(No. 2999.)

"RICHARD HAYWARD."

The Merchant Shipping Acts, 1854 to 1876.

In the matter of the formal Investigation held at Newcastle-on-Tyne on the 14th of September 1886, before H. C. Rothery, Esquire, Wreck Commissioner, assisted by Captain Parfitt and Admiral Pickard, as Assessors, into the circumstances attending the supposed loss of the sailing ship "Richard Hayward," of Carnarvon, together with her crew of 26 hands, whilst on a voyage from Sunderland to Singapore.

Report of Court.

The Court, having carefully inquired into the circumstances of the above-mentioned shipping casualty, finds, for the reasons annexed, that the loss of the said vessel was probably due to her cargo of coal having become spontaneously ignited, owing to a portion of the iron pyrites having been left in it, to the quantity of small coal which she had on board, and to the rain having been allowed to get into the hold whilst the cargo was being shipped.

The Court makes no order as to costs.

Dated the 14th day of September 1886.

(Signed) H. C. Rothery,
Wreck Commissioner.

We concur in the above report.

(Signed) Wm. Parfitt, Benj. S. Pickard, } Assessors.

Annex to the Report.

This case was heard at Newcastle on the 14th of September instant, when Mr. Dendy appeared for the Board of Trade. The managing owner of the "Richard Hayward" was present, but was not represented by either counsel or solicitor. Thirteen witnesses having been produced by the Board of Trade and examined, Mr. Dendy handed in a statement of the questions upon which the Board of Trade desired the opinion of the Court. The managing owner of the vessel having recalled two of the witnesses, then addressed the Court on his own behalf, and Mr. Dendy having been heard in reply, the Court proceeded to give judgment on the questions upon which its opinion had been asked. The circumstances of the case are as follow:—

The "Richard Hayward," which was an iron four-masted sailing ship, belonging to the port of Carnarvon, of 1686 tons gross, and 1637 tons net register, was built at Sunderland in the year 1885, and at the time of her loss was the property of the "Richard Hayward Ship Company, Limited," Mr. William Edward Jones, of Port Dinorwic, in the county of Carnarvon, being the managing owner. She left Sunderland on the 11th of July 1885, with a crew of 26 hands all told, and a cargo of 2,496 tons 6 cwt. of coal, bound to Singapore, and was seen on the 29th of September following by an American barque called the "Great Surgeon" in about latitude 38° south, and longitude 35° east, apparently deserted, and with fire issuing from the hatches, and it is said that the lowering tackles were hanging from the davits, as though her crew had got off in the boats. From that time nothing more seems to have been seen or heard of either the vessel or her crew, and after this lapse of time it is fair to conclude that they have all perished.

These then being the facts of the case, the first question which we are asked is, "Whether the coal "shipped on board the 'Richard Hayward' is dangerous "for shipment on long voyages?" It seems that the coal with which this vessel was laden came from the Dudley Pit of the Cramlington Colliery, and from the yard and low main seams in about equal quantities, that being the proportion in which the coal is usually despatched from this colliery. According to Mr. Potter, a part owner in and the manager of the colliery, the coal contains only a very small quantity of explosive gas, so much so that the colliery is always worked with naked lights, except when they are knocking away the supporting pillars, when, for greater security, safety lamps are used, lest a portion of the roof should come down, which would allow the escape of the gas from a seam above, which is heavily charged with explosive gas. He also stated that in the yard seam there is little or no iron pyrites, but that in the low main seam there is about 1·3 per cent. of it, but that it is easily detected, being chiefly in nodules. The mode, he told us, which is adopted for getting rid of the iron pyrites is by passing the coal, as it comes from the pit mouth, over a screen with half-inch meshes, some 20 feet long by 5 feet wide, at the bottom of which stand two men, one on each side, their duty being to pick out and throw aside all pieces of iron pyrites and other refuse matter. There is also, we are told, a third man, who stands on a plank over the wagons, and as the coal is shoveled into them he picks out any pieces that may have escaped the observation of the other two men. These are the precautions, Mr. Potter told us, which are taken to get rid of the iron pyrites, and his evidence was fully confirmed by Mr. Willis, the government inspector of mines for the Newcastle district, within which the Cramlington Mine is situated, who stated that the coal from this colliery is in general very clean and free from pyrites. And Mr. Mason, the coal fitter, who put the coal on board the vessel, told us that during the last 7 years he had shipped about 400,000 tons of this coal on board 337 vessels, which were bound on long voyages to the west coast of South America, San Francisco, Madras, Singapore, and other distant places, and that only seven of these vessels had caught fire on the way, being a little over 2 per cent. With these facts before us the conclusion to which we have come is, that the coal, when properly screened and cleaned, is, as a general rule, not dangerous for shipment on long voyages.

The second question which we are asked is, "Whether the coal was properly screened and cleaned from "brasses and pyrites before it left the pit?" It is impossible for us to say whether the coal which was actually put on board the "Richard Hayward" was or was not properly screened and cleaned. No doubt, as a general rule, the coal which is sent from this colliery is so, but Mr. Willis told us that on one occasion it had come to his knowledge that during a whole fortnight the quantity of refuse thrown aside by the men employed at the screens was very small compared to what it was on the succeeding fortnight, and that he could only account for the fact by supposing that during the former period the process of cleaning had not been so carefully performed as at other times. Moreover, Mr. Potter told us that the men employed to screen the coals and to pick out the pyrites were paid by weekly wages, and not, as is sometimes done, by the quantity of refuse thrown aside, so that they had not the inducement of self-interest to make them specially careful and vigilant. It may be therefore that, when the cargo of the "Richard Hayward" was sent off, there might have been some laxity on the part of the men at the screens, and if so it is quite possible that a portion of iron pyrites may have been left in the coal.

The third question which we are asked is, "Were the "coals shipped in proper condition, and was the breakage as far as possible prevented?" The coal had come from the Cramlington Colliery, which is about 11 miles to the north of Newcastle, and it would consequently have undergone a good deal of shaking before its arrival at Sunderland. We were told by Captain Pritchard, the owner's overlooker, that it was small coal, and the staithes master and the stevedore stated that it was more than usually dusty. It seems, however, to have been shipped in the ordinary way by lowering the trucks to the level of the coamings, and passing it through shoots into the hold, in doing which there would necessarily be a certain amount of breakage, but not more than is usual in these cases. On the whole, however, the evidence seems to shew that there was a good quantity of small coal in the vessel.

The fourth question which we are asked is, "Whether "during the time of loading, and particularly on the

L 367. 2780. 200.—9/86. Wt. 12. E. & S.

" 24th of June and the 7th of July, the weather was " wet? and, if so, whether every possible effort was " made and care taken to prevent the cargo becoming " wet?" There seems to be no doubt that, although the weather was generally fine whilst the loading was going on, a great deal of rain fell on the 24th of June and the 7th of July, and that it was allowed to get down into the hold. Mr. Penney, shipwright surveyor to the Board of Trade at Sunderland, told us that he called the attention of Captain Pritchard, the owner's overlooker, to the fact; and although Captain Pritchard said that he did not remember it, it is not denied that a good deal of rain did fall on those days, and that no precautions were taken to prevent its getting into the hold and wetting the coals. This was undoubtedly a misfortune, seeing that the vessel was bound on a long voyage, and we think that Captain Pritchard is not wholly free from blame in the matter.

The fifth question which we are asked is, " Whether " the holds were properly ventilated so as to ensure a " system of surface ventilation only, without ventilating " the body of the cargo?" The ship, we are told, had five ventilators with cowls standing about 7½ feet above the deck, and fitting over strong iron coamings about 18 inches high. The first of these ventilators was placed just abaft the forecastle, and consisted of two tubes; the upper one, which had a diameter of 15 inches, and formed the coamings, terminated just below the upper deck, inside of which was a smaller tube extending from the upper to just below the under deck, with a diameter of 10 inches, and with an open space between the tubes so as to give surface ventilation to the 'tween decks as well as to the lower hold. No. 2 ventilator, which had a diameter of 12 inches, was placed nearly midships, immediately above the water tank, where there was a break in the 'tween decks, and just pierced the upper deck. The third and fourth ventilators were placed just abaft No. 4 hatch, at a distance of four feet and a half from one another, one on each side; they were similar in all respects to No. 1 ventilator, having a diameter of 15 inches in the upper part and of 10 inches in the lower part. The fifth ventilator was further aft, and was intended to ventilate the lazarette only; it had a diameter of 12 inches, and passed through the cabin to the lazarette. With ventilators thus placed and thus constructed, the lower hold being quite clear and free from obstruction from the collision bulkhead aft, and the ventilators being placed at the extremities as well as in the centre of the holds, we are of opinion that the vessel was properly and sufficiently ventilated, and that a free circulation of air over the surface of the coal was insured without any danger of its being carried down into the body of the coal. The vessel, in fact, appears to us to have been exceptionally well ventilated.

The sixth question which we are asked is, " Whether " proper means existed whereby the temperature of " the cargo could be ascertained?" There were two temperature tubes placed one between the fore and main masts, and the other between the third and fourth masts. Each had a diameter of about three inches internally, and extended from the upper deck to the top of the kelson, the upper ends being fitted with screw plugs. We are told also that the master was supplied with a thermometer with which to test the temperature of the cargo from time to time, by lowering it down through these tubes. Whether he ever used it or not it is not possible for us to say: but that there were proper means on board for testing the temperature of the cargo admits of no doubt.

The seventh question which we are asked is, " Whether " there were proper and sufficient appliances on board " for the purpose of extinguishing fire?" It seems that there was a force pump forward, from which a tube ran along one side of the deck to the after part of the vessel, having three or four plugs in it, to which hoses could be attached, and the water could thus be directed to any part of the vessel. In our opinion she was exceptionally well fitted with means to extinguish any fire that might occur on board.

The eighth question which we are asked is, " What " was the cost of the vessel to her owner?" Mr. Jones, the managing owner, has told us that she cost them 15,750*l.* or 15,850*l.*, and that with the expenses attending the getting up the Limited Liability Company, the total cost to her owners would be about 16,000*l.*

The ninth question which we are asked is, " What " was her value at the time she left on her last " voyage?" Seeing that she was only launched in May of last year, that she left this country in July, and that this was her first voyage, we think that Mr. Jones is fairly entitled to put her value when she left this country at the sum which she cost him, namely, 16,000*l.*

The tenth question which we are asked is, " What " were the insurances effected, and how were they " apportioned?" Mr. Jones told us that the only insurances effected were 16,000*l.* on the vessel, and 1,000*l.* on the freight. The freight, we are told, was 2,059*l.*, but of this it appears from the charter party that two-thirds was to be paid on sailing, which would leave a sum of about 686*l.* to be received on the arrival of the vessel at Singapore. On the other hand it must be remembered that there were the advances for provisions, wages, and outport charges, which we were told by Mr. Jones were not insured, and which would more than make up the sum of 1,000*l.*

The last question which we are asked is, " What, in " the opinion of the Court, from the evidence before " them, is the cause of the loss of this vessel?" There is in this case no question of seaworthiness, the vessel having been a first class ship, built under special survey, and classed 100 A 1 at Lloyd's, and apparently thoroughly well equipped in all respects. Nor is it suggested by the Board of Trade that she was overladen or unstable. The evidence before us unmistakeably points to her having been seen on fire and abandoned by her crew in latitude 38° south and longitude 35° east, some two months and a half after she left this this country, by an American barque called the " Great Surgeon," and the question is, how she came to take fire. Of course it must be mere matter of conjecture, none of the crew having survived to tell the tale; but we have the fact before us that there was a considerable amount of small coal on board, and that on two days whilst the loading was going on a good deal of rain was allowed to get down into the hold; and if owing to the neglect of those employed to screen the coal at the colliery an undue proportion of iron pyrites had been left in it, as Mr. Willis, the Government inspector, thinks may have occurred, spontaneous combustion would very probably after a time have been set up in the cargo, and it is to this in all probability that the loss of the vessel is due.

Lastly, Mr. Dendy has asked that, as some blame seems to be attributable to Captain Pritchard, the managing owner's overlooker, for the loss of this vessel in not having taken proper precautions to prevent water getting into the hold, we should condemn Mr. Jones in a portion of the expense. It appears to us, however, that this is not a case in which we ought to condemn the owner in costs. The vessel, as I have said, was sent to sea in a thoroughly good condition, and well equipped in every respect. She was exceptionally well ventilated, and was provided with the requisite appliances, as recommended by the Commissioners on Spontaneous Combustion on Board Ship, for ascertaining the temperature of the cargo from time to time. But whether proper use was made of those appliances by the people on board, we have no means of knowing. And under these circumstances we should not think of condemning Mr. Jones in the costs; so far as he is concerned, he seems to have done everything that was necessary to ensure the safe arrival of the vessel at her port of destination.

(Signed) H. C. Rothery,
Wreck Commissioner.

We concur.

(Signed) Wm. Parfitt,
Benj. S. Pickard, } Assessors.