

(No. 1744.)

"FALCON."

The Merchant Shipping Acts, 1854 to 1876.

IN the matter of the formal Investigation held at Glasgow, on the 20th, 21st, 22nd, and 23rd days of March 1883, before H. C. ROTHERY, Esquire, Wreck Commissioner, assisted by Commander BURNES, R.N., Captain PARFITT, and Captain BEASLEY, as Assessors, into the circumstances attending the damage caused by fire to the sailing ship "FALCON," and the subsequent stranding and loss of the said ship, on the 19th of February 1883.

*Report of Court.*

The Court, having carefully inquired into the circumstances of the above-mentioned shipping casualty, finds, for the reasons annexed, that having regard to her age and condition, and to the quantity of coal which she had on board, the said ship was not in a good and seaworthy condition when she left Greenock in January last; and that Joseph Robinson, the owner, and George Grevett, the master who had charge of her from Greenock until she put into Campbelltown, are responsible respectively for having sent and taken her to sea in that state. The Court also finds that James Burns, the master who had charge of her from Campbelltown, was in a state of intoxication on the 11th and 16th of February, and again on the 19th of February, when the fire broke out, and that he not only took no proper steps to put it out, but prevented others doing so.

For these wrongful acts and defaults the Court cancels the master's certificate of the said James Burns, but recommends that in lieu thereof he be allowed a first mate's certificate.

The Court is not asked to make any order as to costs.

Dated this 23rd day of March 1883.

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

We concur in the above report.

(Signed) HENRY D. BURNES, }  
R.N., J.P., }  
WM. PARFITT, } Assessors.  
THS. BEASLEY, }

*Annex to the Report.*

This case was heard at Glasgow, on the 20th, 21st, 22nd, and 23rd days of March 1883, when Mr. Douglas appeared for the Board of Trade, Mr. Murray for the owner and master of the "Falcon," and Mr. Cook and Mr. Naismyth for the owners of the colliery from which the cargo of coal, which she had on board, came. Eighteen witnesses having been produced by the Board of Trade and examined, Mr. Douglas handed in a statement of the questions upon which the Board of Trade desired the opinion of the Court. Mr. Naismyth and Mr. Murray then addressed the Court on behalf of their respective parties, and Mr. Douglas having been heard in reply, the Court proceeded to give judgment on the questions on which its opinion had been asked. The circumstances of the case are as follow:—

The "Falcon," which was a wooden barquentine, belonging to the port of Arundel, of 318 tons gross, and 302 tons net register, was built at Sunderland in the year 1864, and at the time of her loss was the property of Mr. Joseph Robinson, of Littlehampton, in the county of Sussex, shipowner, and others, Mr. Robinson being the managing owner. She left Greenock on Tuesday, the 9th of January last, for Buenos Ayres, with a cargo of 522 tons of coal, and a crew of 10 hands, consisting of Captain Grevett as master, a mate, a boatswain, a cook and steward, 3 A.B's. and 3 apprentices. On getting outside, although the wind was quite fair

from the east, Captain Grevett brought her to anchor at the Tail of the Bank, and then returned in the steam tug to Greenock, for the purpose, as he said, of paying a sum of 15s. to the boatman who had piloted her out. Whilst he was on shore, we are told that the wind came on to blow so strongly, although still from the east and therefore off shore, that it raised a sea which rendered it impossible for him to return to his ship. He accordingly remained on shore on that and the following day, but on the morning of Thursday the 11th, having engaged the services of a steam tug, he went out to her, and having got up his anchor, proceeded on the same afternoon with a fair wind on his voyage. On the 12th they had got as far as the South Rock, but the wind then headed them, and during Saturday the 13th they were driven back again. On Sunday the 14th it was still blowing a gale from the S.W., and as the mate had been off duty from the time of leaving and was still confined to his bed, the master determined to put back to Campbelltown, where he arrived at about 1 p.m. of the same day. There the vessel was detained for so long a time that Mr. Peter Scott, the broker who had done the ship's business at Greenock, with the owner's sanction, sent a Captain Campbell to Campbelltown to see what was the matter. The result was that it was determined to supersede Captain Grevett, and to appoint a new master in his place, and accordingly Captain Burns was sent down and took charge of the vessel on the 25th, Captain Grevett leaving on the same day. The crew also, having requested to leave, were all discharged, with the exception of the cook and steward, one A.B., who was made boatswain, and of course the three apprentices, and on the 27th Captain Burns left Campbelltown, and on the 30th returned with a new mate and three A.B's. Shortly, however, after the new hands had joined her, they expressed a wish to leave her, not indeed because they had had a month's wages in advance, for they had only received 10s., but because, according to them, she was, even whilst in port, making more water than she should do. Two of them accordingly went on shore, and having gone to the shipping office, were referred thence to a magistrate, who referred them back to the shipping office, and when they got there they found it closed. At this time they fell in with the captain and boatswain, who they said treated them very kindly, and ultimately they consented to go in the ship. This of course caused some delay, during which we are told some caulking was done to the deck, but at length on the 9th February, the vessel started on her voyage. During that night it blew hard, and the vessel, which had been making water during the whole time that they were lying at Campbelltown, began of course to make more, so that the men had to be kept a good deal at the pumps. On the 10th it moderated, and continued moderate until the afternoon of the 11th, by which time they had got down as far as between St. John's Point and the Isle of Man, when the wind began to freshen, and the ship of course to make more water. Between 4 and 6 o'clock the same evening the crew came aft, and requested the captain to put back to a port of safety, saying that the vessel was making too much water, and that they did not consider her to be seaworthy. On the captain, however, refusing to do so, and saying that he should go on with her to Buenos Ayres, the whole of the crew stated that they would do no more work, and retired to the deck-house, leaving a man named Lawrence at the helm, whilst the captain and mate retired to the cabin. At about 9, Lawrence, who had been at the helm since 4 o'clock without having had anything to eat, left the helm and went into the deck-house, upon which the boatswain took the helm and remained at it until Lawrence returned in about half-an-hour afterwards. During this time the weather had become worse, and the vessel was drifting before the gale with her sails all loose, heading to the eastward. At length at about 11 o'clock the mate came on deck, and told the boatswain that he was going to take command of the ship and to steer her for some port of safety, and that he, the boatswain, was to take his place. Upon this the men at once set to work, and after clewing up the sails went to the pumps, when they found that during the seven hours that they had been off work she had made a very great deal of water. Whilst they were at the pumps the captain came up and resumed the

command of the vessel, saying that he would not go back to a port of safety, but would go on to Buenos Ayres. The crew, however, finding that she was making so much water did not then dare to leave the pumps. During the night the gale increased, and the vessel lost successively her lower fore topsail, fore sail, upper mainsail, fore topmast staysail and jib. The next morning the master, finding that the crew still refused to proceed on the voyage, determined to put back, and she was accordingly brought up at about 6 p.m. that day under Corsewall Point.

There she remained until the 15th, when, finding that they were in a very exposed position, and having lost one of their anchors, they ran up Loch Ryan, and brought up opposite Cairn village. On the 16th Mr. Doorne, the chief officer of coastguard, went on board to see what she was doing; and he has told us what passed between himself and the master on that occasion. On being told by the master that the vessel had received some damage, Mr. Doorne asked him if he was going to the receiver's to make a deposition, but the captain replied that he should not do so. Mr. Doorne then asked him who his owner was, and he said that he didn't know. Mr. Doorne then asked him what was the number of his crew, to which he replied that he didn't know. Upon this the chief officer called his chief boatman down into the cabin, and then said to the captain, "I am going to ask you a straightforward question, who is your owner?" The master replied that he didn't know; upon which Mr. Doorne asked him for his papers; and on his producing them he discovered who the owner was. Mr. Doorne then asked him for the inventory of the spirits that he had on board, from which it appeared that she had had five gallons of rum, one gallon of brandy, and 50 pounds of tobacco when she left Greenock. The master then produced the brandy jar, but it was empty. The cask of rum was then taken out of a locker under the captain's berth, and on being sounded was found to contain about a gallon. Mr. Doorne having then sealed up the rum and the tobacco, went on shore, and gave his men orders to keep a sharp look-out upon her. On Sunday morning, the 18th, at about half-past 9 o'clock, the chief officer again went on board, found the captain in bed, and having called him up gave him a telegram, telling him he could give him twenty minutes to answer it. The captain then sat down at the table, looking at this telegram for about ten minutes without saying a word, and at length stated that he would not send any answer that day; and thereupon the chief officer returned to the shore.

On the following morning, the 19th, at about 9.30 o'clock, the cook and steward left the galley on deck, where he had been since about 8.30, and proceeded towards the cabin; and on stepping into the companion he observed fire and smoke coming out from round a little trap hatch at the bottom of the companion ladder. He immediately called the master's attention to it, and the crew having being called aft, they began to pour down water from buckets on to the trap hatch. After doing this for about a quarter of an hour or twenty minutes, on the smoke and fire decreasing, the captain told the crew to leave off, and sent them forward to get out the long boat. No attempt, however, was made to ascertain how the fire had originated, and no signal was made to the shore for assistance; but the crew went forward, whilst the captain continued to walk the poop; and the steward returned to the galley to allow time for the smoke and steam to clear away, there being still too much to allow him to get down to the cabin. In about an hour or an hour and a-half afterwards the smoke and flame again burst out with redoubled force, and it being quite impossible to go down the companion, some of the hands got into the cabin through the skylight, and handed up the sextant, chronometer, some clothes, some provisions, and the cask of rum. The captain then told the mate to draw the bung, and to give them a drink all round, he and the mate partaking of it with them. The rum was poured into a jug, and was handed round to them in turn, each taking what he liked. Livingstone, one of the men, having then poured the remainder of the rum into a bucket, threw the cask into the fire; and to save the rum, as he said, from the fire, carried it to the deck-house forward, where he and others of the crew helped themselves so freely to it, that two of them became intoxicated.

In the meantime Mr. Doorne, the chief officer, who had been engaged all the morning with his men in the boathouse cleaning the boat, left at about half-past eleven to get his letters, and whilst reading them his attention was called to the smoke and flame on board

the "Falcon," upon which he at once ordered the boat to be launched, and with five of his men and three fishermen pulled out to her, and in ten minutes from the time of first seeing the fire, they were alongside; and all hands at once jumped on board except one, who was left in the boat to take charge of her. On boarding we are told that the captain was standing by the mainmast, some of the crew were forward getting out the lifeboat, whilst the after part of the vessel was all in flames. Mr. Doorne said to the captain that he had come with his crew to render assistance; the captain replied, "What to do?" The chief officer answered, to put the fire out; upon which the captain said, "Let everything alone, officer; you can't put it out, she'll put it out herself presently." At about this time Mr. Doorne's attention was called by one of his men to the fact that there was a bucket of rum in the deck-house, and that the crew were drinking it, two of them being already drunk. With some difficulty they succeeded in getting the bucket of rum, as well as a bottle of spirits, which Livingstone had got hold of, away from him, and in throwing the rum over the side; and finding that the captain would not allow them to do anything towards putting the fire out, Mr. Doorne went on shore, leaving the chief boatman behind, and telegraphed to the receiver, at Stranraer, that the vessel was on fire, and that the captain refused all assistance. Having done so he again returned to the vessel, and lay alongside until the mate came and told him that the captain wanted to speak to him. Upon his jumping on board, the captain told him that he might take charge of the ship, and do what he pleased with her. He accordingly set the jib and fore topmast staysail, and, having slipped the cable, proceeded with the coast-guard boat towing ahead, it being impossible then to go aft to steer her, towards the shore, where they beached her directly opposite the village. Having then stopped up the scuppers they cut holes in the deck to allow the water to get to the fire; but owing to her having a list to starboard, the water all ran over to starboard, and they had then to bore holes in the bows, and abreast of the mainmast, to allow the water to get into the hold. The tide was, however, falling, and the fire had then got such hold of the after end of the vessel, that little effect was produced. Early in the afternoon one of the men and the three apprentices left; they were followed afterwards by the remainder of the crew; and at 7 o'clock the captain went on shore with the chief officer of the coastguard, to speak with Lloyd's agent, who had come up. Very shortly afterwards the vessel slipped off the bank into deep water, and the five coastguardmen and a fisherman, who were on board, were obliged to take to the rigging, whence they were rescued by a shore boat, which happened to be on the spot at the time. Happily there was no loss of life, but the vessel and cargo have been totally lost.

These being the facts of the case, the Board of Trade have put to us a somewhat formidable list of questions. I am bound, however, to say that they bring out very clearly all the points which have arisen in this very important case; and I shall therefore proceed to consider them in order.

Now the first question which we are asked is, "Whether when the vessel left Greenock she was in good and seaworthy condition, and if not, whether the owner used all reasonable means to ensure the vessel being sent to sea in a seaworthy state?" The vessel was, as I have already said, built in the year 1864, and was originally classed A1 at Lloyd's for nine years, which under the new rules was extended to 10 years, in 1874 she was continued in the same class for seven years more, but in June 1881, after undergoing some repairs, she was classed A1 in red for six years. After this she made a voyage to the River Plate, and returned with a cargo of meat fibrine to Antwerp, where Captain Grevett took command of her; and under his command she made two voyages to the Baltic, returning with timber, then took a cargo of coal from Shields to Southampton, whence she came to Greenock in ballast. She has belonged all along to the same owners, and although originally employed in the grain trade, had of late gone somewhat down in the world, her two last voyages from abroad being with lumber from the Baltic. On one, if not on both these voyages, as well as on the voyage from Shields to Southampton she had been found to be leaking, but the leak could not be found. Accordingly on her arrival at Greenock Captain Grevett tested her, first with smoke, and then with water, to try and find out this secret leak, but without success. When therefore the cargo was put into her at Greenock, the following may be said to have been her



condition, she was 19 years old, classed A1 in red for six years, of which two were past, and she had a secret leak which showed itself whenever she was loaded below the 13th or 14th footmark. And now what was her behaviour after the voyage had commenced, she leaked at starting, she leaked whilst lying at Campbelltown, she leaked in Loch Ryan, and she leaked badly when she got into heavy weather.

And now let us see what cargo and what amount of freeboard she had on this voyage. On the voyage from Shields to Southampton she had, we are told, about 480 tons on board, but on this voyage she had no less than 522 tons, or about 40 tons more than on the previous voyage, and as she had leaked a good deal on that voyage, it would be fair to conclude that she would leak a good deal more on this. The gross tonnage also of the vessel being 318 tons, 522 tons would be about  $1\frac{2}{3}$  of the gross tonnage, which for a vessel of her age and class certainly appears to be a very large cargo. Let us see, however, what her freeboard was. It seems that on leaving Greenock she drew 16 feet 5 inches forward and 16 feet 6 inches aft, and that her freeboard was about 3 feet 1 inch. Now, was this a sufficient freeboard? I find from the Board of Trade rules that a sailing vessel of 300 tons under deck tonnage, and the under deck tonnage of this vessel was 311 tons, ought to have a freeboard of 2·2 inches to every foot depth of hold, and as the depth of this vessel's hold was 16·65 feet, that would give us a freeboard of 36·63 inches or about 3 feet and half an inch. This, however, would be the minimum freeboard for a first-class vessel of her size, which would have to be increased whenever, owing to the age or construction of the vessel, it appeared to the surveyor to be necessary. Again, what freeboard would Lloyd's rules give us? We have not all the materials for estimating accurately the freeboard under those rules, but taking her length from the inside of the stem to the fore side of the rudder post to be about 110 feet, her co-efficient of fineness would be about ·63, and taking the moulded depth at 18 feet, we obtain from Table D a freeboard of about 3 feet 3 inches as a minimum for a first-class ship, which, however, the "Falcon" certainly was not. On the whole, looking at her age and character, and to the existence of this secret leak, the assessors are of opinion that she was not, when she left Greenock, in a sufficiently good and seaworthy condition to carry so heavy a cargo. And they cannot acquit the owner of having despatched her whilst in that condition on so long a voyage, more especially at that season of the year.

The second question which we are asked is, "Whether the coals shipped on board this vessel are dangerous for shipment on long voyages?" The coals which were shipped on board this vessel came, we are told, from the Bog and Home Farm Collieries, which are situated at Bothwell, near Hamilton, and belong to Messrs. Hamilton, McCulloch, and Co. They are commonly known as the Duke of Hamilton's splint coals; and the seam from which they came has been very clearly described to us by Mr. Moore, the Government Inspector for the east coast of Scotland. From the drawing which he has given us of the seam, it appears that it consists of five layers; the uppermost, which is about 6 inches deep, is of an inferior quality, and is generally left as a roofing; then comes a layer about 22 inches deep of good hard splint coal; then a layer about 8 inches deep of gas coal; below that a layer about 20 inches deep of what is called free coal; and then another layer of inferior coal about 6 inches deep, which is generally left as a flooring. In working the coal they first take out the 20 inches of free coal, they then work the eight inches of gas coal, laying it on one side for sale, and for which they get a higher price, and last of all they work the 22 inch layer of hard splint coal. This they then mix with the free coal, which is of a splinty character, but softer and more friable than the hard splint, and after being passed over an inch and half sieve, it is sent down in trucks to Greenock and shipped.

Now there is one point upon which all the witnesses were agreed, namely, that this coal is remarkably free from gas, so that the colliery is worked with naked lights, the ventilation, as Mr. Moore told us, being very good. As regards too, the presence of iron pyrites in this coal, Mr. Hamilton who has owned the colliery since 1864, told us that he had never seen any either in the hard splint or in the free coal, and that they had had as much as 36,000 tons of the three different descriptions of their coal, the hard splint, the gas coal, and the free coal, lying in large heaps, some of it for as long as 6 or 8 years, and that he had never known

an instance of spontaneous combustion in their coal. And in that view he was confirmed by Mr. Grant, who, although he has been the manager of this colliery only since the 1st of February last, has had a large experience of this kind of coal, having been manager of collieries in the neighbourhood for the last eight years. On the other hand, Mr. Moore, the Government Inspector, whilst he admitted that the hard splint coal was very free from iron pyrites, said that he had seen some of it in the free coal; he added, however, that the splint coal, mixed with free coal, was the very best shipping coal that they had in that district. Mr. Hamilton also told us that, owing to the softer character of the free coal, and its tendency to break into small pieces, a great part of it fell through the sieve, so that the greater portion of that which was shipped was hard splint, which, according to Mr. Moore, is peculiarly free from pyrites. The result then would seem to be that whilst it is a coal which is generally very free from iron pyrites, it is not so free from it, but that it is quite possible that some portions might pass over the sieve, and thus get mixed with the cargo.

Mr. Murray also referred us to the report of the Royal Commissioners on the spontaneous combustion of coal in ships, and to a number of cases in which it was said that spontaneous combustion has occurred on board vessels laden with splint coal. To this it was objected by Mr. Naismyth, that, as we were sitting in Scotland, we were bound by the Scotch laws of evidence, and he referred us to a book of authority, "Dickson on the Law of Evidence in Scotland," where at page 692 it is said that "Books of Science (e.g. works on medical jurisprudence) are not admissible; the matters which they contain requiring to be proved by the oral evidence of scientific witnesses; but," it is added, "passages in treatises regarding the subject of examination, may be made evidence by the witnesses deponing that they coincide with the views which the author there expresses." On this Mr. Naismyth contended that we had no right to look at the report of the commissioners at all, or at anything in it, and that it must be treated as mere waste paper; he even went the length of saying that, if reliance was to be placed on the opinions expressed by Dr. Percy and Professor Abel, we ought to have had some witness to depose that he coincided with the views of those eminent men. I am, however, not prepared to go to the extent for which Mr. Naismyth contends; it appears to me that we are entitled to look at the report of the commissioners as being the conclusions at which a body of very competent gentlemen have, after careful inquiry, arrived; it is a document to which we are constantly in the habit, in these coal cases, of referring, and as regards the views expressed by Dr. Percy and Professor Abel, it certainly would not add to their weight with us, if some less eminent person came before us and said that he had read their opinions, and concurred with them. The subject of spontaneous combustion is not altogether new to the Court, and we have always been accustomed to regard this report as a document of high authority in these cases. At the same time we are not prepared to go to the length contended for by Mr. Murray, that the number of cases mentioned in the appendix to the report of spontaneous combustion having occurred in cargoes of "splint cargo," are any proof that the coal with which this vessel was laden was liable to spontaneous combustion; for it must be remembered that there is splint coal, and splint coal; there is the free coal, which is a kind of splint coal, and there is the hard splint coal of this colliery; and we were told, not only by Mr. Hamilton, but also by Mr. Moore, that the hard splint coal in other collieries is inferior to that found in the Bog and Home Farm Colliery, which is the very cleanest in the district. When therefore we are referred to cases of spontaneous combustion having occurred on board vessels laden with "splint coal," we should like to know whether the splint coal with which they were laden was the same splint coal that was in this vessel; but on this point these cases give us no information. The conclusion, then, to which we have come is that, although iron pyrites may sometimes be found in this coal, still that the hard splint, even when mixed with free coal, is, as Mr. Moore has told us, the very best and cleanest in the district, and that we have no reason to think that it might not generally, if shipped in good and proper condition, be sent with safety even on long voyages.

The third question which we are asked is, "Whether the coals were shipped in proper condition, that is, with a view to avoid breakage, and wet as far as possible?" We were told that 35 wagons were sent



down from the colliery between the 15th and the 18th of December, and that they were shipped on the 20th and 21st, and that the remaining 48 wagons were sent from the colliery between the 26th and 28th, and were shipped on the 28th and 29th. We were also told that during most of the time the weather was what one of the witnesses called "true Greenock weather," in other words, very wet. No doubt, therefore, the coal would be wet when put on board, and that cannot be called a proper condition, for if there was any pyrites in the coal the wet would be very liable to generate spontaneous combustion. As regards breakage, we are told that the wagons were lowered with a crane until they were within a short distance of the coamings of the hatches, and the coal was then shot out of the wagon into the hold. The coal from the first few wagons would no doubt have to fall a distance of some 18 to 20 feet, but as the hold filled the fall would become less; and the assessors tell me that it was in their opinion a proper mode of loading the coal, although no doubt it would cause a certain amount of small coal to be deposited under the hatches. To have emptied the coals, as Mr. Moore suggested, on the deck, then picked out the large pieces and carried them down into the hold, so as to prevent any small coal getting into the hold, would, in their opinion, not be practicable, and would certainly add enormously to the cost of shipping, much more than 3s. a ton at which Mr. Moore put it.

The fourth and fifth questions I propose to take together; they are, "Whether proper means existed on board for the purpose of testing the temperature in the body of the coal?" and, "Whether the heat of the cargo was so tested at any time during the voyage?" It is not pretended that there were any means on board of testing the temperature of the body of the cargo, or that it was at any time so tested.

The sixth question which we are asked is, "What was the cause of the vessel having put back to Campbelltown?" Captain Grevett told us that the illness of the mate was the principal cause of his putting back to Campbelltown; and this probably was one of the reasons, if not the principal; the leaky condition, however, of the vessel and the bad weather with which they had to contend also no doubt contributed to it.

The seventh question which we are asked is, "Whether the vessel made a considerable quantity of water before she reached Loch Ryan, and if so, what was the cause of it?" There can be no doubt that she made a great quantity of water before she reached Loch Ryan, so much so as to oblige the crew, although very unwilling to do any work, to remain at the pumps during a good part of the night, lest she should go down under them. No doubt that water was due partly to the secret leak, to which reference has been already made, partly also to the fact that she was an old vessel, and very deeply laden, so that the water probably came in through the seams and butt ends.

The eighth question which we are asked is, "What were the circumstances in which the master and several of the crew were discharged at Campbelltown?" The circumstances under which the crew were discharged at Campbelltown have been already stated—they wished to leave her, as they thought she was not in a sufficiently seaworthy condition to perform the voyage to Buenos Ayres in safety. As to Captain Grevett, he seems to have been discharged because it was thought that he was not sufficiently energetic and was too dilatory in putting to sea.

The ninth question which we are asked is, "Whether the cabin stove was sufficiently protected?" The stove was purchased by Captain Grevett at Shields, and placed in a recess, lined with sheet iron, where the old stove had been. It stood on legs and on an iron stand, and, so far as we can judge, was properly and sufficiently protected.

The tenth and eleventh questions are, "Whether two or three days prior to the 19th February there was any smell of gas or foul air in the cabin?" and, "Whether proper means were taken to ascertain the cause of it?" If it rested on the evidence of the master we should have been disposed to doubt whether there had been any smell of gas or foul air, the more so as Mr. Doorne, the chief officer of coast guard, told us that he did not perceive any bad smell, although he was in the cabin on the 16th for about an hour, and again on the 18th for about 20 minutes. But we were told by the mate, as well as by the cook and steward, who gave his evidence very fairly, that there was a foul smell in the cabin, and that they tried to get rid of it by cleaning out the lockers, but without success. We are therefore disposed to think that there was a smell of

some kind; but whatever it was, whether it came from the cargo or from a dead rat, no proper means were taken to ascertain the cause of it.

The twelfth question which we are asked is, "What was the cause of the fire breaking out on the morning of the 19th February?" Three suggestions have been made; it was said that it might have been due, first, to spontaneous combustion, or, secondly, to the fire in the stove, or, thirdly, to the act, whether wilful or accidental, of some person on board. Those are the three suggestions which have been offered to us. And, first, as regards the theory of spontaneous combustion; the fire it seems broke out in the neighbourhood of the little trap hatch, at the foot of the companion stairs and just outside the cabin door, and which was right in the after part of the hold, where the first lot of coal had been placed on the 20th and 21st December. They had therefore been in the ship for about 2 months when the fire broke out. If therefore there had been even a small portion of pyrites in it, seeing that the coals were shipped in a wet state, there is some reason to think that spontaneous combustion might have been set up. At the same time it must be remembered that, although not entirely free from pyrites, the evidence is that it is a particularly clean coal. All then that can be said is that, although not very probable, it is quite possible that it might have been due to spontaneous combustion. As regards the stove, it is true that there was a fire kept in it night and day, but then, as we have seen, it was properly protected; moreover, it was not above the cargo, where the fire broke out, but over the after peak, where there was only a water tank, so that to set fire to the cargo it would have had to burn first through the deck, and then through the bulkhead separating the after peak from the hold. Added to which, if it had been caused by the stove, we should have expected that the woodwork about it in the cabin would have been on fire, but this does not appear to have been the case, and on the whole we are disposed to think that the theory of the fire originating from the stove, though possible, is extremely improbable. Lastly, there is the suggestion that it may have been done by some person dropping something either wilfully or accidentally through the little trap hatch at the bottom of the companion ladder. This little trap hatch was covered with a loose board, which could readily be lifted, and it was through this hatch that the coals which were required to feed the cabin fire were obtained. We learn from the Report of the Commissioners on Spontaneous Combustion that a lucifer match or light dropped accidentally upon a cargo of coal would be very unlikely to set it on fire; on the other hand, lighted spirits or petroleum would most certainly do so. If then the cargo was set on fire in this way, by a light being dropped through the trap hatch, it points to its having been done wilfully rather than accidentally. Now the only persons who had access to this trap hatch were the master, the mate, the boatswain, and the cook and steward. It is difficult to see what reason any of the three last mentioned could have had for setting fire to the ship; they appear also to have been on deck for some considerable time before the fire broke out. There remains then only the master, who, as will presently be seen, was on several occasions in a state of intoxication, and more particularly on the morning of the fire, and it is always difficult to count upon the conduct of a drunken man. His indifference too to the fate of the vessel, and his unwillingness to have the fire extinguished, point to him as being the person with whom, if with anyone, the fire originated; at the same time we are bound to say that there is no evidence that the fire originated in this way. The case then stands thus; it is possible that the fire may have been caused by spontaneous combustion; it is also possible, but in the highest degree improbable, that it was caused by the stove; and it is possible that it may have been either wilfully or accidentally set fire to by someone on board, but of this there is no evidence.

The thirteenth question, "Whether it was owing solely to spontaneous combustion of the coal?" has just been answered.

The fourteenth question which we are asked is, "Whether prompt and proper measures were taken, and whether the master made every possible effort to extinguish the fire?" Upon that point there is no doubt. All that the master seems to have done, when the fire first showed itself, was to order the crew to pour water on it for about a quarter of an hour or twenty minutes, and when the flame and smoke seemed to be somewhat subdued he told them to go forward



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and get the boat out. But he never took the trouble to investigate its origin, or to see that it was effectually extinguished, or to signal to the shore for assistance. Again, when the fire broke out a second time, he took no steps to extinguish it, and when the coast-guard offered their assistance he refused it.

The fifteenth question which we are asked is, "Whether the master and mate, or either of them, caused the rum or any spirits to be distributed among the crew, and if so, whether they were justified in doing so?" It is not denied that the master ordered the rum to be served round to all the men, and partook of it himself; and one of the men told us that, after that had been done, the master said that they might help themselves; but whether that be so or not, it is clear that the master took no pains to see that the rum was put under safe keeping. According to him the cask was left on the deck, and he thought that the mate had emptied it on the deck; the mate on the other hand thought that the master had done so. Instead of which it is now clear that the remainder was poured by one of the men named Livingstone into a bucket, which he took forward to the deck house, at the same time throwing the empty cask into the fire, apparently to feed the fire, a more reckless and unprincipled act it is difficult to conceive, but there can be no doubt about it, for the man admitted that he had done so. There can however be no doubt that the master was not justified in distributing the rum as he did amongst the crew.

The sixteenth question which we are asked is, "Whether on the morning of the 19th February, the master was in a state of intoxication?" That the master was drunk on the 19th seems to admit of no doubt whatever; it is indeed the only justification, if justification it can be called, for his conduct, in not attempting to put out the fire, and in refusing the assistance of the coastguard men. That this too was not the only occasion on which he was drunk is clear; for unless he had been the worse for liquor on the 11th when the crew struck work, he would never have remained down in his cabin leaving the deck with only one man at the wheel, the sails all loose, and the wind rising. Again on the 16th in Loch Ryan, the answers which he gave to the questions put to him by Mr. Doorne, shew that he was then also under the influence of drink. In our opinion there can be no doubt that the master was the worse for liquor not only on the 19th February, but also on the 11th and the 16th.

The seventeenth question which we are asked is, "Whether he was justified in refusing the offer of assistance made to him by the coastguard?" Of course, there can be no two opinions on that point. It was an utterly unjustifiable act on his part to refuse the assistance of the coastguard, and to forbid them to put out the fire.

The last question which we are asked is, "Whether James Burns, the master, George Grevelt, the previous master, and David Banks, the mate, or any of them, are or is in default; and whether blame attaches to the owner?" and it is added that "the Board of Trade are of opinion that in the circumstances the certificates of the two masters and the mate ought to be dealt with."

And first, as regards Captain George Grevelt, the former master; there can be no doubt that he is to blame for having taken the vessel to sea in the state in which she was, knowing that she had a secret leak, and that she had 40 tons more cargo in her than she had had on the voyage from Shields to Southampton. The owner is also, in our opinion, to blame for having let her go on this voyage, knowing that she had this secret leak. Captain Grevelt is also, in our opinion, to blame for having left his ship at the tail of the bank and gone on shore, one of the crew being drunk and the others somewhat under the influence of liquor, and all strangers to the vessel, for the purpose, according to his own account, of paying a sum of 15s. to a man

whom he had engaged to pilot the vessel out, and which he must have known before he left the harbour that he would have to pay. If, too, he had been anxious to return to his vessel, it is inconceivable that he should not have been able to return either on that or on the next day, as the boatswain has told us that there were small boats about on both those days. At all events he might have done what he had to do on the 11th, namely, engage a steam tug to put him on board and to help him to get up the anchor. Whilst, however, we think that he has shown great want of energy in the discharge of his duties, and that he was very rightly dismissed by the owner, it appears to us that we have no right to touch his certificate, for whatever may have been his misconduct, it did not lead to the loss of the vessel, which was due, not to the leak, nor to her having been too deeply laden, but to her having taken fire.

We now come to James Burns, the last master; and in whatever light we look at it we think that his conduct was utterly disgraceful to any one holding the rank of master of a British ship. His conduct on the night of the 11th in remaining down in his cabin from about 6 to 12 p.m., when the crew had refused to do any more work, with a gale rising, the sails all loose, the vessel leaking badly, and only one man on deck, was unpardonable. His duty at that time was on deck, encouraging the crew and shewing them a good example, and had he done so the men would probably have stuck to their duty; and it was no doubt owing to the condition in which he was at the time that the crew refused to do any work; it was bad enough to cross the Atlantic in a leaky vessel, but with a drunken master in addition, it was more than they could submit to. Again on the 16th, when they were in Loch Ryan, and when Mr. Doorne came on board, there can be no doubt from the answers which he gave to that officer's questions, and which need not here be repeated, that the master was then the worse for liquor. Again on the 19th, when the fire broke out, if he did not cause that fire, he at all events took no steps to put it out; and his conduct on that occasion, especially in refusing the offer of assistance from the coastguard, can only be explained on the supposition that he was then the worse for liquor. On the whole we think that this man has shewn himself to be quite unfit to command a ship, and we shall therefore cancel his certificate. As, however, it is possible that he may not be an habitual drunkard, we shall leave it to the Board of Trade in their discretion to restore it to him, should he, after a sufficiently long probation, shew that he is worthy of that indulgence. We shall also recommend that during the suspension of his master's certificate he be allowed a first mate's certificate, that he may be able to earn a livelihood, though in an inferior capacity.

As regards Donald Banks, the mate, although there is much in his conduct which is deserving of censure, he was the first to come on deck to resume charge of the vessel on the night of the 11th. Mr. Doorne also told us that, although the master gave them no assistance, the mate assisted them to get the rum away from the men, and afterwards did his best to put the fire out. Under these circumstances the assessors are disposed to take a lenient view of his case, believing that his misconduct was probably due to the bad influence of the master; we shall therefore not deal with his certificate.

The Court was not asked to make any order as to costs.

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

We concur.

(Signed) HENRY D. BURNBY,  
R.N., J.P.,  
WM. PARFITT,  
THS. BRASLEY, } Assessors.