been seen between 1 a.m. and the time when the ship struck.

9. A good and proper look-out was kept.

10. The primary cause of the stranding and loss of the vessel was the over-confidence of the master with regard to his dead reckoning position at or about 11.30 p.m. of the 12th December, his neglect to take soundings at or before 11.30 p.m., and his consequent assumption that the vessel was on a safe course when she was actually approaching danger. The immediate cause of the stranding of the vessel was the alteration made in the course at 1 a.m. of the 13th December.

11. In view of the improper alteration of course at 1 a.m. of the 13th December, and of the failure to take

soundings at or before 11.30 p.m. of the 12th December, when neither Trafalgar nor Sparte light was visible, the Court is of opinion that the vessel was not navigated with proper and seamanlike care.

12. The serious damage to and loss of the British steamship "Delhi" was caused by the default of the master. Considering his unblemished character during 29 years' service with the Peninsular and Oriental Steam Navigation Company, the trying circumstances under which he was placed, and the able manner in which he conducted operations after the casualty, thus ensuring the rescue of the whole of the crew and passengers, the Court refrains from dealing with his certificate.

The Court desires to confirm what it has already stated, that no blame can be attributed to the fourth officer.

The Court added the following observations:—

We desire to add our sincere admiration of the gallant conduct of the officers and crew of the French

cruiser "Friant," who rendered every assistance to the "Delhi" in distress, and who did so much to save the lives of the crew and passengers. We further wish to express our deepest sympathy with the relatives of the three brave men who unfortunately perished while engaged in the work of rescue.

ARTHUR HUTTON,
Judge.

We concur.

L. WOOD BAYLDON, } Assessors.
W. A. FAUSSET, }

(Issued in London by the Board of Trade on the
19th day of March, 1912.)