(No. 7084.)

"LUCIFER" (S.S.).

The Merchant Shipping Act, 1894.

In the matter of a formal investigation held at the Magistrates' Room, Liverpool, on the 11th, 12th, 13th, and 14th days of June, 1907, before W. J. Stewart, Esq., assisted by Captain Sinclair Loutit, Captain Jenkin Thomas, and Mr. J. H. Hallett, C.E., into the circumstances attending the abandonment of the British s.s. "Lucifer," of Liverpool, on 16th April, 1907, near lat. 40° 19′ N. and long. 59° 59′ W. Atlantic Ocean.

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 abandonment of the said vessel was due to the fact that she was in immediate peril of foundering owing to her having sprung a serious leak, while labouring in the trough of the sea during the time that her engines were being repaired, owing to the leaking of the condenser.

Dated this 14th day of June, 1907.

W. J. Stewart,
Judge.

We concur in the above Report.

W. H. Sinclair Loutit,
Jenkin Thomas,
J. H. Hallett, M.I.C.E., } Assessors.

Annex to the Report.

This inquiry was held at the Magistrates' Room Dale Street, Liverpool, on the 11th, 12th, 13th, and 14th days of June, 1907. Mr. Paxton represented the Board of Trade, Mr. Crooks appeared for the owners, and Mr. A. T. Miller for the master. The first engineer and first officer appeared in person.

The "Lucifer," official number 110609, was a British screw steamer, schooner-rigged, and built of steel in 1899, at Wallsend-on-Tyne, by C. S. Swan & Hunter, Limited, and was registered at the Port of Liverpool. She was of the following dimensions: —Length, 344·4 feet; breadth, 47·1 feet; and depth in hold, from tonnage deck to ceiling amidships, 27·9 feet; her gross registered tonnage being 3822·71 tons and registered tonnage 2472·54 tons. She was propelled by one triple-expansion surface condensing engine of 300 n.h.p., built by T. Richardson & Sons, Limited, at West Hartlepool, in 1899, and had two steel boilers pressed to 180 lbs. per square inch, built by the same firm in 1899, her estimated speed being 10 knots per hour.

She was owned by the Bear Creek Oil and Shipping Company, Limited, of 18, Water Street, Liverpool, Frederick Charles Bowring, of 18, Water Street, Liverpool, being designated the person to whom the management of the vessel was entrusted by and on behalf of the owners, under date of 15th September, 1899.

The "Lucifer" was built for the carriage of mineral oil at a cost of £54,000, and was classed 100 A1 at Lloyd's. She had two steel decks, 12 bulkheads, and had five water ballast tanks with a capacity of 320 tons, and could carry, when fully loaded, 5,133 tons of mineral oil in specially constructed tanks, without being immersed to her deep load line. She was flushed decked with closed bulwarks, raised poop, bridge, and forecastle, the engines and boilers being situated under the poop abaft the oil tanks. She carried four boats, two of which were lifeboats, and the necessary life-saving appliances, and was in every respect well equipped for the trade in which she was employed. The last extensive repairs to the vessel were effected in Newport, Monmouth, in June, 1906—after she had grounded during her passage down the river Elbe in May of the same year. The vessel was then placed in dry dock, her bottom duly examined, and all defects were made good to the approval of Lloyd's surveyor, the cost amounting to £1,100.

In February, 1907, at Manchester, she was thoroughly overhauled, whatever was necessary was done, and she left that port in March last in a perfectly sound condition. She passed the Lloyd's No. 1 survey at Newport, Monmouth, in April, 1904.

The s.s. "Lucifer" left Liverpool, in water ballast, for New York, on March 5th, 1907, her draught of water being 23 feet 5 inches aft, and 18 feet 6 inches forward, under the command of Mr. Q. W. D. Wilson, with a crew of 32 hands all told. On the outward voyage across the Atlantic, she experienced more than the average amount of bad weather. For several days she had strong head winds, sometimes increasing to a gale with high seas, causing her to pitch and strain heavily and the propeller to race badly. Although in light trim she took in large quantities of water at times, one heavy sea smashing the starboard lifeboat and staving in the starboard side of the bridge. She reached New York, however, without any material defects in her hull or machinery becoming apparent after the passage of 21 days.

The vessel left New York on the 5th April, 1907, for Dublin, loaded with 5,100 tons of mineral oil in the tanks, 29 tons of general cargo in the forehold, and about 636 tons of bunker coal, her draught being 24 feet 6½ inches aft, and 23 feet forward, giving a freeboard of 5 feet 8 inches, the centre of the disc being above the water line. All went well until 9 a.m. of the 9th April, when the chief engineer reported that the condenser was leaking badly, and that it was necessary to stop the vessel to repair it; so with the consent of the master, the engines were stopped, though at this time the weather was most unfavourable for doing so, a moderate gale prevailing with a heavy sea, causing the vessel to labour a good deal and take in quantities of water. After the engines were stopped, the vessel fell off into the trough of the sea, straining heavily and taking in a good deal of water until noon, when the engines were restarted. The same weather continued during the day, and at 7.20 p.m. the chief engineer reported that the high pressure piston rod gland was blowing badly, and that it was necessary to stop the engines again. They were accordingly stopped for some two hours whilst these repairs were effected, the vessel again falling off into the trough of the sea and labouring heavily. At 10 p.m. the engines were restarted, and about this time the presence of an unusual quantity of water in the bilges of the stokehold attracted the attention of the chief engineer, who showed it to the master, but expressed the opinion that he would have no difficulty in reducing it. At about 1 a.m. of the 10th April the weather became rapidly worse, a high, confused sea got up, and the vessel losing speed, failed to steer and fell off into the trough of the sea, though efforts were made to keep her up to it by setting the main trysail. This state of affairs continued from then to 10.40 a.m., when the engines stopped from the firemen being unable to maintain steam, the water in the stokehold having washed up the stokehold platform. Every effort appears to have been made by the chief engineer and his subordinates to cope with the influx of water up to this time; all

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the available pumps were put on, and the bilge injection tried; but the pumps were frequently choked with small coal, and the bilge injection would not throw any water from the same cause. The engineers devoted their attention to keeping the pumps going after the stokehold platform was washed away, and with assistance from the deck managed to rig up a temporary platform in the stokehold, by means of which the fires could be fed, and steam raised again; and at about 11 p.m. sufficient steam was obtained to start the engines, but not enough to give steerage way to the vessel, which, owing to the heavy sea prevailing, continued lying in the trough of the sea and rolling heavily.

At 1.40 a.m. of the 11th April, the water gained so much on the pumps that the temporary staging in the stokehold was washed away and the steam went down to 50 lbs., stopping the main engines which from this time became useless.

During the greater part of this day the weather remained the same, the vessel lying in the trough of the sea and straining badly. The crew and firemen were divided into two watches and employed baling the water out with buckets to assist the pumps in getting it under, and by these means the water was kept from gaining.

During the 12th, the weather became worse, and in spite of the efforts made by continuous baling to assist the pumps (which now frequently became choked and sometimes stopped for want of steam) the water gained. Seeing this, on the morning of the 13th, the master, after consulting with the chief engineer, bored several holes in the bulkhead between the cross bunker and the pump room, for the purpose of letting the water through into the pump room bilge, but this was not of much assistance as the holes became so frequently choked with small coal. Towards noon of this day, the force of the wind increased, the sea rose, and the water rapidly gained on the pumps, and at 10 p.m. all hands were compelled to leave the engine room. The master then decided to lighten the vessel by emptying No. 1 oil tank of its contents, and by 4 a.m. of the 14th the tank was emptied. By this time, owing to the continuous straining to which the vessel had been subjected, whilst lying in the trough of the sea, the decks began to buckle, and a plate was observed by the master to be fractured in the neighbourhood of the main rigging, so the master determined to ask for assistance when opportunity occurred, and got on deck a tow line and unshackled his bower cables in readiness. On the evening of the 14th, the water was up to the cylinder tops, and the vessel's stern was nearly under water, she having made 9 feet of water during the preceding 24 hours. During the 15th the same weather prevailed, the vessel lying helpless in the trough of the sea, and the water steadily gaining. As darkness set in the master exhibited flares as distress signals to attract attention from passing steamers and prepared the lifeboats for leaving the vessel. In response to these signals, the s.s. "Sagami," of Sunderland, came alongside and remained in the vicinity all night. At daylight of the 16th, all hands from the "Lucifer" were transhipped to her, the "Sagami's" boats making two trips and the "Lucifer's" one to effect the transference, which was completed without accident by 8 a.m.

At the time the "Lucifer" was abandoned, the water was 18 inches over the tops of the cylinders and the after part of her deck was awash. The crew of the "Lucifer" were on the 28th April put into a pilot boat off Falmouth and landed there.

At the conclusion of the evidence, Mr. Paxton for the Board of Trade, submitted the following questions for the opinion of the court.

(1) When the vessel left New York on the 5th April last,
- (*a*) Was she in good and seaworthy condition as regards hull and equipments?
- (*b*) Had she the freeboard required for a summer voyage?
- (*c*) Was she in good and proper trim for a voyage to Dublin?

(2) What was the cause of the condenser leaking on the morning of the 9th April last? Were prompt and proper measures taken to remedy the defect? Did any large quantity of water get into the ship through the condenser at this time?

(3) What was the cause of the gland of the high pressure piston leaking on the 9th April last although it had been overhauled at New York?

(4) For how long were the engines stopped for repairs on the 9th April last? Did the vessel strain herself during such stoppage and was every effort made to prevent her falling into the trough of the sea?

(5) When did the vessel first commence to make an unusual quantity of water? When was the fact reported to the master and chief engineer? Were prompt and proper measures taken to ascertain the cause of the influx and to keep the water under?

(6) Was every possible effort made to save the ship?

(7) Was the vessel prematurely abandoned?

(8) Was the vessel navigated with proper and seamanlike care?

(9) What was the cost of the vessel to her owners? What was her value when she last left the United Kingdom? What insurances were effected and how were they apportioned?

Mr. Crooks having addressed the court on behalf of the owner, and Mr. Miller on behalf of the master, the Court gave judgment as above and returned the following answers to the questions of the Board of Trade.

(1) When the vessel left New York on April 5th, 1907,
- (*a*) She was in good and seaworthy condition as regards hull and equipments.
- (*b*) She had the freeboard required for a summer voyage.
- (*c*) She was in good and proper trim for a voyage to Dublin.

(2) The leak in the condenser on April 9th was due to the leaking of a tube. Prompt and proper measures were taken to remedy the defect. No large quantity of water got into the ship through the condenser at that time.

(3) The evidence did not disclose the exact cause of the high pressure piston rod leaking on April 9th.

(4) The engines were stopped to repair the condenser tube from 9.10 a.m. of the 9th April last to noon, when they were restarted, the repairs having been effected. At 7.20 p.m. of the same day the engines were again stopped until 10 p.m. on account of the high pressure piston rod gland packing blowing. During these stoppages the vessel did strain herself owing to rolling heavily in the trough of the sea. Every effort was made to prevent her falling into the trough of the sea.

(5) The vessel first commenced to make an unusual quantity of water after 10 p.m. of the 9th April, when the master and chief engineer were both in the stokehold, but the engineer at that time had no doubt as to his ability to deal with it. Soon after midnight of the 10th April, the wind and sea increased in violence, the vessel lost her steerage way, and lying in the trough of the sea strained heavily, causing the water to gain on the pumps—although all those available were put into use.

Prompt and proper measures were taken by the master and chief engineer to ascertain the cause of the influx of water and to keep it under.

(6) As soon as the vessel was found to be making water, every possible effort was made to save her. The Court, however, is strongly of opinion that having regard to the state of weather at the time when the condenser tube gave out, and to the fact that the engines were only partially disabled, the master and chief engineer would have been better advised if they had decided to keep the engines going before taking in hand the repairs, in the hope that the weather might moderate, rather than risk the straining and labouring which were inevitable when

the engines were stopped and the vessel lay helpless in the trough of the sea.

(7) The vessel was not prematurely abandoned.

(8) With the exception of the matter referred to in the answer to question 6, the Court is of opinion that the vessel was navigated with proper and seamanlike care.

(9) The original cost of the vessel to her owners was £54,000; her value when she left the United Kingdom was £50,000; she was then insured for £37,000 on a time policy to September 1907. The value for insurance was £41,000, the owners taking £3,800 and another company £800. Her policy on freight was £3,500 and on advances £3,000, while a proportion of the premium was insured. The owners had recovered all the insurances, the total collected being about £46,000.

W. J. STEWART,
Judge.

We concur in the above Report,

W. H. SINCLAIR LOUTIT,
JENKIN THOMAS,
J. H. HALLETT, M.I.C.E.
} Assessors.

Liverpool, 15th June, 1907.

(*Issued in London by the Board of Trade on the 12th day of July*, 1907.)