nized prior art are three, namely: (1) Recesses in the standards; (2) removability of the bottom plate; and (3) the driving weight. The contention of the appellee here is less specific. It is asserted that "nowhere in the prior art did a machine exist in which all the staves were driven home simultaneously through fixed truss-hoops, and leveled against a bottom sustained in definite relation to the hoops." And again it is said: "The radical distinction in the Corcoran advance lies in the fact that he drives the staves while the truss-hoops are stationary, whereas in the prior devices, with one exception, the truss-hoops are forced along while the staves are stationary." The removable bottom, it will be observed, is not essential to either of these propositions. The "one exception" referred to is the Deering patent No. 194,335, which, it is said, is for a "machine to pound on the stave ends," in which the hoops are set one at a time (it being necessary to readjust after each setting the dependent standards which clasp the barrel in the interval while the piston is performing its stroke), and do "not level against the abutment plate in unison with the simultaneous tightening of all the hoops, which is Corcoran's central idea." These propositions of counsel and the view declared by the court alike can be accepted only by assuming or conceding the further contention that the trussing of "butter tubs," as distinct from "barrels," began with Corcoran, and that the earlier patents for barrel-trussing devices are not a part of the prior art to be considered. "The Corcoran construction," it is said, "while simple and efficient as a means of trussing tubs or half-barrels, would have been wholly inefficient for trussing barrels, for the reason that more than half of the barrel would project over the top of the Corcoran standards, and with the flare that the staves have, within said standards, the upper ends of the barrel staves, if seated in the Corcoran truss, would radiate to such an extent as to render impracticable the use of a driving weight, and at the same time the upper halves of the staves, being wholly unsupported, would yield in an outward direction to the blows from such weight, and therefore would prevent the compact seating of the staves within the truss hoops, shown in the Corcoran invention as applied to butter tubs." This may all be conceded, but it does not follow that the transition from barrel trussing to the trussing of half barrels or tubs was at all difficult, or involved the exercise of more than mechanical skill. To illustrate: One of the drawings of the Dann patent, No. 289,393, represents barrel staves projecting more than half their length above the standards, and above the uppermost trussing hoop, and radiating to such an extent as to render impracticable the use of a driving weight; but nothing could be more evident than that, if the upper halves of the staves there shown were cut off, the driving weight could be used, and that the result of the operation, without any change whatever in the form of the device, would be a half-barrel or tub. Other patents in evidence, notably the Wycoff, No. 6,813, and the Bayley, No. 190,730, show machines for trussing barrels which without essential alteration could be used for trussing tubs, and their construction is such that if they do not, part

by part, anticipate the combination of Corcoran, they make it impossible that the machines of the appellant, constructed as they have been in conformity either with the Ulrich patent, No. 356,217, or the Glader & Smith patent, No. 477,195, shall be deemed to infringe that combination. The earlier patents mentioned show recessed standards, some vertical, as in the Deering device, and some horizontal, as in the Wycoff and Bayley machines, through the truss-hoops of which, held in the recesses of the standards, the staves are driven simultaneously against bottom plates sustained in a definite relation to the hoops. That is done, it is true, in the Wycoff and Bayley machines, by pushing forward the standards, and thereby forcing the hoops upon the staves; but the process and effect, it is quite clear, are mechanically the same as if the staves were driven through stationary hoops; and if it were proposed to employ the machines in trussing half-barrels, instead of barrels, the only change of construction and operation required would be to make stationary one of the leveling heads and one set of standards, and to use the other leveling head as a piston head, in lieu of the driving weight, to force the staves simultaneously through the hoops. Indeed, in the Wycoff construction one of the cup dies, or pots, is shown to be stationary, and the staves are forced into it, and through the hoops held in its annular recesses by the pressure or stroke applied at the other end, just as in the Corcoran device. In the Deering machine, as its operation is explained, the staves are driven through the hoop, and not the hoop upon the staves. There is, to be sure, but one recess in the standards, but the standards are adjustable so as to receive into the recess the different sizes of hoops successively as necessary, and to hold them in a fixed position while all the staves are driven simultaneously through each hoop in its order, until the intended result is accomplished. The substitute for the driving weight and rope is a platform moved by a piston, and, instead of a continuous pressure, the specification says that the piston with the platform "may be dropped down and brought up again suddenly with a strong stroke against the lower end of the barrel, thus setting the hoop through the means of percussion."

It need not be said that the Corcoran claim is totally void; but, if upheld, it must be restricted to the particular construction described. The right to drive staves through trussing hoops resting in annular rings or recesses on the inner side of a pot is covered by the prior art, and when it was found, if not anticipated, that the bottom of the pot was liable to be broken or worn in the process of trussing, it required no invention to insert a false or removable bottom, which could be replaced when necessary. In fact, the leveling heads shown in the Bayley patent are or could easily be made removable. The practice of making removable such parts of machinery as are especially exposed to wear or injury is too old to admit of the exclusive appropriation of that feature of construction in any kind of machine. Corcoran's patent discloses no such intention. The bottom, I, in his device, was made removable evidently in order that in Figs. 1 and 2 it might be inserted,

and again withdrawn, after the dropping down of drop bottom, D, and in order that in Fig. 3 the standards might be adjusted to hoops of different sizes. In the machines of the appellant the removable bottoms contribute to no such adjustments, and are used solely for the purpose of economical replacement when broken or unduly worn. The decree below is reversed, with direction to dismiss the bill for want of equity.

THE CITY OF AUGUSTA.

HANDY et al. v. ADAMS.

(Circuit Court of Appeals, First Circuit. April 15, 1897.)

No. 194.

1. APPEALS IN COLLISION CASES—CONFLICTING EVIDENCE—FINDINGS BELOW.
Where the judge below has recorded his impression that certain testimony given by witnesses in his presence was of doubtful value, and on an examination of it by the appellate court there is nothing to suggest that the trial judge overlooked anything appearing on a careful comparison of the whole record, his conclusions will be entitled to great weight.

2. COLLISION—BURDEN OF PROOF—LOOKOUTS.
Where a lookout is shown to have been absent from his post for a large part of the critical time during which the vessels were approaching each other, and was therefore unable to observe a considerable portion of the essential occurrences in controversy, the presumptions arising from this lack of vigilance are of very substantial importance; especially where it appears that the master of the vessel, instead of being in command of the deck, was himself at the wheel. In such case, if the vessel is unable to sustain the burden of showing fault in the other party, such inability must be laid to her own misfortune or negligence. The Charles L. Jeffrey, 5 C. C. A. 246, 55 Fed. 685, applied.

3. SAME—ERRORS IN EXTREMIS—LUFFING.
Where a sailing vessel going closehauled finds that another sailing vessel running free is crossing her course so close under her bow that she will probably not go clear, and thereupon luffs, she will not be held in fault, even if this was a mistake, as the rule of error in extremis applies.

4. SAME—EVIDENCE—ADMISSIONS.
While the courts seldom put much reliance on the evidence of officers or seamen as to alleged admissions by officers or seamen of the hostile vessel, yet, when such admissions are in harmony with the reasonable probabilities of the case in other particulars, they may be of value in suggesting a solution as between conflicting proofs.

5. ADMIRALTY APPEALS—COSTS.
While, perhaps, there may be no appeal from ordinary questions of costs within the common jurisdiction of taxing masters, yet there may be such an appeal when the force of a statute or some positive rule of law is involved, though it concerns only costs.

Appeal from the District Court of the United States for the District of Massachusetts.

Eugene P. Carver (Edward E. Blodgett on brief), for appellants.
Edward S. Dodge, for appellee.

Before COLT and PUTNAM, Circuit Judges, and BROWN, District Judge.

PUTNAM, Circuit Judge. The learned District Judge from whom appeal has been taken in this case, and who found the A. Heaton alone in fault, stated the questions at issue as follows:

"This collision between the two schooners, the City of Augusta and the A. Heaton, occurred off Nausett Light on September 13, 1895, about 1 a. m. The wind was northwest by west, blowing a moderate breeze; and the weather was clear and fine. The City of Augusta was coming up the coast, closehauled, on the port tack, and steering about north. The A. Heaton was coming down the coast on an almost directly opposite course to the other vessel, with the wind abaft the beam,—a situation which gave the City of Augusta the right of way. The claim set up in the libel of the A. Heaton, and which is supported by the evidence of the libelants, is that she saw the lights of the City of Augusta almost directly ahead, and, in order to avoid her, starboarded, and kept off a point or so to the southeast, and, shortly afterwards, kept off another point; and, as she claims, she was going clear, when suddenly the City of Augusta ported, and ran across her bow, and that, to avoid this danger, the Heaton then ported and luffed up into the wind, and that then she would have gone clear if it had not been that the City of Augusta also luffed, and in that situation ran into her, striking her on the port side, near the foreriggging. The claim on the part of the City of Augusta is quite different. On board her the lights of the A. Heaton were seen directly ahead. It is claimed that the vessel held her course until she was quite near to the City of Augusta, in fact within dangerous proximity to her; and that, observing that the Heaton was keeping off, to give her more room, the City of Augusta luffed a little, and then the Heaton luffed up into the wind, and went right across her bow."

These issues involve only questions of fact, as to which the master of the A. Heaton was so essential a witness in her behalf that her case must clearly fail unless his testimony is substantially accepted. He testified orally before the District Judge, who observed:

"I would state that the testimony of the master of the Heaton did not impress me very favorably. His memory was singularly feeble and faulty, and I doubt very much whether he made a correct statement of what occurred."

The learned judge, having had the opportunity of personally observing this witness, has thus carefully recorded the result on his own mind. Our examination of his testimony, as shown by the record, confirms this result; and a like examination of that of the lookout of that vessel leaves a similar impression. It is true that the evidence of the lookout of the City of Augusta is also very much confused in regard to the events at the critical period immediately preceding the collision. But that of her master is clear and consistent, so far as the facts were within his observation; and those covered the main issue in the case, namely, that the City of Augusta firmly held her course until she luffed the instant before the collision.

The nature of the conflicting proofs is such that it is impossible, in any view of the case, to pronounce the decree below clearly erroneous. Nothing suggests that the district court overlooked anything which appears to us on a careful comparison of the whole record. Without, therefore, undertaking to say whether weight is usually to be given to the findings of fact by the court below in the terms in which the rule is ordinarily stated, or according to the qualified and guarded way of putting it in The Ariadne, 13 Wall. 475, 479, we are within the lines of undoubted safety when we say that this is one of the peculiar class of instances where necessarily the conclusions of the learned District Judge have great value. Moreover, the rules

laid down by us in The Charles L. Jeffrey, 5 C. C. A. 247, 55 Fed. 685, 686, will be found to have application to this case. We there said:

"The entire watch of the Joe Carleton consisted of the captain and steward or cook, the latter testifying that, although he had followed the sea for 18 years, it had been mostly in the latter capacity. According to the testimony of both of these men, the captain relieved the cook at the wheel at or about 10 o'clock, and the cook then went on the lookout. The cook admits that, after he went on the lookout, he took about 10 or 15 minutes in clewing up the topsails and trimming down the staysail. * * * Natural justice and good sense, as well as the settled practice of the admiralty courts, are not ordinarily satisfied with testimony touching contested issues of fact relating to the topics in dispute here, given by mariners who are so slack as these witnesses with reference to the cognate prime requirements of navigation. When one vessel makes a claim against another in the case of a collision, admiralty courts are bound by the same rule which forbids any other court from condemning any one in damages, except in behalf of a party who supports his demand by a preponderance of evidence. If, therefore, as with the Joe Carleton, the owners of a vessel, either through the necessities of economy or for other reasons, are not able to show such constant vigilance, especially on the part of the lookout, as is necessary to sustain the burden which rests upon every one who claims another to be in fault, the inability to maintain the claim must be laid to their own misfortune or negligence, and not to the courts or the law. Under the circumstances of this case, and applying the rule of evidence referred to, even if this court was not able to find by a preponderance of evidence that the Charles L. Jeffrey was free from fault, there is also lacking the like preponderance in favor of the claim that she was in fault, or that the Joe Carleton was fulfilling all the duties which the statute required of her; and therefore, for this reason alone, we would justly be compelled to affirm the decree of the district court, and dismiss the libel of the owners of the Joe Carleton, on the ground that the case of the latter was not proven to our satisfaction."

In the case at bar it is conceded that, after the A. Heaton sighted the City of Augusta, the lookout of the former went to the pump, and remained there three minutes. He maintains that he went forward again seasonably before the collision, but there is some evidence to the contrary. We do not deem it necessary to determine whether or not he did so go forward again. It is plain he was absent from his post, and that there was no other lookout, for a large part of the critical portion of the time during which these vessels were approaching each other, and that he was unable, on account of his admitted absence, to observe a considerable portion of the most essential occurrences about which the parties are at issue. This is not the case of The Nacoochee, 137 U. S. 330, 341, 11 Sup. Ct. 122, where the absence of a lookout would be of no consequence, but of The Genesee Chief, 12 How. 443, 462, 463, and of The Oregon, 158 U. S. 186, 193, 15 Sup. Ct. 804; and the vigilance of the lookout, and the presumptions arising from the want thereof, are of very substantial importance. In addition thereto, contrary to the continued injunctions of the courts otherwise, the master of the A. Heaton was not in command of the deck, but was himself at the wheel. Besides him and the lookout, she had one other man on deck amidships; who, however, admits that he heard the first report of the light of the City of Augusta, but did not see her till she came under the lee bow of the A. Heaton, which was at the moment of the collision. Under these circumstances, the A. Heaton must bear the burden, within the rules in The Charles L. Jeffrey, ubi supra, of the unwillingness of the court to accept proofs

to charge another vessel, coming from one so slack in her discipline as she is clearly shown to have been. We are not, on this point, required to make like inquiries as to the discipline aboard the City of Augusta, nor as to her proofs in all respects, because she is not the moving vessel in this litigation, and no burden rests on her to make out a claim.

We should also observe that, as the A. Heaton was sailing free and the City of Augusta was closehauled, it is a clearly settled rule of the practical administration of the law that the burden rests on the A. Heaton to show that she kept well clear of the course of the other vessel. This has nothing to do with the subordinate rule which would require the City of Augusta, if her luffing was inexcusable, to show that it could not have contributed to the collision, because if the A. Heaton was in fault, as found by the district court, the proofs show that the luffing was undoubtedly in extremis. According to the testimony of the captain of the City of Augusta, having been called forward by the lookout, he saw that the A. Heaton was crossing his course from his port to his starboard, showing her green light, and that she was so close under his bow that he thought she probably would not go clear, and therefore he luffed, to enable her to do so. He had reasonable grounds for believing that his luffing would prevent a collision which was imminent. Under these circumstances, it is impossible for any one to say with certainty that his luffing was a mistake; but, even if it were otherwise, the rule in extremis applies. The instances in which parties have been held strictly for errors in luffing seem to be superseded by later and more moderate statements of the rule. Among the more stringent cases are The Catharine, 17 How. 170, and The Agra and The Elizabeth Jenkins, L. R. 1 P. C. 501, 505. A more reasonable and just statement is that of the supreme court in The Oregon, 158 U. S. 186, 204, 15 Sup. Ct. 804, 812, as follows:

"It was a case of action in extremis, and, while it is possible that a bell might have called the attention of the approaching steamer, it is by no means certain that it would have done so; and, whether the lookout acted wisely or not, he evidently acted upon his best judgment; and the judgment of a competent sailor in extremis cannot be impugned."

We stated somewhat more fully the same principle in The H. F. Dimock, 23 C. C. A. 123, 127, 77 Fed. 226, 229, as follows:

"We are aware that the master of the Dimock appears to have been competent for his position, and to have exercised an honest judgment, and, indeed, to have proceeded even more carefully than other steamers navigating practically in company with him. Where the questions are merely those of prudential rules of navigation and of maritime usages, a vessel should not ordinarily be held in fault simply because the courts, with cool deliberation, after all the facts, determine that what was done was mistaken. In such cases a court should put itself in the position of the master at the time of the circumstances involved, and consider that the rights of the parties, when maritime contingencies are difficult and unusual, must ordinarily be settled according to his determination, provided he has suitable experience and capacity, and exercises a discretion not inconsistent with sound judgment and good seamanship."

The A. Heaton contests the experience and competency of the man at the wheel of the City of Augusta. He was a passenger, and his

inexperience cannot be denied; yet he had a knowledge of maritime terms, and was not entirely without maritime experience. He was an apparently intelligent student at a Maine academy, taking this voyage for a vacation. There is nothing in the case to suggest that he was not both a competent and an impartial witness. He may well be supposed to have been less subject to influences than any officer or seaman attached to either vessel. The fact that he was inexperienced would be of more value if there were any evidence that he in truth steered badly. There is no such evidence except as involved in the issue of the whole case; that is, if the whole case is against the City of Augusta, it must be because it carries the theory that she was badly steered. The evidence of her master and wheelsman is positive that she was kept on her course until she luffed just before the collision. The wheelsman says that he kept a "good full," and also that he held his course steadily by compass. However, this particular question is removed by the fact that the master of the City of Augusta was himself by the wheel so constantly that no point can be made out of the mere inexperience of the wheelsman. Each side charges the opposing vessel with maneuvers which would be very improbable in one properly manned and disciplined; and, on the whole, in view of the facts and considerations to which we have referred, we are unable to reverse the conclusion of the district court.

While the case of the A. Heaton against the City of Augusta thus fails mainly for want of satisfactory proofs on her part to support the burden which rests on her, yet it seems quite apparent that the collision occurred through her own fault. Either she failed to sight the City of Augusta seasonably, as was found by the district court, or she afterwards lacked vigilance in observing her courses, and in bearing away from her by so large a margin as she was bound to do. The libel alleges that she first saw, at a distance of about two miles, the red light of the City of Augusta on her starboard bow. The testimony of her lookout is to the same effect, putting it about half a point on that bow. The testimony of the master of the A. Heaton, at one place, is that he saw the light of the City of Augusta before his lookout saw it, and that it bore about half a point on his starboard bow, but that the light first seen was green. At another place he states that it was red, and again, after having had read to him the portion of the libel to which we have referred, he says, "Both lights." It is quite plain, taking the whole case together, that, when the City of Augusta was first sighted by the A. Heaton, the two vessels were nearly head on, but that the City of Augusta was a little on the starboard bow of the A. Heaton, and, accepting the terms of the libel, showing her red light. This brought them on courses slightly crossing. The A. Heaton claims that her first maneuver was to keep off to her own port a point, and she complains that, immediately after first sighting the City of Augusta, the latter vessel showed both of her lights, and continued to show them, notwithstanding she herself kept off. In view of the testimony of the master of the City of Augusta that she was making about half a point leeway, which is in accordance with the probabilities, the A. Heaton, by keeping off only a single point to her own port, which was also to the leeward, and thus in the

same direction in which the course of the City of Augusta was crossing her course, and in which the City of Augusta was also drifting, could hardly expect other than that she would see both lights of the other vessel. She claims that she afterwards kept off further, but she states that, when she finally shut in the red light of the City of Augusta, the latter vessel was only eight or ten times her length distant from her own starboard bow. It is apparent that if the A. Heaton undertook to keep off in the direction in which the City of Augusta was crossing her course, and thus to the leeward, in which direction the City of Augusta was also making some leeway, instead of going to the windward by porting her helm, and thus bringing red to red, she was bound to go off promptly points enough to give ample margin for passing the other vessel. This she evidently did not do, and thus it was that she came across the bow of the City of Augusta, as stated by the master of the latter vessel, inducing him to luff, and thus, further, in connection with her own maneuver of also luffing in the confusion of the last moment, she brought about the collision. It is true that her master and lookout claim that, before she luffed, the City of Augusta had crossed her bow to the leeward, had shut out her green light, and was showing only her red, thus occasioning the luffing of their own vessel. In view of the comments we have already made on their testimony, we do not feel justified in accepting it as against the evidence of the master of the City of Augusta to the contrary.

The courts seldom put much reliance on the evidence of the officers or seamen of any vessel involved in a collision as to alleged admissions by officers or seamen of the hostile vessel, although such admissions, when made on the spot, and proved by the evidence of disinterested witnesses, which cannot be challenged, may well be regarded as the most natural and truthful expressions of the circumstances of a collision, uttered before there was an opportunity to frame a theory exculpating one vessel or the other. Therefore, such alleged admissions may, in any event, be of value in suggesting a solution as between conflicting proofs, when they are in harmony with the reasonable probabilities of the case in other particulars. Of this character is the evidence of Captain Adams, of the City of Augusta, as to his conversation with Captain Handy, of the A. Heaton, on the deck of the former vessel, immediately after the collision. Captain Adams testified as follows:

"He [meaning Captain Handy] said he thought he would keep off across our bows, and then he was afraid we were keeping off, or would keep off, and then he said he commenced to luff, put his wheel down, and he said he was afraid at the same time that we would luff."

This is in entire harmony with our theory that he did not keep off in season.

In this connection we may aptly cite The Singapore and The Hebe, L. R. 1 P. C. 378, 384, with reference to the duty of a vessel running free, as follows:

"Her plain duty was to have ported her helm, altered her course, and so got out of the way. She says she did so. * * * Whether she did or not, this is plain: that it was her bounden duty to have gone out of the way, and that, the wind being in the quarter in which we find it proved to have been,

and her course being such as she admits it was, it was plainly within her power, as it was within her obligation, to have got clearly out of the course that was being pursued by the Hebe."

The appellants made the following assignment of error, with others: "That the court erred in taxing more than one hundred miles travel for witnesses from without its jurisdiction." This is intended to raise an objection to an allowance of costs, according to the rule of the circuit court for the district of Massachusetts, as established by Mr. Justice Gray and Judge Colt in U. S. v. Sanborn, 28 Fed. 299. This question was raised in the district court, and insisted upon, in such way that it is fairly before us, notwithstanding the many expressions that costs are not matters of appeal. Among the latest are those found in Du Bois v. Kirk, 158 U. S. 58, 67, 15 Sup. Ct. 729, 732, and Bank v. Cannon, 164 U. S. 319, 323, 17 Sup. Ct. 89. In Du Bois v. Kirk, the court said:

"This court has held in several cases that an appeal does not lie from a decree for costs; and if an appeal be taken from a decree upon the merits, and such decree be affirmed with respect to the merits, it will not be reversed upon the question of costs."

Another late expression is in Bank v. Hunter, 152 U. S. 512, 515, 14 Sup. Ct. 675, 676, as follows:

"If the sum in dispute on this appeal were sufficient to give us jurisdiction, we could consider the question of costs referred to in the second assignment of error. But, as the appeal in respect to interest must be dismissed for want of jurisdiction, the appeal, in respect to costs, must also be dismissed. No appeal lies from a mere decree for costs."

That case was in equity. The record does not show the amount of costs involved, and the only question appears to have been which party should pay costs,—a question which, under the circumstances, did not necessarily involve a strictly legal right. So far as concerns causes in equity and admiralty, the rule of the supreme court, as generally stated, seems traceable to Canter v. Insurance Co., 3 Pet. 307, 319. That case was in equity, and the matter appealed against was apparently one of counsel fees. At that time there was no statutory regulation about costs; and it had been decided in The Apollon, 9 Wheat. 362, 379, that counsel fees might be allowed as costs in admiralty. Consequently, in Canter v. Insurance Co., the only questions were those of a sound discretion, questions not "positively limited by law." It will be seen, therefore, that this case involved no question of fixed law, either as to the right to any costs at all, or as to the right to particular items where the allowance of any costs whatever is in the discretion of the court. This was the condition of the case covered by our opinion in Gamewell Fire-Alarm Tel. Co. v. Municipal Signal Co., 23 C. C. A. 250, 77 Fed. 490. But since the act of February 26, 1853 (10 Stat. 161, c. 80), regulating fees and costs (now section 823 of the Revised Statutes and sequence), the law has taken on a different phase. At present the power to allow costs at all is in many cases fixed by positive law; and in other cases, where there still remains a judicial discretion to allow costs and to determine for or against whom they shall be allowed, as in equity and admiralty, some of the items are, nevertheless, positively fixed or limited. Canter v. Insurance Co. has been largely cited in the cases wherein it is said