the specification proceeds to describe this regulating device. This description we need not here reproduce or further mention, for this regulating device is the subject-matter of the second claim of the patent, and that claim is not here involved. The alleged infringement is only of the first claim, which claim is as follows:

"(1) The combination of the pump, A, the pipe, E, communicating with the exhaust pipe of the engine, valve, e, water pipe, F, and force pipe, G, communicating with the boiler."

We have already quoted at length everything contained in the specification of the patent relating to the subject-matter of the first claim. That claim, obviously, is for a combination of specified parts. The specification, in connection with the illustrative drawing, shows very clearly the purpose of the invention, and the means devised by the patentee for carrying the same into effect. The invention is designated as "a new and useful improvement in heater and feeder for steam boiler," and "the main object" is stated to be "to utilize the whole or a portion of the exhaust steam of a steam engine, by forcing it into a boiler with a supply of water." The operation of the described apparatus is this: When the plunger is moved upward the valves, e and f, are opened, and the exhaust steam through the pipe, E, and cold water through the pipe, F, simultaneously enter into the pump cylinder beneath the plunger. Then, upon the descent of the plunger, the valves, e and f, are closed, the check valve in the chest, H, is opened, and the combined exhaust steam and water forced directly into the boiler through the pipe, G. There is no suggestion in the specification, or indication in the patent drawing, that the exhaust steam is to be utilized for any other purpose than thus to supply a hot feed to the boiler. Now, it was not a new thing to utilize exhaust steam for the purpose stated in De Beaumont's patent. For a very long time prior to his invention it had been a common practice to supply steam boilers, by means of feed pumps, with water heated by the condensation of exhaust steam; the cold water and the exhaust steam meeting in a condensing chamber or receptacle, and the water of condensation being pumped therefrom into the boiler. Indeed, the De Beaumont patent purports to be for a mere improvement in heaters and feeders for steam boilers. Under the proofs, it is very clear that at the date of De Beaumont's invention the state of this art was such that no claim was allowable except for the special means devised and described by the patentee for accomplishing the stated purpose. Railway Co. v. Sayles, 97 U. S. 554. Accordingly, we find that the first claim of the patent in suit is for a specific combination of elementary parts. Upon well-settled principles, then, this claim must be construed strictly, and the patentee held to the particular arrangement of parts described and specified. Duff v. Pump Co., 107 U. S. 636, 2 Sup. Ct. 487; Bragg v. Fitch, 121 U. S. 478, 7 Sup. Ct. 978; Snow v. Railway Co., 121 U. S. 617, 7 Sup. Ct. 1343; Wright v. Yuengling, 155 U. S. 47, 15 Sup. Ct. 1. Has infringement of this claim by the defendant been shown?

The defendant is the grantee of letters patent No. 256,089, dated April 4, 1882, for an improvement in apparatus for heating buildings. It appears that the defendant erected under this patent three

steam-heating plants in the city of Philadelphia,—one on Carter's alley, at the rear of No. 224 Chestnut street, one on the Walnut street wharf, at the Philadelphia & Reading station, and one at the Catholic High School. These plants are illustrated by drawings made by the complainant's witness Mr. Gallagher, which are in evidence as exhibits. It is alleged that these heating plants infringe the first claim of the patent in suit. The distinguishing characteristic of the defendant's apparatus, as installed in each of the above-named plants, is the circulation of steam through the heating coils and pipes by means of a partial vacuum throughout the steam-heating system, created and maintained by a vacuum pump. This vacuum pump is connected with a large pipe at the return end of the system. By the action of the vacuum pump the exhaust steam and any water from condensed steam are drawn from the heating coils and pipes into the large return pipe. There is also admitted into this large return pipe a jet of cold water, to cool the heated vapor before it reaches the vacuum pump. The contents of this return pipe are discharged by means of the vacuum pump into a tank. This tank is connected with the steam boiler by an independent pipe, through which, by means of a second pump, the hot water collected in the tank is delivered into the boiler. The vacuum pump employed in the defendant's apparatus is the standard double-action pump, and is entirely different from the plunger pump of the De Beaumont patent. The second pump used by the defendant is an ordinary boiler-feed pump, of the type which existed before the De Beaumont invention. Notwithstanding the manifest differences, the complainant's witnesses expressed the view that each of these heating plants installed by the defendant at the above-named places embodies the De Beaumont invention. In so stating, these witnesses, no doubt, were honest enough. They proceeded, however, upon a mistaken idea as to the scope of the De Beaumont patent. It has no such extent as these witnesses supposed. On the contrary, as we have already seen, the patent is of very limited scope, not only because of the anterior state of the art, but also by reason of the statements of the specification, and the definite terms of the first claim. It is very clear to us that no infringement by the defendant has been shown. Passing by dissimilarities in details of construction, there are radical differences between De Beaumont's apparatus and the apparatus set up by the defendant, in purpose, in mode of operation, and in combination of essential parts. The patent in suit has no relation whatever to the vacuum system of steam heating, or, indeed, to any system of steam heating. The De Beaumont apparatus is intended simply to feed the steam boiler, and his pump is in direct communication with the boiler. The function of the defendant's vacuum pump is to create and maintain a partial vacuum in a steam-heating system. In the three steam-heating plants in question the vacuum pump has no direct communication with the steam boiler. The discharge by that pump of the accumulations of the return pipe is not to the boiler, but into a tank. That tank is an open tank, in the sense that it is not air-tight. It is therefore impossible for the vacuum pump to make delivery into the boiler. The proof is quite convincing that, as the

defendant's heating plants are organized, it is not practicable to force the water of condensation into the boiler by means of the vacuum pump. The water discharged by the vacuum pump into the tank cannot reach the boiler without the aid of further appliances. In fact, the defendant employs an additional pump—an ordinary boiler-feed pump—to deliver to the boiler the heated water collected in the tank. We have no hesitation in holding that the combination of the first claim of the De Beaumont patent is not to be found in any of the heating plants that the defendant is shown to have installed. We are of the opinion that upon the question of infringement the appellant's case entirely fails. Having, then, upon a consideration of the substantial merits of the controversy, reached a conclusion which is fatal to the appellant, and requires an affirmance of the decree dismissing the bill of complaint, we think that it is not necessary for us to consider the other question in the case, namely, whether the proofs established the complainant's alleged title to the patent in suit. The decree of the circuit court is affirmed.

THE HERCULES.

THE MORGAN.

TAYLOR v. CROSSLEY.

(Circuit Court of Appeals, Fourth Circuit. May 4, 1897.)

No. 206.

COLLISION—FAILURE TO STAND BY—PRESUMPTION.

The act of September 4, 1890, providing that if the master of a vessel which has been in collision fails, without reasonable cause, to stand by until he ascertains whether the other vessel is in need of assistance, the collision shall, "in the absence of proof to the contrary, be deemed to have been caused by his wrongful act, neglect, or default," merely puts upon a vessel which so fails to stand by the burden of showing that she was not responsible for the collision; and where the facts preceding the collision are shown, and it does not appear that such vessel was in fault, and it further appears that the other vessel was guilty of a fault sufficient to account for the collision, then the former cannot be found guilty of contributory fault merely because of her failure to stand by. 70 Fed. 334, reversed.

Appeal from the District Court of the United States for the Eastern District of Virginia.

This was a libel in rem by W. W. Crossley, master of the schooner Morgan, against the steam tug Hercules (George Taylor, her master, claimant), to recover damages resulting from a collision. The district court found both vessels in fault, and entered a decree for divided damages. 70 Fed. 334. The claimant has appealed.

Robert M. Hughes, for appellant.
Floyd Hughes, for appellee.

Before GOFF and SIMONTON, Circuit Judges, and BRAWLEY, District Judge.

BRAWLEY, District Judge. The decree of the court below holding both vessels in fault for the collision in the libel mentioned, and there being no appeal in behalf of the schooner, our attention will be limited to the consideration of the fault imputed to the tug. The learned judge, in his opinion, holds that "the tug was in fault in failing to stand by the schooner after the collision, as well as in other particulars not material to the decision." The Morgan was a three-masted schooner, loaded with coal, which sailed from Hampton Roads on March 24, 1893, bound for New Haven. The steam tug Hercules, having in tow the barge Charter Oak on a 200-fathom hawser, was bound south to Norfolk. The collision occurred between half past 10 o'clock and 11 o'clock at night in the Atlantic Ocean, about 20 miles to the southward of Winter Quarter Shoal lightship, and about 40 miles from Cape Charles lightship. The tug struck the schooner on the port side, between the fore and the main rigging, and cut down into her timbers, making a large aperture. The schooner was promptly hauled up in the wind and hove to. She proved to be in a sinking condition, and, spite of all efforts to staunch the leak, the water gained so rapidly that her master endeavored to make port, but was unable to do so, and at 5 o'clock the water had so increased in the hold that the crew were obliged to take to the small boat, and were rescued the same morning by a passing tug. The schooner sank at 6 o'clock in the morning of March 25th, about seven miles northeast of Winter Quarter lightship. At the time of the collision the schooner was making about 5 or 6 knots an hour. The tug was making from 2½ to 4 knots an hour, the wind and tide being against her. There was a heavy sea running, and a thick fog.

The testimony, as is usual in such cases, is more or less conflicting. As the collision occurred in the open sea, in the nighttime, and in a thick fog, the rule which requires a steam vessel to keep out of the way of the sailing vessel must be construed according to the circumstances. That it was the duty of the tug to proceed slowly in such weather is clear. The officers and men aboard of her say that she was making from 2 to 2½ knots an hour, but the court below finds that she was moving at about 4 knots. It does not hold that this was too rapid a speed, and it is not clear to us that the rate of speed can be imputed to her as a fault. The Martello, 153 U. S. 70, 14 Sup. Ct. 723. Nor is it clear to us that there was any failure on the part of the tug to keep a proper lookout, or in giving the proper signals The testimony in her behalf was that everything was done that ought to be done. The court below, which had the advantage of hearing that testimony, has not found her at fault in either particular. The testimony of the master in charge was that immediately before the collision he heard one faint blast of the fog horn aboard the schooner; that he put his wheel a-port, and in a second or two saw a red light. The testimony showed that the schooner was not provided with a mechanical fog horn, as required by law, and for this the court below has held her in fault. As it is not clear from the testimony that there was any act of commission or omission on the part of the tug tending to bring about the collision, and as the opinion of the

court below, which was made a part of the decree, has not pointed out such fault, it remains to consider only the correctness of the conclusion which holds the tug responsible in one-half of the damage for its conduct after the collision in failing to stand by. The act of September 4, 1890 (1 Supp. Rev. St. [2d Ed.] p. 800), provides:

"Section 1. That in every case of collision between two vessels it shall be the duty of the master or person in charge of each vessel, if and so far as he can do so without serious danger to his own vessel, crew, and passengers (if any), to stay by the other vessel until he has ascertained that she has no need of further assistance, and to render to the other vessel, her master, crew, and passengers (if any), such assistance as may be practicable and as may be necessary in order to save them from any danger caused by the collision, and also to give to the master or person in charge of the other vessel the name of his own vessel and her port of registry, or the port or place to which she belongs, and also the name of the ports and places from which and to which she is bound. If he fails to do so, and no reasonable cause for such failure is shown, the collision shall, in the absence of proof to the contrary, be deemed to have been caused by his wrongful act, neglect, or default.

"Sec. 2. That every master or person in charge of a United States vessel who fails, without reasonable cause, to render such assistance or give such information as aforesaid shall be deemed guilty of a misdemeanor, and shall be liable to a penalty of one thousand dollars, or imprisonment for a term not exceeding two years; and for the above sum the vessel shall be liable, and may be seized and proceeded against by process in any district court of the United States by any person, one-half such sum to be payable to the informer and the other half to the United States."

There is some conflict in the testimony as to the conduct of the tug after the collision. The master, mate, and fireman of the tug testify to efforts made to find the schooner, and that she disappeared in the darkness and fog, and could not be found, and that the usual signals of distress were not given or heard; but, inasmuch as the court below has found that she did not stand by, we will assume the correctness of that finding, and consider whether, for that reason alone, the tug should be held responsible. Our act is a copy of one which has long been in force in England, the only material difference being that while, under the English statute, the punishment inflicted is a revocation of the master's license, the second section here makes it a misdemeanor, punishable by fine and imprisonment. Both are in the nature of penal statutes designed to punish the master for the neglect of that duty which considerations of humanity alone impose, and which, long before either act, was recognized as a duty in the admiralty jurisdiction. It is creditable to the merchant marine of both countries that few cases are reported where the failure to stand by and render assistance have come before the courts, and this case is not presented in an aspect which permits an expression of opinion as to whether the master of the tug is liable to punishment for the omission to do what the statute required. We have only to determine whether, by reason of the statute, we are bound to presume that he has been guilty of some "wrongful act, neglect, or default," because there has been an "absence of proof to the contrary." In a case where the testimony has been full respecting all the acts and incidents leading up to the collision, and the judge who heard the same has failed to predicate a decree against the tug because of any acts or omissions on the part of the master or others tending to

produce it, and where our examination of the testimony fails to convince us that the collision was brought about by their fault, it would be a violent construction of the statute to hold that by reason of it alone the tug should be held responsible because of an omission of duty after the collision, and that, too, in the face of a decree not appealed from, holding that, in part at least, such collision was due to the negligence of the schooner. The case would be different if there had been an absence of proof as to the collision itself,—if, for example, the crew of the schooner had not been rescued, as happily they were, and for that or other reasons there was a lack of testimony respecting it, then the failure to stay by, unless explained, would have raised a presumption that the collision was caused by the wrongful act, neglect, or default of the master of the tug. It is in such cases that the statute becomes operative and, in "absence of proof to the contrary," fastens the responsibility upon those who, failing in one duty, which was plain, may reasonably be charged with that which was doubtful. When one, disregarding cries for assistance, runs away from the scene of a crime, a strong presumption arises that he has committed it; but where there is positive proof by eye-witnesses that he did not, he cannot be convicted of it simply because he ran away, although he might be convicted of running away, if that were made a penal offense. So we construe this statute to mean that, if a master of a vessel that has been in collision with another fails to stay by her, and shows no reasonable cause for such failure, the law will presume that the collision was caused by some negligent act or omission on his part, and, in the absence of proof to the contrary, will fasten upon him the responsibility for the collision. It puts upon him the burden of showing that he was free from fault. It assumes that one who fails to offer assistance to those whose distress is caused by him is presumably at fault in the act which caused the distress, and it denounces pain and penalties against his inhumanity, and holds his ship responsible for the pecuniary fine; but it does not condemn without a hearing. The obligation imposed is not unqualified; it is carefully guarded by conditions; it permits presumptions to be rebutted by proofs, and it is only "in the absence of proof to the contrary" that his responsibility is made absolute.

In The Queen of the Orwell, 1 Marit. Law Cas. 300, the eminent Dr. Lushington thus construes the English statute:

"Now, for the penalty, or what may be called the penalty, 'in case he fails so to do, and no reasonable excuse for said failure,' it shall be attended with certain consequences which are enumerated in the enactment. The effect of that, I think, is precisely what has been stated,—that, supposing such a state of things to occur, there is thrown upon the party not rendering assistance the burden of proof that the collision was not occasioned by his wrongful act, neglect, or default. It does not go further. Assuming this case to come within the provisions of the statute, the proper question I shall have to put to you is that which I should put if no such statute at all existed,—whether this collision was occasioned by the wrongful act, neglect, or default of the steamer."

The conceded violation of any statutory requirement creates a presumption against the party in default, but this rule cannot be extended further than to hold that when an accident occurs it is obligatory upon the party who has failed to comply with the statute to