

"EMPRESS OF CANADA" INQUIRY

Marine Superintendent on Spread of Fire

"A LITTLE BIT OF INCENDIARISM"

From Our Own Correspondent

LIVERPOOL, Wednesday

The Liverpool marine superintendent for the owners of the *Empress of Canada* gave evidence to-day at the Ministry of Transport Inquiry into the loss of the vessel by fire. When questioned about the cause of the fire and its rapid spread, he replied that at the back of his mind there was "a little bit of incendiarism." 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 and 16.]

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.

WEEK-END WORK PLAN

The first witness was Mr. H. J. Mowbray, senior assistant manager on the hull side of Harland & Wolff, Ltd. He said it was usual when work was being carried on during Sundays to agree with the superintendents what was to be done. They held a foremen's meeting on Friday to decide how many men would be on the various jobs. It was his practice when they had work on a Canadian Pacific ship on a Saturday or Sunday to visit the ship. He visited the *Empress of Canada* on the day of the fire.

He was concerned with shell repairs on D deck. The ship had taken the water in the graving dock on the Friday at 7 p.m. Work finished at 4.30 to enable her to do this. They had to strip the staging which had been necessary for repairing the shell damage on D deck. They had actually carried out riveting to that job on D deck. The job had been started in dry dock and they had done the riveting below D deck when floating, then they had to dismantle the staging for the ship to go out. He was concerned with seeing that the staging had been erected on the Sunday morning and that they had started with the riveting work. A new piece of plate had been fitted and electrically welded and all rivets below D deck were in.

When he was there on the Sunday morning most of the riveting in D deck cabin was finished except for a few at the top. The job extended above that deck and further rivets had to go

in and to enable that to be done they had to raise the staging. He said that 288 men employed by Harland & Wolff were working on the ship that day. When a trade was going to use a welder or a burner or a rivet fire the foreman plumber was sent for and he arranged for a fire watcher to stand by. The job of the fire watcher was to cover any naked light, particularly underneath where the job was on, and if they were burning on the bulkhead to watch the other side. They must not start work until the location had been examined.

On the completion of the work the fire watcher stood at the job for an hour and went round the job. After reporting to the chargehand he would then go up to the duty officer with his book and report that the job was finished and that everything was satisfactory. Invariably the duty officer, before he signed the book, would go round the job himself with the fire watcher. On the day of the fire he was at the ship at 12.30. Later, after the fire had broken out, he was sent for at home and he arrived back at the ship at about 4.55.

MEN STANDING BY

Asked by Mr. Hewson what assistance Harland & Wolff employees gave during the fire, Mr. Mowbray said he met the marine superintendent and reported to him and later saw the superintendent engineer and asked if they required any assistance. It was agreed that he should keep some of the burners back in case they were required. When they saw water coming from the coaming of the door on the port side amidships it was decided to burn some holes in the shell aft of the door, just above the stringer bar. They had some heavy plating and hydraulic rivets in the way, but he saw three holes being burnt through to free the water. As the ship came over a little due to the list, they were able to burn a couple of openings in the shell near a deck somewhere about the same location. The holes were about six inches by four inches in size. After seeing three holes burnt he went to the freight office, which was used as a centre of control, and he stood by there in case he was needed. A few holes were burnt in the ship, but he did not remain there during the time that was being done.

Continuing his evidence Mr. Mowbray agreed that a lot had been done recently to discourage smoking and the owners could take a lot of credit for this. Up to 1941 smoking was prohibited on board a ship and in the dock estate. When the blitzes started it was permitted in the dock estate and smoking on board ship became uncontrolled. There were about 800 men altogether at the ship during overhaul and assuming that 600 of them were smokers and that 10 per cent. of those 600 smoked in unauthorised places that would mean about 60 men. The fire patrols had not seen anything like that and he thought that was an indication that there had been a big improvement since smoking was again banned. Harland & Wolff's men had to abide by the ship's regulations. Directions concerning non-smoking were emphasised through the foremen.

The WRECK COMMISSIONER asked what orders were made as to what was to happen in case of fire and Mr. Mowbray replied: "They haven't any."

Mr. Hewson then recalled the evidence of one or two chargehands who said that they had orders to try to prevent fire but once it started they had no directions as to what to do. Mr. Hewson asked if it had ever been considered by Harland & Wolff that they should get together with the shipping companies to try to thrash out some idea as to what should be done in the event of fire in ships. Mr. Mowbray said that it had not been considered.

Mr. Hewson: Has it ever struck you that with several hundred men on board what use they could be in the case of fire?—I think that apart from the first aid at the start of the fire if you get the others interfering it would be chaos. If 291 men came to one cross alleyway they would be more than a hindrance.

AIR PIPE SYSTEM

When questioned about the air pipes which passed through the fire doors Mr. Mowbray said these could be cut with a penknife in a very short time. He thought a penknife would do a better job than an axe because, the pipes being rubber, it would be better to saw them with a sharp knife than give them a blow with a possibly blunt axe. Describing the air pipe system he said that they came from a compressor on the quay, and the hose came through a porthole abreast the after end of the main dining room on B deck. In the alleyway they had a distribution box from which three or four hoses about three quarters of an inch diameter were led off and these passed through the fireproof door and went down the ventilator on the port side.

Replying to Mr. Bean, witness agreed that the rule which was brought out permitting smoking on the dock estate was in effect only a relaxation to permit smoking in a certain number of specific places where notices were not displayed prohibiting smoking. He agreed that the no-smoking rule applied in ships.

Mr. BEAN: I appreciate the force of your comment that any arrangements to use your men in fire fighting might lead to chaos because of the numbers, but do you think it would be possible to have some simple fire rule that the men would go to certain places in the event of an alarm?—I think that would be rather difficult. At a C.P.R. overhaul we would have in the region of 600 men, but only during the overhaul period. Normally the C.P.R. ships, during an in-port period, might average about 80 men. It would be difficult during an overhaul period with the amount of casual labour to be giving them fire instructions.

Does that present a very great difficulty in conveying to the men that in the event of an alarm they would go either to one end of the ship or to the other?—No, but I would say that the shipowners should make these arrangements and not the repairers.

Would it be very difficult for your men to have some simple fire orders in the event of an alarm?—The only difficulty would be where the casual labour was concerned.

But with your general employees it would be possible to give them some fairly simple orders?—Yes, if a plan was formulated which could be brought to the notice of the foremen and from the foremen to the chargehands.

Mr. Mowbray agreed that fire doublers who were instructed in fire directions concerned with their work were not trained for general fire purposes also.

Mr. BEAN: I wonder whether you would not think it possible and desirable that they might receive the training, which after all, is quite short and is readily available?—I think any training they would get would be to the full benefit of everyone concerned.

I imagine there are times when you are doing a general overhaul when they are really the chief fire fighting unit on board?—That is right, when the ship is in our hands.

So it would be very much to your firm's advantage if they should receive this training?—Yes.

Referring to the air pipes which had been said to have obstructed the closing of the fire doors, Mr. Bean asked whether the witness would not consider it both possible and practical that where pipe lines did obstruct the fire doors the special attention of the ship's authorities should be drawn to the fact. Mr. Mowbray agreed that this could be done but added that the men who put out the hoses were always very careful to avoid going through fire doors whenever possible. He agreed that it might be a useful idea if the special attention of the master-at-arms was drawn to the fact where pipe lines did impede the closing of a fire-door.

In reply to Mr. Naisby witness said he thought that the change in the Mersey Docks and Harbour Board Regulations in 1942 concerning smoking had produced a lot of smoking on the dock. He thought that smoking was a little more prevalent to-day than it was before the war, and that the evidence they had heard about the men passing the word along the ship that the fire patrols were on their way was quite true. He thought they could do more to bring the non-smoking regulations to the notice of the men through their foremen and chargehands than through putting notices around the ship. In reply to the Wreck Commissioner he said that smoking was not allowed in the dock sheds and that there were notices there to that effect.

BOILERMAKER'S EXPERIENCES

ALBERT MAGUIRE, a boilermaker, said he was burning out and replacing plates in a tank in the stokehold on the port side. At 4 p.m. he left to go to the crew's mess on D deck for tea. As he was passing through C deck he saw smoke on the top of the pantry stairway leading to the small pantry on B deck. With two other men he tried to get up the stairs to see where it was coming from but the smoke was too dense and they could not do so. A couple of minutes later the whole of B deck appeared to burst into flames which seemed to come from a mass of electrical wires in the bulkhead. The wiring from which he saw the burst of flame was a mass of wires varying from half an inch to one inch in thickness. There would be about 60 altogether and they made a block about 10 inches square. He was using a fire extinguisher at the time he saw the burst of flame. The wires were carried on a tray which ran under one of the beams fore and aft in the pantry. Replying to Mr. Collinson, witness said the lights had been going on and off during the day. Once they were in darkness for an hour. The lights had gone off once or twice while he was in the stewards' mess having his dinner. He was working inside the tank with the help of temporary lighting with a special lead running through a manhole from the box outside in the stokehold. The light was from the ship's power.

H. J. SHORT, a joiner, said that he was stripping woodwork in B33 to enable the welders to get at the plates. He finished at 11 a.m. and went to work in A15, leaving the door of B33 unlocked. Asked by Mr. Hewson if he smoked in B33 he replied that he did not smoke on board the ship, as it was an understood rule that there was no smoking on board. He never went back to B33. He had left his tools in cabin A15 and they were there, as far as he knew, to this day.

MARINE SUPERINTENDENT'S VISIT

Captain A. S. PHILLIPS, marine superintendent, Liverpool, of Canadian Pacific Steamships, Ltd., said he called in on the *Empress of Canada* at midday on the day of the fire while passing after a visit to the *Empress of France*. He stayed in the *Empress of Canada* about half an hour. So far as he knew the ship's fire mains were in order and ready to deal with any fire. If anything had been wrong he would have expected the engineer to report to the ship's officer so that arrangements could be made to couple up with the shore. When the ship was in dry dock there was a hose from the shore to the ship and all that was needed was an attachment, or simple twist coupling, and the turning on of the water. In wet dock there were some valves to be removed before this connection could be made.

The question of fire patrols came under the organisation of the investigation department. He considered that six men were adequate for a fire patrol.

Asked by Mr. Hewson about open ports Captain Phillips said he did not think that many passenger ports would be found open in dock. The stewards were very careful about that. They had cleaned up the ship and they knew if any water got into a cabin through open ports they would have to clean the cabins again. Asked about the closing of ports as a fire precaution Captain Phillips replied: "Any man going to sea appreciates that fire is one of the greatest hazards and it is instilled into the men to keep the ports closed." Asked if he had given any special direction for them to be kept closed, he said, "It is an understood thing that they should be kept closed."

Mr. HEWSON: There is some evidence that one port, if not more than one, just forward of the steel door on the starboard side of the alleyway near the dispensary was open?—That is what made me doubt the evidence.

Doubt that?—I cannot imagine a port being left open.

We had evidence from one of the seagoing shore gang that smoke was coming from a port, but he could not see which deck?—It might possibly have been one of the crew ports, but I doubt that it would be a passenger port.

Your opinion on ports being kept shut seems to be more directed towards keeping the cabins clean because of extra work for the stewards. What do you think about them being open or shut from the point of view of fire precautions? I take it you have never issued any direct order to those under your supervision in the port that ports should be kept closed?—I think that is in our general orders, in case of fire, for stopping the draught.

You mean when fire has broken out?—Quite.

But not from the preventive side of it?—No, I think one thing goes with another if they closed the ports for washing down then they are closed for the prevention of fire.

Asked about fire patrols, Captain Phillips said that B deck was a fairly straightforward deck to patrol and a man should be able to smell or see signs of fire. If there were fire inside the cabin he would expect the smell to come out through the ventilators of the cabin.

Mr. HEWSON: What is troubling me is this. If the evidence of Mr. Hill is in any way near correct and if the times given by Mr. Hill and the later witnesses are right it would appear that there would be grounds for saying that there was smoke in and around this section of cabin B 53 and a little forward of that for something like half an hour or perhaps more. We do know from the evidence given by Mr. Griffiths that he patrolled that deck within about five or 10 minutes of the time that Mr. Hill said he saw smoke. There is another witness coming who will say that he went along the alleyway on his patrol at about a quarter to four and that he smelt nothing. Does it not seem a little peculiar to you, if that evidence is right, that no-one smelt anything?—It is most peculiar at that time of the day and at that place between four and five o'clock. There must have been many men in the alleyway round about then. I cannot imagine the fire escaping their notice and there would have been smoke.

Mr. Hewson said he had been directing his mind more to a time about 3 30 p.m. and on the starboard side of the ship. He added:—

If that port were open in B 53 and a fire was beginning to burn would the smoke go out through the port rather than through the ventilators into the ship?—Quite the reverse in my opinion. I think if the port were open it would blow the smoke into the ship.

Do you think that is a good argument for keeping ports open?—Not at all, but it would assist them in smelling the smoke.

Do you think that if smoke did come into any of these side alleyways a patrolman ought to have smelt it?—A patrolman and the rest of the people who must have been around.

SUDDENNESS OF FIRE

Can you account for this fire and for its suddenness in bursting out as it would seem to have done?—I cannot imagine it starting from a cigarette end or the smouldering of a piece of wire and getting such a hold in such a short time as it apparently did.

Do you mean that if it had been a cigarette end or a smouldering wire it would have taken several hours to work up enough heat to start a fire?—It would have taken a considerable time.

Captain Phillips added that if the fire had taken a long time to get going he could not imagine how it came to escape detection.

Mr. HEWSON: Do you think that as a general proposition it would be a good thing for cabins to be inspected at fairly frequent intervals?—I do not think that is necessary.

For what reason?—The fire would be detected by smell or sight or hearing.

WRECK COMMISSIONER: Was any action taken in consequence of the report and recommendations of the working party on fire?—We were fire conscious right through.

Answer my question. Was any action taken?—None.

Asked about the efficiency of fire patrols which were referred to in the recommendations and whether he was of the opinion that it was efficient for a patrolman to walk along the passenger alleyway without looking into the cabins, Captain Phillips replied, "Yes."

Mr. HEWSON: Is it your opinion that they were efficient when they did not go into the side alleyways?—I would say, yes. I would not expect them to go into every one.

Mr. HEWSON, quoting from the recommendations that patrols should be sufficiently frequent as to ensure that a ship was completely patrolled once an hour asked:—

"Does it surprise you to hear that Mr. Griffiths, a patrolman, and Mr. Jennings, the master-at-arms, when patrolling A and B decks took one and a half hours?"—It does rather surprise me.

Captain Phillips added that he thought they should each be able to patrol those two decks in an hour and if they took an hour and a half they were not complying with the recommendations.

Mr. HEWSON: So you think there is a bit of slow footed work going on if they took one and a half hours?—Yes.

Questioned on the training of patrols, witness said that those fire patrols who were in the ship's crew had fire drills and knew how to use firefighting equipment. No smoking was allowed in the passenger accommodation of the ship whatever except in staff rooms. Harland & Wolff's men were allocated a place for their feeding which was the stewards' mess. All the ship's company were well aware of the regulations as also were men working in the ship.

Captain Phillips said he did not consider there was as much smoking on board as there was thought to be by some people. He thought there was less smoking to-day than 10 years ago. On the day of the fire he had been on board the *Empress of Canada* at 12 30 and then went home. At 4 20 he was told the ship was on fire and at about 4 40 he was back at the ship, where he contacted the chief officer of the Bootle fire brigade and a number of Mersey Docks and Harbour Board officials at the freight office which was being used as a headquarters. He said that at the time counter-flooding the ship to overcome the list was first discussed, he was not present because he was arranging for the movement of the *Empress of France* to a place of safety. He was, however, in agreement with the measures which had been taken to combat the fire and later the list and ultimate capsizing of the ship. He could see no other alternative.

Questioned by Mr. Naisby on any alternative cause he had in mind for the starting of the fire, having said that he did not think it started through a cigarette end or smouldering, Captain Phillips replied, "I think it must have had some assistance, and I think applied assistance for it to gather such speed so quickly."

Mr. HEWSON: What do you mean by assistance?—I had at the back of my mind a little bit of incendiarism.