

(No. 1807.)

“BYWELL CASTLE” (S.S.)

The Merchant Shipping Acts, 1854 to 1876.

IN the matter of the formal Investigation held at Westminster, on the 22nd and 23rd days of May 1883, before H. C. ROTHERY, Esquire, Wreck Commissioner, assisted by Captain CASTLE and Rear-Admiral MORESBY, as Assessors, into the circumstances attending the supposed loss of the steamship “BYWELL CASTLE,” of London, and the loss of the lives of her crew of 22 hands, whilst on a voyage from Alexandria to Hull in January last.

Report of Court.

The Court, having carefully inquired into the circumstances of the above-mentioned shipping casualty, finds, for the reasons annexed, that the said vessel was, when leaving Alexandria, as well as when leaving Gibraltar on her last voyage, in a good and seaworthy condition, as regards her hull, equipments, and machinery, but that she was overladen, and that she probably foundered in the heavy gale which is said to have prevailed in the Bay of Biscay at the time when she might be expected to be crossing it.

The Court makes no order as to costs.

Dated this 23rd day of May 1883.

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

We concur in the above report.

(Signed) JOHN S. CASTLE, } Assessors.
J. MORESBY, }

Annex to the Report.

This case was heard at Westminster on the 22nd and 23rd days of May instant, when Mr. Middleton and Mr. Mears appeared for the Board of Trade, and Mr. de Hamel for the owners of the “Bywell Castle.” Three witnesses having been produced by the Board of Trade and examined, and the return made by the master of the vessel to the British Consul at Alexandria, and six affidavits taken at Alexandria having been put in and read, Mr. Middleton handed in a statement of the questions upon which the Board of Trade desired the opinion of the Court. Mr. de Hamel then produced five witnesses, and having put in the deposition of a witness taken at Gibraltar, and the manifest of the cargo of the “Bywell Castle,” was heard on behalf of his parties, and Mr. Mears having replied for the Board of Trade, the Court proceeded to give judgment on the questions upon which its opinion had been asked. The circumstances of the case are as follow:—

The “Bywell Castle” was an iron screw steam ship, belonging to the port of London, of 1376 tons gross, and 891 tons net register, and was fitted with engines of 120 horse power. She was built at Newcastle-on-Tyne in the year 1870, and at the time of her loss was the property of Mr. John Hall of Newcastle-on-Tyne, and others, Mr. John Hall being the managing owner. She left Alexandria on the 15th of January last for Hull with a crew of 22 hands, a cargo of 1,804 tons of cotton seed and beans, and about 140 tons of coal in her bunkers. She arrived at Malta on the 20th of the same month, and having taken in 45 tons of coal proceeded on her voyage to Gibraltar, where she took in 115 tons more, and left again on the 27th. On the 29th she was signalled from Point Carvoeiro near the Burlings, where there is, I am told, a signalling station; but from that time nothing more has been seen or heard of her, and there can be no doubt, after so long a lapse of time, that she must have foundered with all hands. This inquiry has accordingly been ordered with a view to ascertain, if possible, in what way her loss is to be accounted for.

Now the first question upon which our opinion

has been asked is, “Whether, when the vessel left Alexandria, she was in good and seaworthy condition?” by which I presume is meant, so far as her hull, machinery and equipments are concerned. She was built, as I have said, in the year 1870 at Messrs. Palmer’s yard on the Tyne; but owing to a fire, which subsequently occurred at those works, all the plans of the vessel which the builders possessed have been destroyed. Tracings, however, of the midship section and of the displacement scale have been brought in, which we are told have been in the owners’ possession ever since she was built, and from these and from the evidence of Mr. John M’Intyre, the designer of the ship and the manager of Messrs. Palmer’s yard; of Mr. James Sanderson, who was a draughtsman at Messrs. Palmers at the time when she was built; of Mr. Price, formerly the chief surveyor to the Liverpool Underwriters’ Association on the East Coast, and now general manager at Messrs. Palmer’s works; and of Mr. Richard Williams, superintending engineer to Messrs. Hall the owners, we have been able to form, not perhaps an exact, but a tolerably clear idea of the ship. It seems that she was what is ordinarily known as a well decked ship, having a poop and bridge house connected and extending some 12 feet forward of midships, and a top-gallant fore-castle forward about 26 feet long, with a well between them. We are told that she was an extremely well built ship, and that she was classed 18 years in the books of the Liverpool Underwriters Association; but as Mr. Price, the former chief surveyor to that association on the East Coast, stated, an 18 years vessel of that time was as good as a 20 years vessel of the present day. In 1877 she had new boilers put into her, and was then thoroughly overhauled; and in 1878 after that unfortunate collision with the “Princess Alice” she was repaired, and although since that time she seems to have been frequently in dry dock to have her bottom painted, neither Mr. Hall nor any of his officers could tell us when she was last overhauled. They told us, however, that she was always well kept up, that her hatches especially were very strong, being made of iron, with coamings 2 feet 6 inches high, and having three fore-and-afters in the main hold, and two in the fore hold, and cross pieces in each. And under these circumstances the assessors are disposed to think that the vessel was, so far at all events as the hull, machinery and equipments were concerned, in good and seaworthy condition when she left Alexandria.

The second question upon which our opinion has been asked is, “Whether the load line was so placed as to give the vessel sufficient freeboard?” that is to say, I presume, provided that she was loaded down to it. On looking at the ship’s articles for the successive voyages on which this vessel has been engaged, and in which the position of the load line is required to be inserted, we find it stated in the earlier ones that the load line was 2 feet 11 inches below the deck line, then it was 2 feet 10, then 2 feet 5½, then 2 feet 4, and ultimately 2 feet 2. This would seem to shew that the load line must have been gradually raised from year to year, with the view of loading the vessel more heavily; but Mr. John Hall and his witnesses stated that so far as they knew the position of the load line had never been altered, and that it had always to the best of their belief been at 2 feet 4 inches. On the other hand from facts, to which I shall presently have occasion to refer, it appears to us that it must have been as stated in the ship’s articles at 2 feet 2 inches. But assuming it to have been at 2 feet 4 inches, would that have been a sufficient freeboard for the vessel had she been loaded down to it.

Taking first the Board of Trade rules we find that a flush deck vessel of her length should for an ordinary winter voyage have a clear side of 24 inches for every foot depth of hold, which on a depth of 196 feet would give us 47 inches. From this however certain deductions would have to be made. First there is the sheer, which we are told was exceptionally large, being about 6 feet 6 forward and about 3 feet 6 aft, giving her a mean sheer of about 5 feet, or 60 inches. And as by the Board of Trade rules, 20 inches to every 100 feet of length is a proper sheer, 50 inches would be a proper mean sheer for a vessel of her length. The difference being 10 inches, one-fourth of which, or 2½ inches, would be the proper deduction to make on account of extra sheer. There

are then the deck erections for which we will give the full allowance of 4 inches, and one inch for the extra height of the coamings, and the exceptionally strong character of the hatchways. That will make the total deductions $7\frac{1}{2}$ inches, leaving $39\frac{1}{2}$ inches as the required freeboard at the disc amidships. Seeing however that by these rules the clear side is to be taken from the lowest part of the exposed deck, that is to say in this case from the break of the poop, which was about 12 feet forward of midships, a further deduction would have to be made on that account. Now, according to Mr. Sanderson, the rise from the centre to the fore part of the poop would be from $4\frac{1}{2}$ to 6 inches, but Mr. de Hamel said that he could hardly venture to claim so large a deduction as this, but he did claim about 3 inches, which would leave 3 feet and half an inch as the proper freeboard for this vessel by the Board of Trade rules.

In the next place, what ought to have been her freeboard by Lloyd's rules? According to Lloyd's rules we may take her co-efficient of fineness as about .74, and with a moulded depth of 20 feet 9 inches, that would give us by Table A as a flush decked ship a freeboard of 3 feet $9\frac{1}{2}$ inches. From this, however, certain deductions would have to be made. First, then, there is the sheer, which, according to Lloyd's rules is to be "measured at the middle line;" we must therefore deduct the camber of $8\frac{1}{2}$ inches, which we are told she had, from the mean sheer of 60 inches, leaving a mean sheer at the middle line of $51\frac{1}{2}$ inches; but according to Lloyd's rules the normal sheer should be 15 inches to every 100 feet of length, which would give us $37\frac{1}{2}$ inches as the proper sheer for this vessel; and dividing the difference between the two by 4, we have about $3\frac{1}{2}$ inches to be deducted from the required freeboard on account of extra sheer. The camber being, I have stated, $8\frac{1}{2}$ inches, is about the proper amount. Then as to the deck erections. A flush deck vessel with a moulded depth of 20 feet 9 inches, and a co-efficient of fineness of .74, should under Table A have a freeboard of 3 feet $9\frac{1}{2}$ inches; and an awning deck vessel of the same dimensions ought by Table C to have a freeboard of 1 foot $11\frac{1}{2}$ inches. What the exact length of the deck erections was we are not told, but Mr. Sanderson claimed for the deck erections an allowance of $\frac{1}{10}$ ths of this difference, or about 9 inches, and that we are disposed to allow. The total deductions then would be for extra sheer $3\frac{1}{2}$ inches, and for deck erections 9 inches, or a total of 1 foot and half an inch, and that deducted from the 3 feet $9\frac{1}{2}$ inches leaves 2 feet $9\frac{1}{2}$. In addition to this, however, we are told that there must be a further allowance according to Lloyd's rules of 3 inches for the thickness of a wooden deck, the vessel having only an iron deck, which would reduce the freeboard to 2 feet $6\frac{1}{2}$. On the other hand, it may perhaps be doubted, seeing that this vessel was 13 years old, and that she would have to cross the Bay of Biscay in the very depth of winter, whether in accordance with the principles laid down in regard to deck erections and in the note at the foot of Table A, some such addition as 10 per cent. ought not to be made to the required freeboard on these accounts, which would raise the freeboard again to about 2 feet $9\frac{1}{2}$. Be this however as it may, it would seem that the minimum freeboard allowed by Lloyd's rules for a vessel of these dimensions ought, under the most favourable circumstances, to be not less than 2 feet $6\frac{1}{2}$ inches.

Seeing then that by the Board of Trade rules the minimum freeboard for this vessel for a voyage across the Bay of Biscay in the winter months should be 3 feet and $\frac{1}{2}$ an inch, and by Lloyd's rules the minimum freeboard for such a vessel under the most favourable conditions should not be less than 2 feet $6\frac{1}{2}$, we have no hesitation in saying that this vessel, had she been loaded down to her load-line, whether that load-line was at 2 feet 4, or as seems most probable at 2 feet 2, would, more especially for a winter voyage across the Bay of Biscay, have been greatly overlaid.

The third question which we are asked is "Whether she was overlaid?" It seems that on leaving Alexandria she had 1,804 tons of cargo and about 140 tons of coal on board, making a total of 1,944 tons; and that on leaving Gibraltar she had about 4 tons more coal in her bunkers, making a total dead weight of 1,948 tons. This, it will be observed, is considerably more than double her registered tonnage, and is 67 per cent. above her under deck tonnage; *prima facie*, therefore, it was a very heavy cargo for this vessel, especially for a winter voyage across the Bay of Biscay. And now let us see what freeboard this would give her. According to the statutory notice which the captain is required to leave with the British Consul, she drew on leaving Alexandria

17 feet 7 inches forward and 20 feet 5 inches aft, giving her a mean of 19 feet, and had a clear side at the lowest part of 2 feet 3 inches. It is said, however, that there must be some mistake here, for that the midship section shews the total depth at side to have been 21 feet 7 inches, and that if 19 feet, the vessel's mean draught, be deducted from this, it leaves a clear side of 2 feet 7 inches. It was stated also in the depositions made by the stevedores at Alexandria that when the vessel left the lowest part of the disc was 3 inches above the water, so that according to these gentlemen, if the centre of the disc was at 2 feet 4 below the deck, that would give her a freeboard amidships of 3 feet 1 inch. And their evidence was confirmed by a seaman named Gorman, who told us that he went on shore on the morning of her departure for the purpose of lodging a complaint with the British Consul in regard to the provisions served out to them, and that on returning to the quay between 9 and 10 a.m. after seeing the Consul, he found her lying off at her moorings, and that on hailing her he was told by the captain to get on board in the same way as he had gone ashore, and that not being able to get a boat he had been left behind, and according to this man the bottom of the disc was then two or three inches out of the water. Lastly, we have the deposition of a person called Nicholas Serrato, the master of the coal hulk at Gibraltar, in which it is stated that, after she had taken in the 115 tons of coal at that place, the "disc was from about 5 to 6 inches above the water" "from the lower part of its circumference," so that according to this she had then a freeboard of from 3 feet 3 to 3 feet 4. According then to the evidence derived from the tracing of the midship section the freeboard was 2 feet 7, according to the stevedores at Alexandria and the witness Gorman it was 3 feet 1, and according to the witness from Gibraltar it was from 3 feet 3 to 3 feet 4 inches. The discrepancy between these witnesses throws a good deal of doubt on their accuracy. On the other hand we have the formal declaration of the master as contained in the statutory notice which he left with the British Consul at Alexandria, made *recenti facto*, that her clear side at the lowest part on leaving was 2 feet 3 inches and no more, and this is strongly confirmed by the evidence of one of the owner's own witnesses, a Mr. Campbell. It seems that Mr. Campbell had served in the vessel as chief mate from March to December 1882, and had left her just previous to her departure from this country on her last voyage. During that time he had made 4 voyages in her, returning on each occasion with grain cargoes, on three of the voyages from Alexandria, and on the other from Sulina. The last voyage that he made in her was from Alexandria, and they then had a very similar cargo to that which she had when she was lost, namely cotton seed and beans, the total dead weight, including coals, being about the same. He told us that on that occasion the water was nearly down the centre of the disc, and that that was the way in which, whilst he was in her, she was generally loaded. Now on turning to the statutory notice left by the master with the British Consul at Alexandria on that voyage, we find it therein stated that her draught forward was 17 feet, and aft 22 feet 2, giving her a mean of 19 feet 1, and that her clear side at the lowest part was 2 feet $3\frac{1}{2}$, or within $\frac{1}{2}$ an inch of what it is stated to have been in the statutory notice left with the Consul on the last voyage. Mr. Campbell also stated that on that occasion, owing to her being so much by the stern, the fore tank was full; and how do we know that the fore tank was not full on the last occasion, the only evidence on the point being that of the stevedores, who really could know nothing about it? Now is it likely that the master would on two successive voyages have made so serious an error in the freeboard as to put it down at 2 feet 3 and 2 feet $3\frac{1}{2}$, when in fact it was 3 feet 3 to 3 feet 4? We think it impossible, and we think that the master's statement is that on which most reliance is to be placed, namely, that she had on leaving Alexandria, and consequently on leaving Gibraltar, a clear side of only 2 feet 3. Now Mr. Campbell has told us that with a freeboard of 2 feet $3\frac{1}{2}$ the water was very nearly up to the centre of the disc, which would lead us to think that the load-line must have been at 2 feet 2 according to the statement in the ship's articles, and not at 2 feet 4, as some of the owner's witnesses have stated. Seeing then that according to the Board of Trade rules she should have had a freeboard of 3 feet and $\frac{1}{2}$ an inch, and according to Lloyd's rules she ought under the most favourable conditions to have had a freeboard of not less than 2 feet $6\frac{1}{2}$ to 2 feet $9\frac{1}{2}$, we have no hesitation in saying that this

vessel, with 3 inches, leaving Gibraltar.

The fourth question is, "Whether she was overlaid?" We were told that she was overlaid on several occasions, also the time he was in her, weather being so bad, herself to no appearance, the fact that the vessel was overlaid.

The fifth question is, "Whether she was overlaid?" "the register," "suant to," "of Gibraltar," "of this," "with?"

1,133 tons, 150 tons, 40 tons of cotton seed, 1,610 tons, tributed, suppose, the heavy bottom.

of Trade Court the from port that date decked s relating cable to tions hav vessel w forward it. It is been issued but we n and I see expressed this desc be regard the after have to single fore part more de observe of the r complie which se with pro and pro iron stan nuts. V

vessel, with a freeboard amidships of only 2 feet 3 inches, was, on leaving Alexandria as well as on leaving Gibraltar, grievously overladen.

The fourth question upon which our opinion is asked is, "Whether as loaded she had sufficient stability?" We were told by Mr. John Hall that he had never taken steps to ascertain her stability, but that he had not on any occasion known her to shift her cargo. We have also the evidence of Mr. Campbell, that during the time he was in her, although they had had very bad weather both on the first as well as on the fourth voyage, she had behaved very well, and had shewed herself to be a very good sea boat, and that there was no appearance of any shifting of the cargo. The evidence, therefore, so far as it goes, would seem to shew that the vessel had sufficient stability.

The fifth question which we are asked is, "Whether the regulations issued by the Board of Trade, pursuant to section 5 of the Merchant Shipping (Carriage of Grain) Act, 1880, were applicable to the loading of this vessel, and if so, whether they were complied with?" We are told that the cargo consisted of 1,133 tons of cotton seed and 671 tons of beans; that 150 tons of the cotton seed were in the 'tween decks, 40 tons of it in feeders, and that the remainder of the cotton seed and the beans, consisting altogether of 1,610 tons, was placed in the lower holds, but how distributed there is nothing to show, although it is, I suppose, fair to assume that the beans, which formed the heaviest part of the cargo, would be placed at the bottom. This being so, what as I understand the Board of Trade wish to know is, whether in the opinion of the Court the regulations issued for the carriage of grain from ports in the Mediterranean and Black Sea, namely that dated the 29th of January 1881, relating to single decked ships, or that of the 20th of February 1881, relating to vessels having two or more decks, are applicable to this vessel; and if so, whether those regulations have been complied with. I have stated that this vessel was a well decked ship, having a single deck forward of the engine-room, and a 'tween decks aft of it. It is true that there are no regulations that have been issued specially applicable to this class of vessel, but we must take a common sense view of the question, and I see no reason to depart from the opinion which I expressed in the case of the "Alfred," that vessels of this description must, so far as the fore part is concerned, be regarded as being single decked ships, and as regards the after part as having two decks. What therefore we have to consider is, whether the regulations applicable to single decked ships have been complied with *quâ* the fore part, and the regulations as to vessels with two or more decks *quâ* the after part. And first I should observe that one and perhaps the most important part of the regulations, which appears to have been fully complied with, is that regarding the shifting-boards, which seem to have been fitted from deck to keelson, with proper beam fittings, and to have been grain-tight and properly secured in the upper part between split iron stanchions, and in the lower part by hook bolts and nuts. Whilst too in the fore part of the vessel there

were unusual large hatchways acting as feeders to the fore and main holds; there is every reason to believe that in the after part the 'tween decks hatches were off, and the three feeding hatches on each side open. So far therefore as appears, we have every reason to think that the regulations of the Board of Trade have in this case been complied with.

The last question which we are asked is, "What in the opinion of the Court, from the evidence before them, is the cause of this vessel not having been heard of since she passed Cape Carvoeiro on the 29th of January last, bound for Hull?" It is impossible for us to say how this vessel has been lost, not a soul having survived to tell the tale. She was a strong well built vessel, with exceptionally strong hatches; but on the other hand she was too deeply laden. We are told that there was a violent gale in the Bay of Biscay at about the time when she might naturally be expected to have been crossing it; and the only suggestion that occurs to us is, that laden as she was, she might not have been able to rise to the seas, which would then have broken over her, filled her fore well and swamped her. It is a sad thing to see day after day cases like this of strong well built vessels disappearing with all hands without anything to account for their loss, except that they were too deeply laden. This is the third case of the kind which has come before the Court in the course of one week, all of them being well-decked ships, one with a double well, the other two with only a single well. These will be followed next week by three others in which the vessels have also disappeared with all hands. It is idle of ship owners to talk of vessels seldom if ever being sent to sea in an overladen condition, or of well-decked ships being specially free from casualties; the records of this Court shew the contrary. We are told that this vessel had made a great number of voyages as deeply laden as she was on this occasion; no doubt she had and had thereby earned large freights for her owners, but we are not told how many perils she has escaped, or how many times during that period she has barely escaped from foundering. Owners, who send their ships to sea, especially in the winter months, in such a state that it is a chance whether they reach their destination in safety or whether they founder with all hands incur a very grave responsibility, and are guilty of a more serious offence than this Court has any power adequately to deal with.

At the conclusion of the proceedings Mr. Mears asked that the managing owner should be condemned in the costs. The Court, however, under the circumstances, though with some hesitation, did not condemn the owner in the expenses, trusting that its decision in this case would be a warning to him for the future.

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

We concur.
(Signed) JOHN S. CASTLE,
J. MORESBY, } Assessors.
Rear Admiral,