ground. They are capable of use, and have been used, to a limited extent, for purposes other than those connected with trolley wires; but defendant has never made, sold, or used them for any purpose other than for use with trolley or guard wires of electric railways.

The sole contention between the parties is whether, under the grant of "the exclusive right and license to manufacture and sell insulators for trolley or guard wires for electric railways, embodying the invention or any substantial or material part thereof," the defendant has the right to make said insulators. It appears from the model in evidence (a section of the Hartford street-railway system) that defendant, as part of its equipment, uses these insulators in a variety of positions between the trolley and guard wires and their supports. The defendant contends that the insulators are covered by said license, because they are embraced within its terms, according to the plain, natural, and obvious meaning of its language, because their primary function is to intercept the current, and prevent its escape by insulation, and because the term "insulators for trolley wires or guard wires" is a generic term, including various classes of insulators used for such purposes. It appears that, prior to the date of said license, the licensor was in the employ of the original licensee; that immediately thereafter he left it, to engage with the complainant company in the manufacture of insulators for electroliers and gaseliers; and that for more than three years thereafter said licensee and this defendant, its assignee, advertised, manufactured, and sold these insulators, with the knowledge of complainant, and without remonstrance on its The defendant contends that these facts show an intentional part. division of the business; that the limitation contended for by complainant would defeat the purposes of the grant; that no concern would buy from defendant one special kind of insulators for trolley wires if it could not also buy from it the other kinds of insulators required for said wires; that the license is to be construed more strongly against the licensor; and that its acquiescence shows its interpretation of said grant in accordance with defendant's claim. Counsel for complainant contends that the words "insulators for trolley wires or guard wires" are limited to insulators serving to insulate the trolley wire from a span or cross wire or a bracket, and that such insulators were illustrated in certain forms shown in sheet 1 of the patent drawings, and that they were the only insulators known at the date of the said license, to those skilled in the art, as insulators for trolley wires or guard wires. In support of this contention, he cites the following language of said license agreement: "This license is intended to be limited to the form of said insulators shown in said patent so far as it relates to trolley or guard wires for electric railways."

I have been unable to adopt complainant's view, for the following reasons: The license states that the licensee "is desirous of acquiring *** * an exclusive license * * * covering the** use of the said invention in connection with trolley wires or guard wires." Defendant's assignor was licensed to manufacture and sell such insulators "for electric railways, embodying the invention or any substantial or material part thereof set forth in said letters patent." It was a condition thereof that even the licensor might invent infringing improvements without being liable therefor to the licensee. The language above quoted, limiting the license to the form shown in said patent, and the connection in which said limitation is expressed, show that the word "form" was not used in the sense of shape, but obviously in the sense of kind, of insulators, namely, insulators for trolley roads, such as are shown in Figs. 1, 2, and 3, and that the intent of the licensor was to exclude such improvements as the said McCarthy or his firm might thereafter make. This view of the construction of said license is supported by the language of the patent itself, and by Fig. 3 of the drawings. The patentee says:

"Fig. 3 is a section showing my invention as embodied in a pull-off insulator for electric railways. * * * At Fig. 3 I have shown a modification of my insulator. The construction is, however, substantially, the same," etc.

Of another figure the patentee says:

"The size and shape of the parts may be changed • • • to adapt the shape and size of the device to the conditions under which it is to be used."

But Fig. 3, with the pull-off removed, would be adapted for use, and like those actually used by defendant in the construction shown in the Hartford model, and would be operatively located on the wires, which in said construction horizontally take the strain off the wires.

Much expert testimony has been introduced as to what insulators are included in the term "insulators for trolley wires or guard wires for electric railways." Defendant's witnesses claim that it includes "all appliances designed to confine the current in the trolley wire, and prevent this current from charging span wires, pulloff wires, and anchor wires; in fact, all wires which may be used to suspend or hold in position the trolley wire itself. In the case of guard wires, the term is used to designate the appliances used to insulate the guard wires from such suspension wires as run to the poles." Complainant's witnesses claim that said term, as used at the date of the license, was limited in its meaning to insulators from immediate supports of span wire or bracket. But while the five expert witnesses for complainant all testify that said term would be understood to cover such devices, and, in the ordinary use in the trade, do not generally include the defendant's construction, it is most significant that not one of them testifies either that defendant's insulators are not in fact "insulators for trolley wires or guard wires," or that they are necessarily excluded, by their construction or use, from said class of insulators, or were so excluded in 1891, the date of said license.

Defendant's experts testify that the insulating system shown by the Hartford model is typical of the method usually employed in this country at the time when said license was given. The term "insulators for trolley wires and guard wires" is not found in the patent. Defendant's insulators are used for such wires only. I think the licensor chose said term in order thus to embrace all such insulators embodying the patented invention as were to be used to prevent current from escaping from such trolley and guard wires. This construction accords with the plain, obvious meaning of the language used, is the only one which gives effect to the whole contract and makes the license of practical value, is in accordance with the apparent understanding and intent of both parties and with their practical interpretation of the license, and will therefore be adopted by the court. It is not claimed that defendant has used any "improvements thereon, when said improvements are embodied in insulators which are made by the said Louis McCarthy personally, or the firm or corporation by which he is employed or of which he is a member." The plea is sustained.

THE M. G. LEONARD.

THE CARROLL BOYS.

THE M. E. LAUGHLIN.

SWEENEY v. THE M. G. LEONARD.

(Circuit Court of Appeals, Second Circuit. April 8, 1897.)

COLLISION-TUGS AND TOWS-ENTERING SLACK WATER.

A tug towing a barge on a hawser from Jersey City around the Battery to the East river *held* solely in fault for a collision of the barge with a schooner in tow of a tug rounding the Battery in the opposite direction, because she miscalculated or neglected to consider the space necessary for the turn of the barge in going through the slack water.

Appeal from the District Court of the United States for the Southern District of New York.

This is an appeal from the decree of the district court for the Southern district of New York holding the steam tug Carroll Boys solely in fault for a collision between her tow, the barge M. G. Leonard, and the schooner George Hurst, in tow of the tug M. E. Laughlin.

The opinion of the court below (BROWN, District Judge) was in full as follows:

About noon on the 12th of September, 1894, as the libelant's schooner, George Hurst, was going around the Battery from the East into the North river, in tow on a hawser from the steam tug M. E. Laughlin, she came in collision with the barge M. G. Leonard, which was in tow of the steam tug Carroll Boys, which had crossed the North river from the Jersey Central piers, Jersey City, and was bound up the East river in the last of the ebb tide. The stem of the barge struck the port side of the schonner, aft of the mainmast, at an angle of about five or, six points, in consequence of which she sank in a few minutes. The above libel was to recover the damages.

The libel charged that the collision was caused by the negligence of the barge Leonard in not following the course of her tug, the Carroll Boys, but in allowing her to take a sheer to port shortly before the collision. It is contended that the two tows, but for that sheer, would have passed clear of each other, as the tugs had done, by a fair margin of from 75 to 100 feet. The answer of the barge denied any negligence or any sheer, and alleged that the fault was in the tug in not keeping the tow sufficiently away; and under the fifty-ninth rule the barge brought in the two tugs as additional defendants, both of which denied fault and assigned the alleged sheer of the Leonard as the cause of the collision. If there was any sheer to port by the barge shortly before the collision, the evidence does not warrant the finding of any negligence on the part of the barge as the cause of it. All the witnesses who testified on the subject express the opinion that it was the force of the North river ebb upon the stern of the barge, as her bows entered the slacker water to the eastward between the currents of the North and East rivers, that caused the sheer they speak of; and they suggest that it should have been counteracted by a port wheel on the barge. But the barge's evidence leaves no doubt that her wheel was put hard a-port; that the wheelman put the wheel over as soon as he saw the pilot of the tug port his wheel; and that additional men on the barge helped to keep the wheel hard a-port. The witnesses on the barge, moreover, deny that she sheered to port at all, but state that in fact the barge turned one or two points to starboard, although this was less than she would have turned under the same wheel but for the force of the ebb tide on her stern as her bows went into the slack water.

Upon a careful consideration of all the testimony I am satisfied that the account of the men on the barge is substantially true. I am persuaded that what the defendants' witnesses call a sheer was no sheer through any mistake in handling the wheel, and probably no real sheer at all, but only a relative slowness in a change to starboard under a port wheel, by which, as compared with the position and more rapid swing of the tug Carroll Boys, there was such a difference in the pointing of the barge and the tug as to give the witnesses the impression that the barge sheered to port. The place where the collision occurred, taken in connection with the angle of collision and the heading of the schooner at the moment of collision, tend strongly to confirm the statement of the Leonard's witnesses that there was no sheer at all to port, but that they merely came around slowly to starboard, on account of the stronger ebb current at their stern than at their bows.

Nearly all the witnesses agree that the collision occurred in the slack water to the southwest of the Battery wall, and the place of collision is pretty accurately fixed from the position of the sunken schooner, which the witness Timmons testifies was about 600 feet from the Battery wall and about 50 feet easterly from a line drawn from the bath house (which is between the barge office and Castle Garden) to the easterly side of Liberty Island. This point was about three hundred feet to the eastward of the line where the North river ebb is sensibly felt, which, according to the witness Windsor, is at that stage of the tide about on a line from the end of pier 1 to a point on Governor's Island 300 feet easterly from the easterly side of Fort William.

Considering that the hawser was 150 feet long and the barge 105 feet long; that their progress was at the rate of about three or four knots through the water, and that they were heading, at the time when the signal of one whistle was exchanged, nearly directly across the North river, and about for the barge office, there can be no doubt that at the time when the whistles were exchanged the barge was drawing very near to the slack water and very soon entered it, and that the effect of the gradual slackening of the current at her bows while the current at her stern was stronger was to retard the action of her port wheel.

The great majority of witnesses do not place the angle of collision at above five points, and the heading of the schooner at that time, according to the testimony of the pilot of the Laughlin, must have been one or two points to the north of a line from the schooner to the Pennsylvania Railroad Ferry at Jersey City. An angle of five points from this course would make the barge heading at least two or three points to starboard of any possible course by which the tu and tow could have arrived off Castle Garden from the Central Ferry in the ebb The master of the schooner, however, says that at the time of collision he tide. was heading towards the New York shore, above Castle Garden, and that the angle of collision was seven points. This would make the heading of the barge at the collision about the same as the above; while if the heading of the schooner is correctly given by her master, and the angle of collision was only five points, the barge at collision must have turned to starboard about three to four points from the heading by which the river must have been crossed; and this indi-cates that there was no actual sheer by the barge to port, but only a slower turning to starboard than the tug, giving the deceptive appearance of a sheer to persons upon other moving vessels. The Sam Sloan, 65 Fed. 125, and cases there cited.