

"EMPRESS OF CANADA" INQUIRY

Chief Fire Officer on Gas
Cylinder Danger

COURT ADJOURNED TO JAN. 5

From Our Own Correspondent

LIVERPOOL, Tuesday

Mr. A. J. Greenslade, chief officer of Bootle Fire Service, said to-day at the Ministry of Transport Inquiry into the loss by fire of the *Empress of Canada* that a gas cylinder could explode with sufficient force to fracture a ship's side. He said the intense smoke led to the loss of the ship as it did not permit the fire to be assessed accurately. The inquiry was adjourned to Jan. 5. The fire occurred on Jan. 25 last, in No. 1 branch, North Gladstone Dock, Liverpool. Mr. K. S. Carpmal, Q.C., is sitting as Wreck Commissioner with Captain Lewis Parfitt and Messrs. W. J. Nutton, I. J. Gray and F. Dunn as assessors.

[The previous proceedings were reported in LLOYD'S LIST of Dec. 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 21 and 22.]

Mr. J. B. Hewson and Mr. Gerald Darling are representing the Ministry of Transport. Mr. George Bean is appearing for Bootle Corporation. Mr. J. V. Naisby, Q.C., and Mr. R. J. H. Collinson are representing Canadian Pacific Steamships, Ltd. Mr. Glyn Burrell and Mr. Norman Sellers are appearing for the Mersey Docks and Harbour Board. Mr. Trevor Davies is appearing for Harland & Wolff, Ltd. Mr. P. F. Broadhead (instructed by Messrs. Ingledew, Brown, Bennison & Garrett, London) is instructed to watch the interests of the members of the Mercantile Marine Service Association and the Navigators and Engineer Officers' Union.

Mr. A. J. GREENSLADE, chief officer of Bootle Fire Service, said that on the day of the fire he was off duty and returned home at 4.45 p.m. He was told about the fire and arrived at Gladstone Dock about 4.53. He had been in the *Empress of Canada* as a visitor on two occasions, about two years before the fire and a little later. Both were ordinary visits in no way connected with fires or exploration in case of fire. He had not been in the *Empress of France*.

Mr. HEWSON asked whether it was the practice of Bootle Fire Brigade to look at ships in case there should be a fire at some time and Mr. GREENSLADE replied: "Because of the amount of shipping and the varying ships we cannot, of course, visit every one. It is not only shipping with which I am concerned."

CURTAIN OF FIRE

Mr. Greenslade said he did not see any fire on C deck and remained there only two or three minutes before going up to B deck. He entered the deck through the door in the ship's side amidships and looked aft down the working alleyway. There was heavy smoke and a curtain of fire from the deck to the deck head. The position in the cross alleyway looking towards the starboard side of the ship was almost identical. There was smoke but no fire in the alleyway looking forward. There were two men with a hose playing down the alleyway towards aft.

Mr. HEWSON: This is something like 40 minutes after the arrival of the brigade. Are you telling the Court that at that time there was only one hose in the working alleyway on B deck aft, in what you described as an inferno of fire?

Mr. GREENSLADE replied that there was only one working aft, but there was a second driving across towards the starboard side down the cross alleyway and another driving up the alleyway forward. They were so close together that they could be brought to bear either way. The hose which was being played aft along the alleyway was having some effect in driving the fire back but was not bringing it under control as the fire there was considerable and one of his men described it when he first went in as "roaring like a timber fire." The fire in the alleyways was definitely fierce. At 5.2 p.m. he sent a message back to his control. "Make pumps 20. Position appears serious. Approximately 12 jets in use. Main seat of fire not located."

After making an investigation on B deck amidships he went aft to the entrance of the working alleyway on the port side. The firemen were playing into the alleyway from forward and they told him that they had been driven back. When he went down the stairs to C deck he encountered heat and smoke but no flames. Jets were working round the glass pantry and into the first-class dining-room. He explained that gases could build up and escape with force and upon meeting another agent, which might be oxygen, could ignite and spread the fire with surprising rapidity.

There were several explosions in the ship during the passage of the fire and one fireman was fortunate not to be killed outright—as it was he escaped with shock. When he saw the man, then off the ship, his face had marks of powdered glass. There was a split of about 5 ft. right down the plating of the ship on the starboard side.

Mr. HEWSON: You say in your opinion that it is quite a possibility that if there are oxygen cylinders in a ship, as you have in a ship under repair, getting caught up in a fire they can cause such an explosion?—Definitely.

Mr. GREENSLADE quoted the case of a fire in a ship on Merseyside some years ago, when within 30 seconds a fireman was engulfed in a sudden swirl of fire and was almost burned to death. He had to be invalided out of the service. If there were some bottles, or a bottle, near the side of the ship, the explosion would be sufficient to fracture the ship's side, he said. "It is almost the equivalent of a bomb when it explodes."

Mr. HEWSON: After what you have just told the Court about the release of gases and their sudden firing, do you think this could account for the rapid spread of the fire?—Definitely.

Mr. GREENSLADE continued: "I dropped oxygen and acetylene cylinders I found in the dock. It is against the Dock Board regulations I know, but I hope they will forgive me this time. I would not ask a man to carry cylinders of gas like that about." He heard two explosions within the ship and one loud explosion somewhere between 10 and 10.30.

Asked what conditions were like on A deck, he said the smoke was so thick that it never permitted the fire services accurately to assess the fire there. There might have been several pockets of fire, but even with the aid of breathing apparatus the men were only able to make limited progress. "It was my considered opinion that if this had been a land fire they would have checked the fire over an area of 160 ft. by 75 ft., and that would have limited the fire spread, but the intense smoke led to the final loss of this ship."

PLATES AS HEAT CONDUCTORS

In answer to Mr. Hewson, he said it was far more difficult to fight a fire in a ship than in a block of offices. In a ship the conductivity of heat through the steel plates was much more. "Fire doors themselves are very useful in keeping back fire spread and keeping back smoke, but my opinion is that liners, particularly if they are of British design, are made to burn. A fire officer never views a ship as a beautiful looking hotel. We view her from the point that there will be no holding a fire if it gets away." Air spaces behind panelling could be kept down by using something like steel wool, he said, because once a fire began to take effect the steel plates would conduct heat and bypass the actual fire. There was a far greater spread of fire in a liner than in a building of plaster and brickwork.

Mr. Greenslade said there were pumps from Liverpool, Bootle, Birkenhead, Wallasey, Cheshire and Lancashire, and at 6.20 p.m. he ordered the total to be made up to 30 pumps.

DRAINAGE HOLES CUT

Mr. Greenslade said by 7 o'clock the ship was listing. To facilitate drainage, holes were cut at B deck level by fire brigade personnel and Harland & Wolff's workmen. He estimated that 1440 tons of water was pumped into the vessel while the attempt was being made to save her, though the approach to accuracy of that figure would be very difficult to estimate. It excluded water being pumped from the *Salvor*, which he did not think put much water actually into the ship. In reply to Mr. Naisby, he said, "It was not possible to remove water from the top hamper of the vessel. If we could have got into all the cabins we would have been able to do something about it. Since the fire some experiments had been carried out to try to solve this difficulty."

Mr. NAISBY said a number of passenger liners had turned over after catching fire because of the amount of water in them and asked Mr. Greenslade whether he, or his authority, had even considered whether anything could be done to obviate this danger.

Mr. GREENSLADE said, "No," but he knew of some experiments which had been carried out since the fire. Asked whether it would not have been possible to have pumped water out of the ship, he said the holes cut in the side gave better results by draining the water away than he could have got by using suction hoses.

Replying to Mr. Bean, he said that after the fire he received a letter from Canadian Pacific Steamships thanking him and the fire service for the prompt and efficient manner in which they dealt with a major fire.

The hearing was adjourned to Jan. 5.