

(No. 6009.)

"TURRET" (S.S.).

The Merchant Shipping Act, 1894.

IN the matter of a formal investigation held at the Guildhall, and by adjournment to the Moot Hall, Newcastle-on-Tyne, on the 27th and 28th days of February and the 1st, 2nd, 5th, 6th and 7th days of March, 1900, before JAMES HORACE BECKINGHAM and FREDERICK ELLIOTT, Esquires, two of Her Majesty's Justices of the Peace, acting in and for the City and County of Newcastle-on-Tyne, assisted by Captains ERSKINE and EDWARDS (Nautical Assessors) and Mr. SHAW (Engineer Assessor), into the circumstances attending the abandonment of the British steamship "TURRET," of Newcastle, near Cape Villano, North Coast of Spain, on the 27th day of January, 1900.

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 vessel was abandoned near Cape Villano, north coast of Spain, the engines having become disabled through the breaking of the condenser-doors, owing to some undue pressure, the nature of which the Court is unable definitely to determine. The Court finds the casualty was caused by the chief engineer, Anton Bjorkman, neglecting to keep the bilges clean and to work the engines by the jet or at high pressure, and hereby suspends his certificate, No. 29,166, for the period of twelve months. The Court finds that the master, George Richardson Nesbitt, was justified in abandoning the vessel, but severely censures him for steering in close proximity to a dangerous coast when his engines were unreliable, and for neglecting to take proper measures to ensure the safe towing of his vessel.

Dated this 7th day of March, 1900.

J. H. BECKINGHAM, }
FRED. ELLIOTT, } Judges.

We concur in the above Report.

WILLIAM ERSKINE, }
T. T. EDWARDS, } Assessors.
JAMES SHAW, }

Re s.s. "TURRET."

Annex to the Report.

This was an inquiry into the circumstances attending the abandonment of the British steamship "Turret," of Newcastle, and was held at the Guildhall, and by adjournment at the Moot Hall, Newcastle-upon-Tyne, on the 27th and 28th days of February and the 1st, 2nd, 5th, 6th and 7th days of March, 1900, before James Horace Beckingham and Frederick Elliott, Esquires, assisted by Captains Erskine and Edwards (Nautical Assessors) and Mr. Shaw (Engineer Assessor).

Mr. Burton appeared for the Board of Trade, Mr. Hedley represented the builders, Mr. Temperley, the owners, Mr. Miller, the master, Mr. Bell, the chief officer and first engineer, while the second officer and second engineer appeared in person.

The "Turret" of Newcastle, official number 101,818, was a steel screw steamship built at Sunderland in the year 1892 by Messrs. William Doxford & Sons, Limited, and was of the following dimensions:—Length, 280·25 ft.; breadth, 38 ft.; and depth in hold, 20·3 ft. She was storm-sail-rigged, fitted with triple-expansion engines of 180 horse-power, also constructed by Messrs. Doxford in the year 1892. She was of 1969·78 gross, and 1262·54 net registered amended tonnage, and owned by the "Turret" Steam Shipping Company, Limited, of Bank Chambers, Sandhill, Newcastle-upon-Tyne, Mr. William Peterson being appointed managing owner on the 14th October, 1899. She was a "turret"-built ship, and, in fact, as her

name would imply, the first of that type. The engines were aft, and there was a water-ballast tank under the stoke-hold and engine-room, to be filled for the purpose of keeping the vessel in trim as the coal was consumed.

She was on the voyage in question in good condition and well-found, and fitted with life-boats and life-saving appliances in accordance with the Act.

The peculiar construction of the vessel necessitated a departure from the ordinary method of lowering the life-boats, with regard to the davits. They were constructed on the principle of a crane, which could be lowered or raised by tackle according as the boat was being put out or in. While on the chocks the davits were nearly perpendicular, but, when lowered, the ends were on a line with the outer part of the ship's side. The davits were of wood, with an iron shoe and pin which worked as a hinge, rivetted to the side of the turret.

The vessel arrived in the Tyne on the 26th of December with a cargo of iron-ore from Almeria. After discharging her cargo she was at once put in Messrs. Hawthorn, Leslie & Co.'s graving dock, Hebburn, for the purpose of repairs, as she had sustained some damage on her last voyage in the Gulf of St. Lawrence. The outside repairs effected were the bilge-rolling keels and several of the hull plates. Inside the vessel was thoroughly overhauled, the ceiling being lifted, tank-doors taken off, and cement renewed where required, and thoroughly cleaned. The boilers were cleaned and scaled, all valves on boilers were examined and put in good order, and safety-valves reset. Six tubes were renewed in the boilers, and several others expanded. All sea-cocks and valves were examined, and a new spindle fitted to the injection-valve. The tail-end shaft was drawn in for examination, new metal was fitted to the thrust-collars, two bilge-pipes renewed, pipe from evaporator repaired, and sundry other repairs effected.

This work was carried out under the supervision, and to the satisfaction, of Mr. Alexander Gray, the owners' superintending engineer, Mr. George, the surveyor to the British Corporation, and Mr. Evans, the surveyor to the North of England Insurance Association. Mr. Gray instructed the chief engineer, Mr. Anton Bjorkman, to see that the tank-tops were properly scraped and cleaned, and that his bilges and suction-pipes were cleaned and put in good order. There was considerable discrepancy in the evidence as to what was actually done to carry out these instructions: but the Court is satisfied, in view of after events, that the chief engineer neglected his duty in this respect, and that when the vessel left the Tyne the bilges were in a dirty condition.

After leaving the graving dock the vessel proceeded to load, and, on the 20th of January at 3.30 a.m., she left the Tyne with a cargo of 2,740 tons of coal and 425 tons of bunkers, bound for Leghorn. She had a crew of 22 hands all told, and no passengers, under the command of Mr. George Richardson Nesbitt, who held a certificate of competency as master, No. 83,013, and had been in the vessel nearly five years. Her draught of water on leaving was 18 ft. 3 ins. forward and 18 ft. 6 ins. aft.

All went well till they arrived off Whitby at 10 a.m., when the chief engineer reported that the port boiler was leaking. The water was blown out of the boiler and the leaky tubes expanded and made tight. During this time the vessel had been proceeding slowly under one boiler, and, at 4 p.m., the repairs being effected, she went ahead again at full speed, and so continued until 11.30 p.m. At this time the master stopped and reversed the engines to take a cast of the lead, as a thick haze had come on. The vessel was about abreast of the Outer Dowsing, and the cast gave 13 fathoms, sand, shell and stone. Some of the crew stated in their evidence that at this time the vessel struck something. On the other hand, the master and officers emphatically declared that nothing of the kind occurred. The Court is of opinion that the shock which the men say they experienced was simply due to the reversing of the engines.

The vessel then continued at full speed (about 7½ knots) till 11 p.m. of the next day, when they anchored off the North Foreland on account of the thick haze and the steam steering gear working indifferently. This was remedied, and, at 6 a.m. of the 22nd, full speed was resumed and all went well till 11 p.m. of the 23rd, the vessel being at that time about 80 miles S.W. of Ushant.

The chief engineer reported to the master that there was a large quantity of water in the engine-room and stokehold. Prior to this, namely, at 2 o'clock in the

afternoon, the third engineer had reported to his chief that there was an undue amount of water in the bilges. The chief engineer went below, and satisfying himself that such was the case, instructed his officer to keep the pumps working by clearing the mud-boxes as required. The water however kept gaining, and at 4 p.m. the second engineer on going on watch found the bilge-pumps not working and water in the stokehold. The mud-boxes were choked with dirt, grease and small pieces of waste and cinders. The second engineer then tried the pumps on the stokehold suction and found them choked and unable to work. He then informed the chief, who went below shortly afterwards and found the water nearly up to the tank top in the engine-room, and, with the rolling of the vessel, washing the stokehold plates. Between 7 and 8 o'clock the water was above the tank top, and the bilge-injection, which had been specially attended to while in port by the chief engineer, was put on, but was soon choked and failed to clear the water. At 11 p.m. the chief engineer, as already mentioned, reported the state of things to the master, who stopped the vessel, the stokehold plates at this time actually washing about. The bilge suction-pipe leading from the after-well was taken off, cleared, and shortened 10 ins. and replaced, and the ballast-donkey started on the after-well. This, however, soon choked, and a manhole-door was taken off the ballast-tank in the stokehold and the water run off into the tank and pumped out. With the assistance of deck hands efforts were made to clean out the bilges, and were continued night and day until the abandonment of the vessel on the 27th. From the evidence it appears that the bilges were in a very dirty and neglected condition, and it was not until noon of the next day that the engines were re-started, the suction-pipes in the after-well having been cleared, but not those in the stokehold. At 4 p.m. a crack some 10 ins. in length was discovered in the water-service pipe, which was temporarily repaired by the engineers. From this time the water could be kept under by strict attention being paid to clearing the mud-boxes.

Nothing happened until 8.30 p.m. of the 26th, the course being S.W., with a nasty sea running and a strong N.W. wind. At this time the circulating-pump gave out owing to the indiarubber valves breaking. These were replaced with new ones, and, at 11 p.m., the engines were started at full speed and worked all right till midnight, when the fore lower door of the condenser cracked from top to bottom. The engines were stopped and the door was shored up, but no steps were taken to ascertain the cause.

For this neglect the chief engineer was blameworthy, as by removing the doors of the condenser he could easily have discovered whether there was any obstruction. At 1.30 a.m. of the 27th full speed was resumed until 1.30 p.m., when the after-lower condenser door gave out with a loud report, a large piece flying out and breaking the bilge valve-box. The engines were stopped and the chief engineer reported the nature of the accident to the master, stating at the same time that it would take some 36 hours to make a new door by cutting a portion of a bulkhead. Still no steps were taken by the chief engineer to ascertain if any obstruction existed.

It is evident that there must have been some obstruction to the water passing freely through the condenser, thus causing an undue pressure, resulting in the breaking of the doors. In the absence of information that ought to have been obtained from a careful examination made at the time, the Court is unable to definitely state the actual cause of this undue pressure. The probable cause was the dirt, &c., from the bilges choking the condenser tubes, thus preventing the free circulation of the water.

At this time Villano Lighthouse bore E. by S. $\frac{1}{2}$ S., distant about 8 miles, and Finisterre was visible in the distance, and also two steamers. There was a fresh breeze from the N.W. with a heavy swell, the sea, however, not breaking. If the chief engineer had been equal to the occasion he could easily have worked the engines with the jet-injection, or, in the alternative, by high pressure. By these means the vessel could have been navigated into Camariñas Bay, only some 8 miles distant, or taken out to sea clear of all danger until the condenser-doors could have been renewed.

Signals were now made for assistance, and the steamer "John Cockerill," of Antwerp, bore down to them about 2.15 p.m., sent a boat alongside and asked where they wished to be towed to. The master replied to Ferrol, which was distant some 60 miles. This was an error of judgment on the part of the master, as he should have made for the nearest port.

After an interval of about two hours communication was established between the two vessels by means of a 5-inch wire hauser from the "John Cockerill" with no "spring." As was to be expected, having regard to the swell, after towing a very short time the "bitts" were torn out of the "Turret" and the hawser parted. Seeing that the "John Cockerill" is stated to have had a 15-inch manilla tow rope on board, and the "Turret" a good 15-inch coir tow rope, neither of which was used, though both were the most suitable under the circumstances, the master of the "Turret" showed a great lack of judgment in not endeavouring to use the best material at his disposal, in order to secure the safety of his vessel. The hawser was now slipped and instructions were given to the chief officer to put out the starboard lifeboat and go to the "John Cockerill" and ask what they intended to do.

Owing to the rusting up of the davit-hinges the boat could not be lowered, and recourse was had to the jolly-boat, in which the chief officer and three men rowed to the "John Cockerill" about 5.30. He returned, having left two of his men on board, and reported that the master of the "John Cockerill" recommended the abandonment of the "Turret," as he could do no more for the vessel and would only stand-by to save life. This would be about 7.30.

During the absence of the chief officer, efforts were made by the second officer and chief engineer to free the starboard life-boat. They at length succeeded, but the boat was never put in the water. At this point occurs a conflict of evidence between the master and chief engineer. The former stated that at no time from the accident to the condenser until the abandonment took place was any suggestion made to him by the chief engineer as to working the engines high pressure or by the jet, and that he was under the impression that the engines were totally disabled. On the other hand, the chief engineer said that he informed the master between 5 and 6 p.m. that he was about to try high pressure, and that he subsequently made preparations for doing so and was only prevented from starting the engines by the telegraph ringing "stop" at 8.30 p.m., indicating that they were no longer required. The master denies that he ever rang the telegraph or gave such orders, and the Court is of opinion that the master was bona-fide satisfied that the engines had been totally disabled beyond immediate repair. He accordingly consulted with the officers and resolved to abandon the vessel which at this time (8.30 p.m.) was about a mile from the nearest rock upon which the water was breaking, Cape Villano, bearing E.N.E. and Toriñana S. $\frac{1}{2}$ W. Strange to say, though the "Turret" was possessed of two life-boats stated to be ready for use, neither was used, but the "John Cockerill" sent her life-boat which took off ten of the crew, the remainder going in the "Turret's" jolly-boat, except the two who had been previously left on board the "John Cockerill." All the crew were safely got on board, losing however, their effects and the ship's log-books and papers, and they were landed at Gibraltar on the 30th. It subsequently transpired that the "Turret" had drifted ashore in the vicinity of Cape Finisterre. At the time of her abandonment there was no water in the ship. While the master, under the circumstances and with the view of saving life, was justified in abandoning the vessel, the Court is of opinion that he displayed a great lack of judgment in steering so close to the land while her engines were unreliable, and his conduct in reference to the towing arrangements showed a want of care and forethought for the safety of the vessel, which was most reprehensible. As to the chief engineer, the Court had no alternative but to mark its sense of his carelessness and ineptitude by suspending his certificate for twelve months; but, on the application of his solicitor, consented to recommend that he be granted a second engineer's certificate in the meantime.

At the conclusion of the evidence the following questions were submitted on behalf of the Board of Trade. Mr. Miller, Mr. Bell, and Mr. Temperley addressed the Court for their respective clients, and Mr. Burton replied:—

1. Were the engines, boilers, pumps, and machinery of this vessel properly overhauled and examined in December last?
2. When were the condenser doors last taken off, and were the joints carefully and properly made when they were replaced?
3. Was the vessel supplied with the boats and life-saving appliances required by the statute, and were the boats kept so as to be at all times fit and ready for use?

4. Were the life-belts kept so as to be readily available in case of necessity?

5. Were the hold-bilges examined before taking in cargo, and were they clean?

6. Were the engine-room and stokehold bilges properly cleaned, and were they examined by the chief engineer before the vessel left the Tyne?

7. Was the hull of the vessel in good and seaworthy condition, and were the pumps sufficient and in good order when she left the Tyne on the 20th January last?

8. Did the vessel strike a rock or any other substance on the night of the 20th or on the night of the 21st January, and if so did she then sustain damage?

9. Were the engines stopped at or about 10 a.m. on the 20th January, and if so what was the cause of it?

10. Why was the vessel brought to anchor off the North Foreland on the 21st January?

11. Was there an excessive quantity of water in the engine-room on the 23rd January, and if so what was the cause of it?

12. What was the condition of the engine-room bilges at this time; were the pumps choked, and if so what was the cause of their becoming choked, and were proper measures taken to clear them and to clean the bilges?

13. Were the engine-room and stokehold cleared of water on the 23rd January, and was there any excessive quantity of water in the engine room thereafter?

14. Were the lower condenser doors screwed up on the 23rd January or at any time thereafter, and if so was the operation carefully performed, and were the condenser doors or either of them thereby damaged?

15. What was the cause of the circulating pump being out of order on or about the 26th January, and was it efficiently repaired?

16. Whether on or about the 26th January the condenser doors were subjected to undue pressure, and if so what was the cause of it?

17. What was the cause of the fracture in the forward door of the condenser on or about the 26th January, and was it efficiently repaired?

18. What was the cause of the fracture of the after-door of the condenser on or about the 27th January, and was it possible to repair it with the material at the disposal of the engine room staff?

19. Whether, having regard to the damaged condenser door the engines could have been worked, and if so, should the engineers have so worked them?

20. What was the position of the vessel at this time, and was it possible to have navigated her into port without assistance?

21. Was the vessel taken in tow by the "John Cockerill," did the vessels become separated, and what was the position of the "Turret" at this time?

22. Was there any undue delay in lowering the lifeboat, and if so, what was the cause of it?

23. Were the crew furnished with life-belts, and if not, why not?

24. Was every possible effort made to save the vessel, and was she prematurely abandoned?

25. Was the loss of the "Turret" caused by the wrongful act or default of the master, officers and chief and second engineers, or of any of them?

26. What was the value of the vessel and of her freight, and for what amounts were they respectively insured?

To which the Court replied as follows:—

1. The engines, boilers, pumps and machinery of the vessel were properly overhauled and examined in December—January last by Mr. Alexander Gray on behalf of the owners, Mr. T. G. George, on behalf of the British Corporation and Mr. Lewis Evans, on behalf of the North of England Insurance Association.

2. The condenser doors were last taken off about the 10th December last, at Almeria, by the chief engineer, Mr. Anton Bjorkman, who stated that the joints were carefully and properly made with double-canvas and tallow and securely tightened up.

3. The vessel was supplied with boats and life-saving appliances in accordance with the Act. The starboard lifeboat which was ordered to be put out was not fit and ready for immediate use as it was found that the sockets of the davits were rusted up, and recourse was then had to the jolly boat, which was fit and ready for immediate

use. The port lifeboat was never tried, but the chief officer stated that he overhauled the boats generally on the passage down channel.

4. The lifebelts were kept so as to be ready in case of necessity in the chief officer's cabin on the upper bridge.

5. The hold-bilges were examined before taking in cargo and were cleaned.

6. In the opinion of the Court the engine-room and stokehold bilges were not properly cleaned before the vessel left the Tyne. The chief engineer however stated that he had examined them, and was satisfied with their condition.

7. The hull of the vessel was in good and seaworthy condition, and the pumps were sufficient and in good order when the vessel left the Tyne.

8. In the opinion of the Court the vessel did not strike a rock or any other substance on the night of the 20th or 21st January.

9. The engines were slowed down at 10 a.m. on the 20th January, and the port boiler was blown out to enable the engineer to expand some leaky tubes.

10. The vessel was brought to anchor off the North Foreland at 11 p.m. on the 21st January, partly owing to the thick haze, and also to enable the engineer to effect some slight repair to the steam steering-gear.

11. On the afternoon of the 23rd January, an excessive quantity of water was found in the engine-room and stokehold bilges with which the pumps were unable to cope owing to the latter being choked with dirt. It was found on the afternoon of the next day that the water service pipe was cracked to the extent of some 8 to 10 inches in length.

12. The pumps were choked on the 23rd January with the obstruction coming from the engine-room bilges which were in a dirty condition. Proper measures were taken to clear the pumps, and, on the following day, the water being above the stokehold plates, was run off into the ballast tank and the deck hands assisted to clean the bilges, and continued doing so day and night until the abandonment of the vessel on the 27th.

13. The engine-room and stokehold bilges were cleared on the 24th, as already stated, and the leakage from the service-pipe repaired, and thereafter no excessive quantity of water was found.

14. Nothing was done to the condenser-doors on the 23rd January, when they were apparently in good order.

15. The circulating-pump became out of order about 8.30 p.m. of the 26th January owing to the india-rubber bucket and foot-valves breaking. These were renewed, and the engines set going again full speed at 11 p.m.

16. On or about the 26th-27th January the condenser doors were undoubtedly subjected to undue pressure, but there is no direct evidence as to the cause.

17. The fracture in the forward door of the condenser on the 26th January was due to undue pressure, the nature of which the Court is unable to determine, as no steps were taken to ascertain the cause at the time. Efficient temporary repairs were effected by it being shored up.

18. The fracture of the after-door on the 27th January must be attributable to the same cause as that in the forward-door. Temporary repairs could only have been effected by making a new door by cutting a bulkhead, which would have taken some 36 hours.

19. The engines could under the circumstances have been temporarily worked by the jet and also as high-pressure, and the engineer should so have worked them.

20. At this time (1.30 p.m. of the 27th) the vessel was abeam of Cape Villano, distant by 4-point bearing about 8 miles, and it would have been quite possible, had the engines been worked as stated in the last answer, to have navigated her into Camariñas Bay without assistance.

21. The "Turret" was taken in tow by the "John Cockerill" about 4.30 p.m. of the 27th January, and was towed for about half-an-hour, when the wire-hawser parted. At this time the "Turret" would be approximately about 6 miles W. of Cape Villano.

22. As previously stated in the answer to the third question, there was undue delay in lowering the starboard lifeboat, owing to the sockets of the davits being rusted up.

23. The crew were not furnished with life-belts, as in the opinion of the master there was no necessity for their use.

24. In the opinion of the Court every possible effort was not made to save the vessel. She was not, however, prematurely abandoned by the master, having regard to her proximity to the shore at the time, 8.30 p.m.; to the fact that the master was under the impression that the engines were useless; and to the fact that the master of the "John Cockerill" had refused to do more than stand-by to save life.

25. The Court finds that the loss of the "Turret" was caused by the wrongful act and default of the chief engineer, Anton Bjorkman, in neglecting to keep the bilges clean and to work the engines by the jet or at high pressure after the accident to the condenser, and hereby suspends his certificate, No. 29,166, for the period of twelve months. The Court farther finds that the master, George Richardson Nesbitt, is blameworthy in steering his vessel in close proximity to a dangerous coast, knowing that his engines were at the time not reliable, and also in

neglecting to take proper measures to ensure the safe-towing of his vessel, and the Court hereby severely censures him for his conduct as contributing to the loss.

26. The managing owner valued the vessel at £26,000, and she was insured for £20,500 and the freight for £1,500.

J. H. BECKINGHAM, } Justices.
FRED. ELLIOTT

We concur,

WILLIAM ERSKINE, } Assessors.
T. T. EDWARDS,
JAMES SHAW,

(Issued in London by the Board of Trade on the
10th day of April, 1900.)

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