the same. The court is not prepared to say that no occasion for the exercise of its restraining power is shown in this case, when it is apparent that there was such occasion when the suit was commenced; that it has but recently ceased; that it may, if defendants feel disposed, be renewed at any time; and that the complainants claim that they apprehend a continuance of the wrong. * * * Nevertheless, upon principle, it seems to the court that the right to protection which existed when this cause was commenced ought not to be defeated by anything which has thus far been asserted on behalf of the defendants, particularly as no injury can possibly result to defendants, while the allowance of the motion will insure protection to complainants."

What was said by the court in the quotation just made applies with still greater force when the question arises, as it does here, after a trial has been had upon the merits, and upon pleadings which put in issue the right of complainant to any relief. In such a case a complainant is entitled to a decree showing what issues have been determined in his favor, and one, also, which will prevent any future invasion of his rights by a defendant. The complainant is entitled to a decree in accordance with the foregoing opinion, restraining the defendants from infringing upon claim 1 of the patent in suit, by the use of the Perrin multiple switchboards, or otherwise, and for an accounting, unless the accounting shall be waived by it. Let such a decree be entered.

EVANS et al. v. SUESS ORNAMENTAL GLASS CO. et al.

(Circuit Court of Appeals, Seventh Circuit. April 11, 1898.)

No. 397.

PATENTS—NOVELTY IN INVENTION—GLASS CHIPPING.

The Evans patent, No. 494,999, for alleged improvements in processes of chipping glass, consisting in covering the surface with a film of soap or other coating, applying thereto a pattern of flexible material, then submitting the glass and pattern successively to the sand blast and hot chipping compound, and finally removing the pattern and chipping compound while the latter is in a liquid condition, is void for want of novelty and invention, in view of the prior state of the art. 28 C. C. A. 24, 83 Fed. 706, affirmed on rehearing. Showalter, Circuit Judge, dissenting.

On petition for rehearing.

For prior report, see 28 C. C. A. 24, 83 Fed. 706.

Charles Turner Brown, for appellants.

L. L. Coburn and H. Gordon Strong, for appellees.

Before WOODS, JENKINS, and SHOWALTER, Circuit Judges.

WOODS, Circuit Judge. The petition for rehearing assumes that the opinion of the court in this case was framed on the theory that, if a particular step of the Evans process did not have the novelty asserted for it in argument, the process, as a whole, must for that reason be held to lack novelty. The familiar doctrine was not overlooked, though not restated, that a process consisting of different steps, like a combination of different mechanical elements, may be new and patentable, though every step by itself be old. But when a process has no novelty unless it can be found in a particular step, and it proves to be wanting there, the entire pro-

cess necessarily lacks patentability. The argument at the hearing was understood to proceed mainly on that theory, and on that theory, as the opinion of the court shows, the appeal was decided.

Counsel who has come into the case since a rehearing was asked has been allowed to support the petition by a further brief, the scope of which will be indicated by the following quotations:

"The fifth step in the Evans process was absolutely new with him, and was not shown, described, or even suggested in the prior art. The broad idea of the use of 'glue or similar adhesive and contracting matter' was not new with Evans. The quotation just made is taken from the Stremme patent of 1867, which patent of all the prior art, utterly indefinite as it is, comes the nearest to suggesting the fifth step of the Evans method or process." "It remains that in the art of, and for the purpose of, chipping glass, ripping off a pattern with the glue thereover, and leaving glue to do the chipping upon strict lines, was new with Evans." "Thompson, like Stremme, practiced hand painting 'in covering the glass where the same is not to be chipped with a covering of paint or varnish.' * * * It plainly appears in Thompson's cross-examination that two things characterized his experiments, viz. 'cutting through the glue along the edge of the pattern,' and 'simply lifting the tin foil, paper, or other covering (?) from the part of the glass which was not to be chipped.'" "This patent (Frederici) shows a suggestion, but only a suggestion, towards that which was subsequently accomplished by Evans. Frederici advises the use of a tin-foil pattern, over which a film of beeswax is spread. Then the pattern is removed, whether successfully or not does not appear. Then Frederici proposes that the parts of the glass not covered by the beeswax shall be ground, blasted, or frosted. The sum and substance of this patent is, as stated in its single claim. 'The within-described process for preparing the surface of a piece of glass, stone, or other material for the sand-blast,' etc. Does this, or anything herein contained, even suggest the removal of a pattern, with glue thereon, at a particular stage of the jellying of the glue?" "Does this Shaw patent even remotely suggest the removal of a pattern, with glue thereon, at a particular stage of the jellying of the glue? Our further contentions, not heretofore stated or not at least heretofore presented as we now present them, are these: (a) That an absolutely new result, sounding in the stripping or ripping of the pattern from the glass during a convenient period, which period is naturally and necessarily of a longer or shorter duration, according to the circumstances of temperature or convenience, is found in the patent sued upon; and (b) that the stripping, as described, (1) constitutes a new step in the process of chipping glass; (2) per se makes a new process; (3) would per se have been patentable; and (4) certainly lends patentable novelty to the first and second claims of the patent sued upon. Whether the pattern is to be stripped off five minutes or twenty-five minutes after it is coated with glue is utterly immaterial to any proper question in this case. The circuit court finds but two possible elements of novelty, namely, 'The material of the pattern and the condition of the chipping compound when the pattern is lifted off.' No contention is made as to the material of the pattern. The opinion of this court quotes from the second claim of the patent sued upon, * * * and adds the erroneous statement that 'this step in the process is clearly anticipated in the prior art.' Where, how, when, by whom?" "We respectfully submit that this court has been certainly led into a serious error as to the fact in saying that 'dry, set, and liquid as used (in this case) are relative terms, and signify no more than sufficiently dry, sufficiently set, or sufficiently liquid, as determined by practice and experiment, to contribute most effectively to the desired result.'" "A careful review of this record must satisfy the court that the patentee, Evans, was the first to tell the public to rip (not lift, cut, or dig) the pattern off at all in any process having for its object the chipping of glass; second, that he was the first to tell the public to rip the pattern off with the glue thereover; third, that he was the first to tell the public at what stage of the jellying of the glue to rip this pattern off; fourth, that by this new process he was the first to tell the public how to do this ripping, and leave sharp, fine, strict, and precise lines of ornamentation." "If there was in this record no other fact than the one now to be referred to, to sustain our contentions of fact and allegations of error in

the conclusions arrived at by the court, it would be sufficient. Thompson's testimony and Thompson's patent constitute the main, not to say the sole, reliance of the defense. If his abandoned experiments had been pursued with brains and ability he might possibly have staggered up to the Evans process, but the resultant of his unsuccessful and abandoned experiment was his patent, which, far from even suggesting the ripping off of the pattern with liquid glue thereon, returns to the old, slow, tedious, inaccurate, and impracticable method of trying to cut out the pattern with a needle or sharp tool."

Instead of Evans having been the first to tell the public to rip the pattern off, in distinction from lifting, cutting, or otherwise removing it, the word "rip" does not appear in the patent or in Evans' testimony, where he was asked to explain the method of removal. The words used in the specification are "remove" and "raise," and in the claims "lift" and "remove." He was not the first to tell the public to rip, lift, or remove the pattern "with the glue thereover." In that he was distinctly anticipated by Thompson, and also, but perhaps not so clearly, by Stremme. He was not only not the first to tell, he did not himself tell, the public "at what stage of the jellying of the glue" to remove the pattern. The claims of the patent say, "While such chipping compound is in a liquid condition." The specification says, "Such raising of the pattern must be effected while the chipping compound thereover is in a semiliquid condition," while according to counsel it is utterly immaterial "whether the pattern is to be ripped off five minutes or twenty-five minutes after it is coated with glue," the necessity being simply "a convenient period,—longer or shorter, according to circumstances of temperature or convenience." Nothing more than this could be necessary to justify this court in saying, as it did, that "dry," "set," and "liquid," as used in the patents of Shaw, Frederici, and Evans, are relative terms, meaning in each case that condition which should be found by experience to contribute most effectively to the desired result. That result is the same in each patent, namely, "smooth and sharply-defined outlines," or, as it is expressed in the brief, "strict and precise lines of ornamentation." In that particular it is manifestly impossible that Evans should have been an inventor. He could not have been first to tell "how to do this ripping, and leave sharp, fine, strict, and precise lines of ornamentation," unless the force of the proposition is in the word "ripping," because, confessedly, Thompson did the same thing by cutting through the glue, and "by simply lifting" the pattern from the part of the glass which was not to be chipped. His testimony shows that sometimes the cutting of the glue was imperfect, and when that was so, or when the glue was in such condition as to flow together behind the knife, as must often have occurred, the lifting of the pattern, it is evident, had the same effect in his process as in that of Evans. There is conceded to be a suggestion of the same thing in Stremme's patent, and, as explained in our first opinion, it is distinctly shown by Frederici and Shaw. Those patents cannot be excluded from consideration because they belong to the art of sand-blasting. That is not only a kindred art; it is embodied in the Evans process, and necessarily was known to him. His testimony shows that he not

only knew about it, but had for years been engaged in sand-blasting, and was familiar with its processes. In the practice of that art he had used patterns made of oiled paper, and for this reason, if no other, counsel could not but concede that "no contention is made as to the material of patterns." Knowing just how patterns covered with wax, set or semiset, or with paint, dry or semidry, could be lifted from the glass so as to limit the effect of the sand-blast to smooth and sharply-defined outlines, Evans cannot be credited with invention because his pattern is covered with glue, and when lifted leaves a like outline and limitation to the chipping effect of the glue, which remains upon the parts of the glass not covered by the pattern. The lifting of the pattern, and thereby cutting a film of glue, is not different from the lifting of a pattern, and thereby cutting a film of beeswax, paint, paste, mucilage, white of egg, or other semifluid or viscous substance. It is plainly a mistake to attribute to Evans, as a new idea, that the edges of the pattern could be used to cut or sever a semiliquid chipping compound, so that the portion thereof left on the figure would dry within the lines of the figure, and in drying pull or chip interiorly from such lines. The drying and pulling are completely shown by Stremme and Thompson,—by Thompson from lines as sharp and precise as by Evans, and the cutting of the liquid by lifting the pattern is shown by Thompson, and also by Frederici and Shaw. The petition is therefore denied.

SHOWALTER, Circuit Judge (dissenting). Upon further consideration of this case on the application for a rehearing, I am unable to concur in the opinion heretofore pronounced. In the Stremme patent, dated March 26, 1867, the lines of the figure to be produced by the chipping compound are traced with a pencil on the ground surface of a pane of glass. Then the entire surface, other than the figure, is covered with a coating of varnish which is allowed to dry. Then the glue or chipping compound is applied freely on the figure overlapping the lines formed by the varnish. The glue or chipping compound then dries; the theory being that the glass will be chipped inside the figure, but that the chipping compound will merely pull off the varnish exterior to the figure.

But two patents which concern the chipping of glass by a chipping compound were shown in the prior art; the patent to Stremme being one, and that to Thompson in June, 1889, being the other. In the Thompson patent a covering of asphaltum "or analogous adhesive matter" is put over that portion of the glass which is not to be chipped. This covering is then itself covered with a layer of tin foil or paper. The patentee says, "A mere covering of paint will answer the purpose;" meaning, apparently, that the paint may be used instead of the asphaltum and its outer coating of tin foil or paper. The glue is then spread over the figure overlapping the lines of paint, or asphaltum covered with paper or tin foil. "If the chipping process were now to be carried out in the usual manner," says the patentee,—and he seems to be confirmed by the testimony in the case,—"the glue would chip pieces of glass off beneath the covering, a, b,"

meaning that the chipping would cross the lines of the figure and extend under the covering of paint or asphaltum. "To avoid this," says the patentee, "I cut through the glue with a sharp knife along the margin of the space to be chipped and roll or strip off the glue while in a jellied state from the parts not to be chipped, but I do not cut any crease into the glass itself. The outline of the design or pattern being thus cut through the glue, the chipping may be proceeded with by subjecting the glass and its sharply-defined glue cover to heat in the usual manner." Again he says: "By my improved process I am enabled to produce chipped glass in a simple and effective manner, and without the glass at the sides of the design to be chipped being affected by the chipping process."

In the process of the patent in suit the following is the treatment: First, a thin film of soap or similar substance is applied over the surface of the glass; second, a pattern, capable of resisting the action of a sand-blast, is placed on the glass and held there by means of the soap; third, the film of soap, or other adhesive substance, is removed from the figure cut in the pattern; fourth, the sand-blast process is applied; fifth, the chipping compound in a liquid condition is then placed over the surface of the glass and the pattern; sixth, the pattern is lifted from the glass while the chipping compound is in a semiliquid condition; seventh, the chipping compound thus cut away at the edges of the figure is made to harden and contract by the action of heat, thus chipping the glass within the lines of the figure. If the adhesive substance of the first step be of a kind which will not interfere with the action of the sand-blast, then the third step may be omitted as needless. In this process the lifting of the pattern cuts the semiliquid chipping compound so as to leave the lower exterior edge of the chipping compound which remains on the glass in line with the exterior of the figure to be chipped. The chipping compound commences to dry from such exterior edge, and the chipping is effected so that the figure is clear and exact. The idea that the edges of the pattern—when the glass surface immediately under and coincident with said pattern remained smooth and that within the figure had been roughened as by sand-blasting—could be used to cut or sever a semiliquid chipping compound, so that the portion thereof left on the figure or sand-blasted surface would dry within the lines of the figure, and in drying pull or chip interiorly from such lines, seems to be new with the patentee of the patent in suit.

The patent to Frederici was for an improvement in preparing glass for the sand-blast process. By means of an adhesive coating he attached to a pane of glass a pattern with a design cut in it. Over this he placed a thin layer of beeswax, or some such material, and then stripped the pattern off, thus cutting the beeswax at the edges of the design. He then applied the sand-blast process to the portions of the glass not covered by the beeswax. If the pattern itself had been in this patent, what is called in the record "a sand-blast resist," and if instead of covering the design with beeswax the sand-blasting had been applied to the design,—that is, to the portions of the glass not covered by the pattern,—and thereafter a chipping compound had been applied over the pattern, and then the pattern had been lifted, leaving the liquid or semiliquid chipping compound on the design, and the

chipping compound so left had been suffered to dry, this would have been the process of the patent in suit. But in the Frederici patent the beeswax, or whatever material is used, seems to be set or dry when the pattern is lifted off. The idea of putting such a substance as a liquid glass-chipping compound over a pattern and over the portion of the glass surface exposed thereby, which portion had been previously sand-blasted so that it might hold the chipping compound, and of then pulling the pattern from the glass, leaving the semi-liquid chipping compound exactly within the lines of the figure, and adhering to the roughened glass in such a way that in drying it would pull or chip the glass from its own exterior lines, the same being coincident with the lines of the figure, seems to me not suggested by the Frederici patent. In the patent to Shaw the paint is brushed over the pattern and the glass, and after it dries the pattern is removed. The point in that patent seems to be the use of metal foil for the purpose of making patterns so that the same can be successfully removed from the glass.

The successive steps of treatment, as set forth in the patent in suit, constitute a process which is not in the prior art; nor am I able to say that the prima facie validity of this patent upon the matter of invention is satisfactorily disposed of by anything in the record. The patent to Thompson seems to show that the cutting of the chipping compound by lifting the pattern was not an obvious expedient. He used a knife or sharp implement to sever the still jellied, or as yet unhardened, glue at the outer edges of the figure to be chipped, for the very purpose of preserving exactness of contour. It did not occur to him that this could be easily and rapidly done—provided the figure or design were roughened while the margin thereof under the pattern remained smooth—by simply lifting the pattern at a prior stage of the glue-hardening process, and before the glue became solid enough to afford the necessary resistance to the action of the knife. Stremme operated on ground glass. He sought to produce models for casting. Chipping to or from an exact line was a problem with which he was apparently not concerned. The following sentence occurs in his specification: "The mode here described may be simplified to a great extent by using patterns in applying the varnish, either in the manner of brushing through or printing on the glass the protecting varnish, which latter method would also be applicable in certain cases, even in transferring the glue, when the varnish would be dispensed with altogether." Precisely what he meant by the words "transferring the glue" is not any more definitely disclosed than by the sentence quoted. Did he mean to use a flexible or a rigid pattern? Was the pattern to adhere to the glass? The suggestion seems to be of a pattern as a substitute for the varnish. Was the pattern to remain on the glass while the glue dried and while the chipping went on during the subsequent application of heat? The process of the patent in suit concerns the treatment of smooth glass. The sand-blasting is a necessary condition to the action of the chipping compound, and the pattern for the preliminary sand-blasting serves in the application —and accurate adjustment within the lines of the figure—of the chipping compound. In the Stremme process the design on which the glue is to be applied is not bounded by clear glass. The rough-

ened surface to hold the glue is not a distinct inclosure on a surface of glass otherwise clear. There is not surrounding the design a margin of clear glass which of itself would resist, or tend to resist, any chipping exterior to the ground surface of the design. Nor in the Thompson patent is the exact definition of a sand-blasted design within a margin of clear glass in any way proposed or suggested in aid of the chipping process. In the process in suit the sand blasting is applied within the exact lines of the design. When the pattern is lifted there are no surface breaks or irregularities to carry the chipping compound across the exterior lines; moreover, the cutting of the semiliquid coating is from the underside. The chipping compound is thus left on, and within the exterior lines of, the roughened surface, so that the drying process may commence at, and the pull in the chipping process be from, the exterior lines. My conviction is that the decree here ought to be reversed.

THE C. VANDERBILT.
THE NIAGARA.
THE AMERICA.
THE SYRACUSE.
THE BELLE.

ROBINSON et al. v. THE C. VANDERBILT.

(District Court, E. D. New York. April 12, 1898.)

MARITIME LIENS—WHARFAGE—VESSEL USED FOR STORAGE.

Although a maritime lien may attach to a domestic vessel for wharfage furnished in the ordinary course of navigation, yet no such lien arises where the vessel has been withdrawn from navigation, and is kept at the wharf for the mere purpose of storage.

Asa F. Smith (Frank D. Sturges, of counsel), for libelants.
George M. Van Hoesen (R. D. Benedict, of counsel), for claimants.

THOMAS, District Judge. The boats of the Schuyler Steam Towboat Company, operating between New York and Albany, since 1880, during the closed season of navigation, had laid up at the docks of Jeremiah P. Robinson, at the foot of Court street, in Brooklyn. Mr. Robinson died in August, 1886, and Jeremiah P. Robinson, his son, and others, his executors, appear as libelants, to enforce alleged liens for wharfage, as hereafter stated. The claimant, the Holland Trust Company, is the trustee of a mortgage dated December 24, 1890, and duly recorded December 26, 1890, covering the boats in question, and given to secure certain bonds held by the trust company and others.

The liens for wharfage are claimed against the following specified boats, for the following specified times:

Vanderbilt,	from 28th Nov., 1890,	to June 9, 1891,	191	days.
"	" 27th July, 1891,	to July 29, 1891,	3	"
Syracuse,	" 1st Dec., 1890,	to March 28, 1891,	118	"
"	" 29th July, 1891,	to July 31, 1891,	3	"
Belle.	March 31, April 1–9, and July 31, 1891,		11	"
America,	from 3d Dec., 1890,	to May 20, 1891,	169	"
Niagara,	" 27th March, 1891,	to 31st July, 1891,	127	"