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S.S. "MARLBOROUGH."

The Merchant Shipping Acts, 1854 to 1876.

In the matter of a formal investigation held at Poplar on the 19th and 20th days of March 1880, and at Westminster on the 22nd and 23rd days of the same month, before H. C. Rothery, Esq., Wreck Commissioner, assisted by Captain Ronaldson, Captain Ward, and C. W. Merrifeld, Esq., as Assessors, into the circumstances attending the supposed loss of the steamship "Marlborough," of Hull, whilst on a voyage from Cardiff to Genoa with a cargo of coals.

Report of Court.

The Court, having carefully inquired into the circumstances of the above-mentioned shipping casualty, finds, for the reasons annexed:—

1. That the load-line was not in a proper position on the ship's side, either at 4 feet, or even at 4 feet 6 inches below the upper deck.

2. That, when the ship left on her last voyage, she was overladen.

3. That, apart from all questions of overloading and of ventilation, the cargo was properly stowed and trimmed.

4. That she was not properly or sufficiently manned.
5. That, looking to the form and dimensions of the vessel, the depth to which she was loaded, and the nature of the cargo which she had on board, she had not sufficient stability for a winter or for any voyage.

6. That 4 feet was not a sufficient freeboard for a winter or for any voyage.

7. That, in the opinion of the Court, her loss was probably due to her having been swamped or over-

8. That the load-line was placed at 4 feet below the upper deck by the order and with the knowledge and

sanction of the managing owner.
9. That she was overladen with the knowledge and

sanction of the managing owner.
10. That she was undermanned with the knowledge

and sanction of the managing owner.

The Court accordingly condemns David Parkinson Garbutt, of Marlborough House, Anlaby Road, Kingston-upon-Hull, in the sum of two hundred and fifty pounds (250l.), nomine expensarum, 50l. thereof to be applied towards the expenses of the Court, and 200l. towards the expenses of the Board of Trade.

Dated this 23rd day of March 1880.

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

We concur in the above report.

(Signed) A. Ronaldson, C. Y. Ward, C. W. Merrifield, Assessors.

The Merchant Shipping Acts, 1854 to 1876.

In the matter of a formal investigation held at Poplar on the 19th and 20th days of March 1880, and at Westminster on the 22nd and 23rd days of the same month, before Henry Cadogan Rothery, Esq., Wreck Commissioner, assisted by Captain Ronaldson, Captain Ward, and C. W. Merrifield, Esq., as Assessors, into the circumstances attending the supposed loss of the steamship "Marlborough," of Hull, on a voyage from Cardiff to Genoa with a cargo of coals.

The Court orders that David Parkinson Garbutt, of Marlborough House, Anlaby Road, Kingston-upon-Hull, shipowner, the managing owner of the said stramship "Marlborough," do pay to the solicitor to the Board of Trade the sum of two hundred and fifty pounds (2501.) on account of the expenses of this investigation.

Given under my hand this 23rd day of March 1880.
(Signed) H. C. ROTHERY,

Wreck Commissioner.

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Annex to the Report.

This case was opened at Poplar on Friday the 19th day of March instant, when Mr. Mansel Jones and Mr. McConnell appeared for the Board of Trade, Mr. Bucknill for the owner of the "Marlborough," and Mr. Nelson for the legal representatives of the late master. The case not having been concluded on Saturday the 20th, counsel asked that the further hearing might take place at Westminster, on account of the very great inconvenience and loss of time to all parties in having to attend at Poplar; and I accordingly adjourned it to Westminster, where the case was finally heard and disposed of on the 22nd and 23rd instant.

After 12 witnesses had been produced by the Board of Trade and examined, Mr. Mansel Jones stated that the Board of Trade desired the opinion of the Court upon the following questions:—

upon the following questions:—

"1. Whether the disc or load-line was placed in a proper position on the shir's side?

proper position on the ship's side? "2. Whether she was overladen?

"3. Whether her cargo was properly stowed and

trimmed?
"4. Whether she was properly and sufficiently manned?

"5. Whether, looking to the form and dimensions of the vessel and the depth to which she was loaded, with the nature of the cargo she had on board, she had sufficient stability for a winter, or any voyage?

"6. Whether 4 feet was a sufficient freeboard for a winter, or any voyage?

"7. What, in the opinion of the Court, was the pro-

bable cause of the loss or supposed loss of this vessel?

"8. Was the load-line mark placed at 4 feet from the upper deck by the order or with the knowledge or sanction of the managing owner?

"9. Was she overladen with the knowledge or sanc-

tion of the managing owner?

"10. Was she undermanned with the knowledge or

sanction of the managing owner?"

The owner of the ship having been produced and examined, Mr. Nelson and Mr. Bucknill then addressed the Court on behalf of their respective parties, and Mr. Mansel Jones having been heard in reply, the Court proceed to give judgment on the questions on which its opinion had been asked.

The "Marlborough" was an iron screw steamship, belonging to the port of Hull, of 2,308 tons gross, and 1,498 tons net register, and was fitted with engines of 250 horse-power. She was built at Sunderland in the year 1878 by Messrs. Bartram, Haswell & Co., and at the time of her loss was the property of Mr. David Parkinson Garbutt, of Marlborough House, Anlaby Road, Hull, Mr. Garbutt being likewise the managing owner, but he had mortgaged the whole of the shares to a Mr. Richard Berridge to secure an account current with interest. She left Cardiff on the 29th of November last with a cargo of coals bound to Genoa, and having a crew of 25 hands all told, and in charge of a duly licensed pilot. Soon after passing Nash Point the pilot left her, and from that time she has not been seen or heard of, and there can be little doubt that she has long since perished with all hands. As she belonged to a class of vessel, of which we are told a great many were lost during the last three months of 1879, it may be well to inquire what was her build and construction, and what the character of her fittings and equipments, and this we are able to do, owing to the very full and detailed plans which have been laid before us.

She was what is called a three decked ship, having the two upper decks laid, and orlop or hold beams below. She had four holds, two before the engines, called Nos. 1 and 2, and two abaft, called Nos. 3 and 4. She had six iron watertight bulkheads, namely, a collision bulkhead forward, one between Nos. 1 and 2 holds, one at each end of the engine-room compartment, one between Nos. 3 and 4 holds, and a sixth right aft in the way of the stuffing box. Of these, the collision bulkhead and the bulkheads forward and aft of the engineroom went up to the upper deck; the bulkheads separating the holds went to the main deck; and the after bulkhead only to the hold beams. She had two water ballast tanks, one of which was immediately forward of the engine-room, was 76 feet long, and extended the whole length of No. 2 hold; the other commenced at the after engine-room bulkhead, ran 92 feet aft, and was divided into two by the bulkhead separating Nos. 3 and 4 holds. The top of the forward tank stood about 3 feet 6 inches above the top of the keel; that of the after tank was about 3 feet 9 inches in the fore part, rising to about 4 feet at the after end. All the tanks together contained about 350 tons; but how much each tank held we could not learn; something, indeed, was said in one of the master's letters as to the after tank containing 167 tons, but whether this meant both the tanks or only one of them does not very clearly appear. She had a short poop aft, a bridge house amidships, containing the officers' and engineers' quarters, and a raised forecastle forward; all these were above the upper deck, the whole of the space below the deck being available for cargo. I should add that in the bridge house amidships there were two alley ways with doors at each end opening outwards. She had close bulwarks all round, rising about 3 feet 6 inches above the deck, with eight bulwark ports and six scruppers on each side. The engine-room skylight, which was abaft the bridge house, stood on the top of an iron casing rising 7 feet above the upper deck, and was fitted with teak shutters and bull's-eye lights. She had four boats, two lifeboats, a gig, and a cutter, and her pumping arrangements seem to have been good. Her length, according to the register, was 301 feet, her main breadth to outside of plank 36 feet, and her don't in held from terms of dolls to 36 feet, and her depth in hold from tonnage deck to ceiling at midships was 25 3 feet. The plates along the garboard strake were 12 ths thick, thence to the shear strake they were 11ths, and the shear strake was again 13ths. She seems to have been a strongly built vessel, having cost 33,000*l*. beside 1,000*l*. for extras, and when completed she was classed 100 A 1 at Lloyds. I should add that she was finished and delivered over to the owner before the end of 1878, and had made three complete voyages, and was outward bound on her fourth

voyage when she was lost. Now the first question, on which our opinion has been asked, is "whether the disc or load-line was placed" in a proper position on the ship's side," and with it may be conveniently taken the sixth question, namely, whether 4 feet was a sufficient freeboard for a winter or for any voyage." It seems that, according to the contract, the vessel was to have a total dead weight carrying capacity of about 3,200 tons, with a clear side or freeboard of 5 feet, but that before she left the builders' hands instructions were given to them (we shall presently see by whom) to put the load-line at 4 feet 6 inches; and that was accordingly done. After the first voyage, orders were given to raise it 6 inches higher, and it was thereupon placed at 4 feet, and was in that position when the vessel left Cardiff on her last voyage. Now the load-line on the ship's side marks the point to which the owner claims a right to load her down, which right, I may observe, was, as we shall presently see, exercised by Mr. Garbutt without stint or scruple. But a freeboard of 4 feet gives on a depth of 25 3 feet something less than 2 inches to every foot of hold, an amount of freeboard which not one of the witnesses has been bold enough to come forward and say was sufficient. Mr. Campbell, the manager to the builders, told us that, although the contract provided that she should be capable of carrying a dead weight of 3,200 tons upon a freeboard of 5 feet that did not mean that she could be loaded with safety down to 5 feet; in his opinion she ought not to have been loaded below 5 feet 6. Again, Captain Jennison, who acted as chief officer on the second and third voyages, told us that, in his opinion, she ought to have had a freeboard of from 5 feet to 5 feet 6, or at all events of 5 feet. And Captain Edgell, a gentleman of very large experience, both as a master mariner and as a surveyor of shipping, has a master mariner and as a surveyor of shipping, has told us that, in his opinion, she ought to have had a freeboard of not less than 6 feet in summer, and of 6½ feet in winter. I may add that according to the tables published by Mr. Rundell, the secretary to the Liverpool Underwriters' Association, a gentleman whose opinion is entitled to the greatest consideration, as early to have had a freeboard of not less than 7 feet she ought to have had a freeboard of not less than 7 feet 1½ inches. I think, therefore, that the only answer which can properly be given to the first and sixth questions, must be that the load-line was not placed in proper position on the ship's side, and that 4 feet was not a sufficient freeboard either for a winter or for any

royage.
The next question, on which our opinion has been asked, is whether the vessel was overladen on her last voyage. It appears that on each occasion the vessel carried coals outwards, the first time from the Tyne, and the three last voyages from Cardiff; it may be well, therefore, to see what quantity of coals and what amount of freeboard she had on each of these occasions. The first voyage commenced on 1st January 1879, and

on that occasion she carried 2,655 tons of coal as cargo, and 563 tons of bunker coal, or a total of 3,218 tons, and according to the official log book her draft was 22 feet 6 forward, and 23 feet aft, giving a mean of 22 feet 9, and, as Mr. Campbell tells us that the total depth of the vessel's side amidships, from the bottom of the keel, was 27 feet 63 inches, this would give her a freeboard of 4 feet 91 inches. Her second voyage com. menced on the 8th of May, and she carried 2,694 tons of cargo and 645 tons of bunker coal, making 3,339 tons altogether; and her draft was 23 feet 7 forward and 23 feet 6 aft, or a mean of 23 feet 62 inches, giving her a freeboard of 4 feet exactly. I ought, however, here to state that Captain Jennison, who was the chief officer of the vessel on that voyage, told us that when she left the Roath Dock the water was 2 inches above the load-line, but that it was thought that she would rise that much when she got into salt water; the entries, therefore, in the log book which make her freeboard to be 4 feet must have been intended to express not what it was when leaving port but what it would probably be when she got to sea. The third voyage commenced on the 15th August, and on that occasion she had 2.340 tons of cargo, and 902 tons of bunker coal, or a total of 3,242 tons, and her draft was 23 feet 3 forward and 23 feet 6 aft, or a mean of 23 feet 4½ inches, giving her a freeboard of 4 feet 2 inches. The fourth and the last voyage commenced on the 29th of November last, and she then had 2,511 tons of cargo, and 859 tons of bunker coal, or a total of 3,370 tons. What was her draft of water and what her freeboard on this occasion does not appear to have been very correctly ascertained, for the loading was only finished at 8 p.m. of the 28th, and she left before daylight of the 29th; but according to the foreman coal trimmer the loading marks on her stern post and stem, which were marked to 24 feet, were submerged before the loading was completed, and after it was completed, he and the captain went with a lantern to look for the load-line, but found that both it and the disc were below the water, and as the top of the disc would be 6 inches above the load-line, this would give her less than 3 feet 6 of freeboard. It is right, however, to state that at that time her ballast tanks or some portion of them seem to have had water in them, a fresh engineer having just joined her, who had not had time to make himself acquainted with the pumping arrangements. She would, therefore, no doubt have risen somewhat after the tanks had been pumped out, and when she had got into salt water, but how much it is impossible to say. Seeing, however, that she had on board on her last voyage about 30 tons more than on the second voyage, when according to the official log book her freeboard was only 4 feet, and according to the chief officer the water was, on leaving the Roath Dock, two inches above the load-line; and that she had 120 tons more than on the third voyage, when the log book states her freeboard to have been 4 feet 2, I think we may safely assume that on her last voyage she would, when she left the Roath Dock, have been sunk at least some 3 or 4 inches below the load-line, thus giving her a freeboard of only 3 feet 8 or 3 feet 9 inches, the vessel, e are told, sinking an inch for every 22 or 23 tons.

We find then, that on all these four voyages the freeboard varied from 4 feet 9½ inches on the first to something less than 4 feet on the last, but if Captain Edgell, and the other witnesses who have been examined, are right in saying that she should have had a freeboard of not less than from 5 feet 6 to 6 feet 6, it is obvious that she must have been grievously overladen on all the voyages, and especially on the last voyage, when she was more deeply laden and had less freeboard than on any of the preceding occasions, and this too with a winter voyage before her. It may perhaps, however, be said that the position of the load-line and the amount of freeboard which a vessel ought to have is after all a matter of opinion, and that no hard and fast rule can be laid down as to the proportion which should be allowed between the freeboard and the depth of hold. It may, therefore, be proper to see how the vessel appears to have behaved on some of her previous voyages when she was so deeply laden as we have seen her to have

As to how she behaved going out on her first voyage, we have no knowledge, no witness having been produced who could speak to it. It seems, however, that she returned from New York with a full general cargo, "every available inch of space having," according to the master's letter of the 19th of March 1879 "been utilized," and that she then drew 21 feet 5 forward, and 22 feet 6 inches aft, or a mean of 21 feet 11½, giving her a freeboard of 5 feet 7 inches. Thus loaded

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she left new York, but meeting with bad weather, she got a list, and had to return to port to restow her cargo. On her return to this country a protest was made, which has been brought in, and on examining it, we find that even with a freeboard of 5 feet 7, which she then bad, she was anything but a safe boat. Day after day we find expressions of this kind, "at times she communicated buried herself in the sea," "the ship communicated herself at times constantly filling her deels." " buried herself at times, constantly filling her decks, " took immense quantities of water on deck and over " all," " took much water on deck," " vessel rolled as before, taking in an immense quantity of water on deck." It is one continued account of shipping heavy seas, and filling her decks with water. But if this was her behaviour when she had a freeboard of 5 feet 7, it is important to see what it was on the second and third voyages, when she had a freeboard of only 4 feet, or thereabouts. This we are fortunately able to do, seeing that the first and second officers of the vessel on both those voyages have been examined before us, and as they are all of them gentlemen of large experience, and all hold master's certificates of competency, we can place implicit reliance on the evidence, the more so, as they appear to entertain no ill feeling against the owner.

The first of these witnesses is Captain Jennison, who was chief officer of the vessel on both the second and the third voyages. According to this gentleman, although they had fine weather out on the second voyage, the vessel behaved very badly, she was very tender, her decks were always full of water, and she did not seem as if she could get clear of it; she lay with her lee bulwarks down all the time, and had a list to port." Again, on the third voyage he says she behaved very badly, although they had not so much wind. He also told us that he had informed Mr. Pauling, Mr. Garbutt's cashier, that "she wouldn't stand upright," that "she was always on her broadside," and that he thought she was "a ship to turn over on her broadside, for that, as "soon as any wind came, she would go down and take "a list." That is the opinion of Captain Jennison, a thoroughly competent witness, and one who showed himself to be anything but unfavourably disposed to the owner.

The next witness is Captain Mellor, who served in her as second officer on the second voyage. He told us that the vessel "behaved very badly on that voyage," that "she shipped a great deal of water," and that "when "she got water on her decks, she took a list," that it lay there and "could not get off," and that "if she "shipped one sea, she generally shipped two or three "more," and that in his opinion she was not "a safe "ship." He added that "she was a very tender ship, and when loaded had a tendency to capsize," that "she took a permanent list in very moderate weather, in weather such as in a very small ship we should be "carrying all sail." This gentleman told us that he had had enough of her after one voyage, and left her at the termination of it in company with the whole of the crew except the master and chief officer.

The next witness is Captain Lamplough, who acted as second officer on the third voyage. He told us that "they had a fresh breeze crossing the bay," and that "they had fine weather after that;" but that, nevertheless, the vessel took "lots of water aboard, filled her "decks, her load-line being at 4 feet," and that "she was not a good sea boat." He added, "I had been "long enough in her with one voyage, and we left her right through the ship except the master." In fact, every one seemed to have had quite enough of her after one voyage.

In addition to the above we were told by Mr. Blakeney, Mr. Garbutt's manager, that the men, when they left, complained "that she was a very tender ship, and that "she lay down and wallowed like a pig and couldn't "get up." In fact, the evidence is uncontradicted that, when the vessel was deeply laden, as she was on several of these voyages, she was a bad sea boat, was continually shipping heavy seas, taking a list, and lying over on her side. On the other hand, they all concur in saying that, when in ballast, or with a light cargo, she was a good sea boat and behaved very well. Thus, when she was returning from Galveston with cotton on her third voyage, and when according to the official log book her draft of water was 18 feet forward and 20 feet aft, giving a mean of 19 feet, and when, consequently, she had a freeboard of 8 feet 6½ inches, Captain Jennison tells us that she behaved very well. All these facts tend strongly to confirm Captain Edgell's evidence that she ought not to

have had a freeboard of less than 6 feet in summer and 6 feet 6 inches in winter, and that when she left Cardiff on her last voyage she was dangerously overladen.

The third question, upon which our opinion is asked, is "whether her cargo was properly stowed and "trimmed?" It seems that the cargo which the vessel carried on her last voyage consisted of small coal, screenings from the collieries and wharves. are also told that all the lower holds were full; that Nos. 2 and 3 'tween decks were quite full; that No. 1 'tween decks contained about 50 tons, and No. 4 about 60 or 70 tons. Now, so far as the disposition of the cargo on board is concerned, and apart from the very large amount which she had on board, and especially in the 'tween decks, there is nothing to show that the cargo was not properly stowed, or that the vessel was not in proper trim. It was said, indeed, that she ought to have had shifting boards, but they are not usual with coal cargoes, and we hardly think that they would have done her much good, overladen as she was, or that they would have prevented her going over, had she got a list to either one side or the other. So far, however, as the trimming of the cargo was concerned, it was obviously insufficient for the purposes of ventilation, no clear space having been left, as there should have been, over the coals in holds Nos. 2 and 3 'tween decks to facilitate the escape of the gas. The ventilators, too, were quite insufficient, there being but one ventilator to each hold, and the additional ventilators, that were put in after the second voyage, being quite useless, owing to their being carried down to the lower holds, whilst the other ventilators were in the 'tween decks. We are not, however, disposed to attribute the loss of this vessel to either spontaneous combustion or explosion, for, as Mr. Wales, the Government Inspector of Mines, told us, the coals were of a description not liable to spontaneous combustion, and being colliery and wharf screenings they would probably have given off almost the whole of their gas before being put on board.

The fourth question, on which our opinion is asked, is "whether she was properly and sufficiently manned?" There is some doubt as to how many hands she had on board on her first voyage; a letter from the master speaks of having had 29, but according to the owner there were only 27 hands; on the second we are told she had 26, on the third 22, and on the fourth and last, 25 hands. Now seeing that this vessel had a gross tonnage of 2,308 tons, and engines of 250 horse-power, we think that a crew of 25 hands, to include all the engine-room hands, would not be sufficient, and Mr. Bucknill has admitted that it was not. According to Captain Edgell she should have had not less than from 29 to 30 hands altogether. We shall presently see by

whose fault it was that she was so undermanned. The fifth question, on which our opinion is asked is, "whether, looking to the form and dimensions of the vessel, and the depth to which she was loaded, with the nature of the cargo which she had on board, she had sufficient stability for a winter, or for any voyage?" Now the first thing that strikes us in this case is, that no one seems to have been responsible for the stability of this vessel. According to Mr. Campbell, the manager for the builders, they got an order to build a vessel which should be 300 feet long, 36 feet broad, and 25 feet deep, and which should be capable of carrying 3,200 tons of dead weight, with a freeboard of 5 feet, but as to whether the vessel when built would be a staple or an unstaple vessel, whether she would be safe or unsafe to carry her cargo, that was a question with which they had nothing to do. Mr. Garbutt again tells us that until recently he has only been a land and house agent, and had had nothing to do with shipping; indeed, if we are to believe him, he knows nothing about shipping even now. He told us that the above dimensions were given to the builders on the advice of some friend, but he admitted that he had never calculated the stability of the vessel, and had never taken any measures to have it calculated by any one. He told us that during the building he had been advised by Captain Fisher and Captain Fullam, the late master of the "Marlborough." Captain Fullam, however, could hardly have been of much assistance to him in the building of the vessel, for Mr. Garbutt told us that he never knew him until about two month before he took the command. And as to Captain Fisher, all that we know is that he is at present in command of another ship of Mr. Garbutt's, a sister ship to the "Marlborough," and that he is accustomed to load her down to 4 feet of the water's edge; if so, Captain Fisher can hardly be a very safe adviser. But from first to last no one ever seems to have calculated the stability of the vessel, the position of her metacentre or of the centre of gravity, or with what amount of cargo and to what depth she could be safely loaded; all these were questions with which both the builders and the owner seemed to think that it was quite unnecessary to trouble themselves

Now, in considering this vessel's stability, we have had the very great advantage of Mr. Merrifield's assistance; and, although from the insufficient data which have been laid before us, Mr. Merrifield has not been able to calculate with any positive certainty the posi-tions of the metacentre, the centre of flotation, or the centre of gravity upon which the stability of the vessel depends, there is in his opinion quite enough to show that this vessel, loaded to the depth she was, and with her small amount of freeboard, was not a staple or a safe ship. The following are some of the considerations, apart from her behaviour when deeply laden, on which we have arrived at this conclusion. In the first place, she had a beam of 36 feet as against a depth of hold of 25.3 feet, giving a co-efficient of 70, which appears to us to be a very high one. Again, as regards the ballast tanks, it is true that, owing to there being no ballast tank in the engine-room compartment, the engines were placed as low as they well could be, the shaft having a slight upward tendency in running aft to the propeller; the after ballast tank too would not have had much effect in raising the weights, it being under the screw tunnel, the position of which would be determined by that of the engines and propeller. On the other hand, the forward ballast tank would raise that portion of the cargo which was above it some 18 inches higher than it would otherwise have been. Taking all these circumstances into consideration, Mr. Merrifield is of opinion that the effect of the water ballast tanks would be to raise the weights about 31 inches, not apparently a very large item, but one which cannot be disregarded, where as in this case the margin of stability

But what in our opinion was the main cause of the vessel's instability was the large amount of cargo which she had on board. I have already stated that the whole space below the upper deck was available for cargo, the accommodation for officers as well as men being above that deck. According to Captain Edgell there were in the lower holds about 2,049 tons, in the 'tween decks about 833 tons, and in the bunkers about 486 tons, of which a considerable portion would be in the 'tween decks. The effect of having so large a quantity of coal in her 'tween decks would be to raise the centre of gravity, and thus greatly to increase her instability. Had she had, as Captain Edgell suggests, some 500 tons less of cargo, all of which would necessarily have come out of the 'tween decks, she would have stood some 2 feet higher out of the water, and at the same time the position of the centre of gravity would have been considerably lower. In Mr. Merrifield's opinion this vessel, loaded as she was when she left on her last voyage, had so narrow a margin of stability that if she met with bad weather the water which she would take on deck and which would be retained there by the close bulwarks with which she was fitted would be quite sufficient either to have overturned or to have swamped

was so very small.

The seventh question is "What in the opinion of the "Court was the probable cause of the loss or supposed "loss of this vessel?" It is true, as Mr. Bucknill has stated, that there might have been an explosion of gas on board, that she might have sprung a leak, or that she might have met with a collision. All these things are no doubt possible, but that is not the question which we are asked. What we are asked to say is, what in our opinion was the probable cause of her loss? and looking at the state in which the vessel left this country, the quantity of cargo which she had on board, and especially in her 'tween decks, her low freeboard, her close bulwarks, and narrow margin of stability, the only conclusion to which we can come is that she probably fell in with bad weather, a very likely occurrence, seeing that she left at the end of November, and that she either turned over on her broadside or was swamped.

There remain the three last questions, namely, "Was "the load-line placed at 4 feet from the upper deck by "the order or with the knowledge or sanction of the "managing owner?" "Was she overladen with the "knowledge or sanction of the managing owner?" and "Was she undermanned with the knowledge or sanction of the managing owner?" Now it was said by Mr. Bucknill that Mr. Nelson had brought charges against the owner which he had no right to have done,

seeing that no charge had been made against his client, the master. But if I did not mistake the object of Mr. Garbutt's evidence, it was to throw the whole blame of the casualty upon the master. Mr. Garbutt according to his own account was only a land and house agent, and knew nothing of ships or shipping matters. Even the persons whom he employed to communicate with his masters, namely, Mr. Blakeney and Mr. Pauling, were quite inexperienced, the one being a compass adjuster, the other a mere clerk or accountant. According to Mr. Garbutt he left everything to his captains, and if anything went wrong on board the "Marlborough" it was the master's doing; if the load-line was altered from 4 feet 6 to 4 feet it was Captain Fullam's doing; if she was overladen or undermanned when she left Cardiff on her last voyage it was the master's fault entirely. I think therefore that Mr. Nelson was fully justified in endeavouring to show that the blame rested not with the master but with Mr. Garbutt. that the master is not here to contradict him, we must be careful how we accept Mr. Garbutt's account of con. versations which he says passed between them, and we must endeavour to see how far they accord with the rest of the evidence in the case and the correspondence

between the parties.

And first, "Was the load-line mark placed at 4 feet "by the order or with the knowledge or sanction of the managing owner?" According to Mr. Garbutt, Captain Fullam on his return from his first voyage told him that he had had some difficulty with the authorities at New York, and that they would not allow the vessel to be loaded down to her load-line, and he accordingly advised that it be raised 6 inches, to which Mr. Garbutt assented, the more readily he tells us because he had always before been under the impression that the loadline had been placed originally at 4 feet. The curious thing, however, about this story is that when the vessel left New York on this voyage she had a freeboard of 5 feet 7, and there could therefore have been no question on that occasion with the New York authorities about loading her down to her load-line. But what says Mr. Blakeney, Mr. Garbutt's manager and agent, as to the circumstances under which the load-line was altered? He says "the load-line was altered in May "in Millwall Dock. I gave instructions to the captain to have it done. He said for winter voyages it would be too little. I believe he made some remark about "Mr. Rundell saying that she should have a freeboard of 6 feet. I believe I told him that my instructions from Mr. Garbutt were to alter the load-line to 4 feet." Further on he said, in answer to Mr. Bucknill, "my " instructions were to put the Plimsoll mark at 4 feet. I told this to Captain Fullam. I said to Captain Fullam that, seeing that steamers very often loaded in fresh water, that, although the mark would be altered 6 inches, I had not any expectation that Mr. Garbutt intended to take full advantage of the 6 inches." This then does not look very much as if the suggestion to alter the position of the load-line had emanated from the master; on the contrary, the orders seem to have been conveyed to him by Mr. Blakeney from the owner, and the master, so far from accepting them, appears to have remonstrated against them, and to have stood out until his objections were removed by Mr. Blakeney. Indeed, the suggestion appears, on Mr. Garbutt's own evidence, to have originated with Captain Fisher, another of his captains, and to have been rather forced upon Captain Fullam, and that this was so is strongly confirmed by a letter from the captain

to his father, to which I shall presently advert.

Secondly, "was she overladen with the knowledge or "sanction of the managing owner?" According to Mr. Garbutt he left it to Captain Fullam to take what amount of cargo he thought proper without consulting him in any way; but the correspondence, which has been given in, hardly seems to bear this out. Thus I find a letter from Mr. Garbutt dated the 6th of May in these terms:—"Dear Sir,—Proceed to Cardiff as soon as "possible, and apply to Messrs. F. B. Chadwick & Co. "there for a cargo, you will want 2,700 tons of coals, and 700 tons of bunkers." To this Captain Fullam replies in a letter apparently dated the 7th of May:—"Your favour of yesterday's date is duly to hand. "Your orders therein contained shall receive best attention. You mention 2,700 tons coal and 700 tons bunkers. During the course of a conversation you mentioned 650 as the quantity of bunkers to be taken on board, but in the absence of further instructions I will take 700 tons as last directed." And as a matter of fact the vessel did take on that voyage 2,694 tons of cargo and 645 tons of bunker coal, or a total of

3,339 tons, vever had in voyage. An butt gives us that some th sent a copy o 2,500 tons of of 3,350 tons left Cardiff i mer voyage voyage befo shortly after ney, who ha recommende the winter n accordance write but t Fullam not tells us tha Fullam, and before order Why Mr. Ga purpose, whis not very eto say that h tions were c his orders. own statem that time, n not any suc ever, a lette: the poor ma 29th, 1879,' fact that alleges were —"Your in " out; I ha And as a ma that occasio bunker coal Mr. Garbut is another fa that no such In the state Mr. Garbuti Captain cargo on ship was " my instr " had take There is no to tell Capt had done so state so im tells us the " unless sh " have to c
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3,339 tons, which was the largest cargo that she has ever had in her, except when she sailed on her last voyage. And now what is the account which Mr. Garbutt gives us of the loading of the last cargo: He says that some three weeks before the captain's arrival he sent a copy of the charter party to Cardiff, with a note on the back of it that he was to take on the next voyage 2,500 tons of coal and 850 tons of bunker coal, or a total of 3.350 tons, rather more than she had had when she left Cardiff in the May preceding, when she had a summer voyage in prospect, whereas now she had a winter voyage before her. Mr. Garbutt further told us that shortly after he had sent those instructions, Mr. Blakeney, who had then left his service, called upon him and recommended him not to have her so heavily laden in the winter months; and as that, he says, was quite in accordance with his own views, he determined not to write but 10 go in person to Cardiff and tell Captain Fullam not to take so much by 150 tons. Mr. Garbutt tells us that he accordingly went there, saw Captain Fullam, and told him to take 150 tons less than he had before ordered him to do, and then immediately left. Why Mr. Garbutt should have gone to Cardiff for this purpose, when a letter would have done equally well, it is not very easy to understand, for he does not pretend to say that he waited to see that his amended instructions were carried out, but leaves at once after giving his orders. There is no evidence beyond Mr. Garbutt's own statement that he ever went to Cardiff at all at that time, nor is Captain Fullam here to say whether or not any such interview ever took place; there is, however, a letter from Captain Fullam, apparently the last the poor man ever wrote, dated "Off Cardiff, November 29th, 1879," which seems quite inconsistent with the fact that any such counter orders as Mr. Garbutt alleges were ever given; that letter begins as follows: Your instructions respecting cargo have been carried " out; I have taken a few tons additional to trim ship." And as a matter of fact the quantity taken on board on that occasion was 2,516 tons of cargo and 859 tons of bunker coal, or a little more than the quantities which Mr. Garbutt had originally ordered him to take. There is another fact also which tends very strongly to prove that no such counter orders were given by Mr. Garbutt. In the statement sent by him to the Board of Trade, Mr. Garbutt says:—"On the 21st November last I wrote "Captain Fullam that he would require 2.500 tops "Captain Fullam that he would require 2,500 tons cargo on leaving Cardiff for Genoa, and when his ship was lying off Cardiff he wrote me stating that " my instructions had been carried out, and that he " had taken a few tons additional to trim the ship." There is nothing here about his having gone to Cardiff to tell Captain Fullam to take 150 tons less, and if he had done so, is it likely that he would have omitted to state so important a fact? When, too, Mr. Blakeney tells us that Captain Fullam had said to him that, unless she took less cargo in the winter he should " have to consider whether he would continue to serve " in her," it does seem very extraordinary that Captain Fullam should have voluntarily overloaded the vessel on this last voyage, contrary to the express orders of the owner. All these facts coupled with the passages in the master's letter to his father, to which I will presently refer, oblige us, however unwillingly, to come to the conclusion that no such counter orders, as Mr. Garbutt pretends, were given to Captain Fullam, and that it was by Mr. Garbutt's express directions that the vessel was on that occasion loaded to the extent to which she was.

Lastly, "was she undermanned with the knowledge "or sauction of the managing owner?" Here, again, Mr. Garbutt seeks to throw the blame upon the master, but in our opinion unsuccessfully. We have seen that on the first voyage she had 27 or 29 hands, on the second voyage 26 hands, and now let us see from whom the suggestion came to reduce the number of the crew for the third voyage. In a letter from Mr. Garbutt, dated the 14th July, we find the following passage:-Dear Sir,—In consequence of the present unfortunate " depression in trade, I have determined upon giving "all my ships no more hands than can safely work them; therefore, in the case of the 'Marlborough,'

there will be-Yourself, " The chief officer,

" The second officer, " The boatswain (or third officer),

"The carpenter (one from Hull) who will have to " take watch along with the sailors, and five " A.B. seamen,

" The cook,

" The steward.

" Total 12.

Engine-room:—Chief engineer, The second engineer,

" The third engineer, and

" Six firemen. " Total 9.

" 21 in all, and this number will have to be the limit for each of the ships. The number of hands on deck, exclusive of cook and steward, will give two watches, viz., five in each watch, which, as you will be aware, is ample. Of course, if the ships were going through the canal, they would require more men in case of sickness amongst the crew through excessive hot weather. You will, therefore, note that the crew of your ship will number 21 hands all told. I may add that even this reduction will hardly make it worth my while to run the ships, therefore, I hope you will use "your very best endeavours to keep down expenses and the ship moving, which I have no doubt you will do." In reply the captain writes as follows:—"Dear Sir,—I am in receipt of your favour of the ———, and whilst most anxious to fall in with your views, permit me to draw your attention to the fact that exclusive of officers, the list only gives four men in one watch and three in another. Now with these three in one watch it will not be possible to get the proper reliefs for wheel and look-out at night, particularly as it is frequently necessary to have two men at the wheel in moderate weather, and sometimes four in heavy weather. I wish also to draw your attention to the fact that being a heavier and a larger vessel, and also being heavier masted than the other ships, the addition of the extra hand is highly desirable. Whilst stating this, believe I am fully cognisant of the causes that render a reduction of the crew necessary, hence, I trust that my remarks will be received in the spirit in which they are intended. I may add that the sickness of one hand would, under the proposed arrangement, be seriously felt.

Although I fully believe that the interests of the ship would be enhanced by the additional hand, I beg to state I will endeavour to meet your views to their fullest extent." All then that the Captain meant to say, after receiving that peremptory letter from the owner, was this:—"I know the difficulties in "which you are, give me one more hand and I will do my best;" but it is no evidence that the master approved of the reduction, or that he considered that 22, or even 25 hands, which is the number that he had

on the last voyage, were sufficient.

But any doubt that we might have as to whether the responsibility for the overloading and undermanning of the vessel rests with the master or with the owner, Mr. Garbutt, must at once disappear before the evidence of Captain Fullam's father. It seems that on his return from his first voyage, Captain Fullam ran down to Hull, where both his family and the owner resided. He remained there only one day, but during that time he had a conversation in private with his father, and then told him that the "Marlborough" was undermanned and was so difficult to steer, that it often required the whole of the watch at the wheel, and that there was then no one to look out, and at this time it must be remembered that she had, according to the owner, 27 hands. He also told his father that she had so little stability that on coming from New York, after discharging the pilot, he had been obliged to fill the ballast tanks to prevent her going over, and this, too, although she had already, he said, too much cargo in her, and he consulted his father as to whether he should leave her. His father, however, pursuaded him not to give her up until he got another ship, as he had been a long time out of employment; and Captain Fullam accordingly returned to the ship, and after that his father did not see him again. But although he did not see his son after that time he received two letters from him, which have been put in.

The first of them is one dated Antwerp, July 1879, and was written on his return to that port, with a cargo of wheat from the Black Sea, on his second voyage; and in it, after stating that they had discharged 2,000 tons of coal at Ancona, and had then gone on to the Black Sea, and brought home a cargo of 3,000 tons of wheat, "exclusive of bunkers," he adds, "I would not like to sail her in the winter time at her present load-line. Between you and I, the chief engineer, an excellent

man, is leaving, because he is frightened of her.' The second letter was written after leaving on the third voyage, and is dated Genoa, the 25th of August 1879. To understand the allusion to the weight of the cargo, and the position of the load-line, it is important to remember that on this voyage he had taken out a cargo of 3,242 tons of coal, and that on the previous voyage he had had 3,339 tons, or nearly 100 tons more. Omitting the first part, which has nothing to do with

this case, the letter goes on as follows:-I have a Captain Jennison as mate (not particularly in love with him); and a Captain Lamplough as second mate, this one I rather affect. My first engineer, a splendid fellow, left, I am sorry to say, this time, at Cardiff. A Mr. Harris takes his place. But this one lacks both the energy and capabilities possessed by the other. It is a serious matter to me. The last chief got 16l. per month; this one gets 14l., and has taken a house in Westbourne Avenue! for which he pays about 30l. or thereabouts! The second engineer now get 10l., and the third 7l. The chief mate is reduced from 10l. to 9l. The second's, I have succeeded in keeping at 7l. Our crew at first numbered 29 hands; last voyage this was reduced to 26 men, and this voyage Mr. Garbutt wanted to reduce us to 21 hands all told! I kicked, and we number 22, and this for a vessel of 3,450 tons dead weight. It is simply monstrous.

"Again, according to Mr. Rundell, the Chairman to

the Liverpool Underwriters, this ship (I am going by his formulæ) should have 6 feet 3 inches of side. The builders put her extreme draught at 5 feet. Mr. Garbutt, however, would have her marked to 4 feet 6 inches, and had her loaded to that in Newcastle. In May last he ordered her to be marked to 4 feet depth of freeboard, and loaded her to that in this same death of side we and loaded her to that; at this same depth of side we

left or loaded to this voyage.

Now the factor of safety and stability increases or decreases in a geometrical ratio; and this same factor is further increased or decreased by the proportionate length, &c. of the vessel in a similar degree; hence the

words of the present engineer, 'they must want to lose the vessel,' must have something in them.

"At sea she is when loaded a dirty ship, and takes on board water to an enormous degree. She is likewise very tender, and whether with coals or any other cargo always has a list. I had to put back to New York, because she would not stand upright, and after restowing the cargo, I had, directly the pilot left us, to fill the after ballast tanks with water, increasing her draught

by another 167 tons!

"The officers and crew left the first voyage because she was not safe. The third engineer last voyage when he left told Mr. Pauling she was not a safe ship. chief engineer left, because he was frightened of her going down. The cook left for the same reason. The present chief mate told Mr. Pauling she would go down sometime and not be heard of again. The captain of the steamship 'Effective,' whilst lying in Roath Basin, Cardiff, this time told Mr. Blakeney it was a scandalous shame to allow the ship to go to sea loaded as she was. Deep we were, but not so deep as we have been, our

disc was covered about 2 inches, we were not quite down to her draught marks of previous voyages, she had 100 tons short of last voyage's cargo, and yet her disc covered, and her disc faithfully measured by the second mate. This is a conundrum. I might guess the answer,

but I won't.

"Now I should not have mentioned this matter except for the asking of your advice upon some future occasion. So far as the rest of this voyage is concerned. we are safe, that is, we go out to Galveston in ballast and coming home with cotton we shall be all right. It is the next voyage the trouble will arise. It will be in December when she is ready to sail (of course I am assuming the successful termination of this voyage), and with an overloaded and undermanned vessel I do not again go to sea. I am not very soon frightened, but I do not see why my wife should be made a widow in order that another man should handle a little coin. I

know he needs it.
"She is a heavy steering ship, and Mr. Pauling has, in fine weather, seen five hands at the wheel, and each

watch only musters four men and a mate!

"Of course you will look upon this as private, even from mother, whom it would only distress. I have lots of time to think out the problem, and I want to handle

my gratuity (due last April) before I kick."

This letter, the genuineness of which has not been disputed, and which bears upon its face every evidence of truthfulness, appears to us to prove, first, that in the opinion of the master the vessel was frequently overladen, that when so overladen she was an unstable and unsafe vessel; and that she was also undermanned; and, secondly, that the suggestions to alter the position of the load-line from 4 feet 6 to 4 feet, and to overload and underman her, came not from the master, but from the owner, Mr. Garbutt.

Under these circumstances counsel for the Board of Trade asked that M. Garbutt might be condemned in costs. And looking at all the facts, it appeared to us, that, although the owner might be acquitted of the charge of having wilfully intended to lose this vessel and those on board, his conduct had been so reckless in sending her to sea in so unseaworthy a condition, that he ought to be condemned in costs. And we accordingly condemned him in a sum of 250l. nomine expensarum, of which 501. was to go towards the expenses of the Court, and 2001. towards the expenses of the Board of

Trade.

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

We concur

A. RONALDSON, (Signed) Assessors. C. Y. WARD, C. W. MERRIFIELD,

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