

machinery, etc., * * * and all such claims as were by order herein made on the 31st day of January, 1890, declared to constitute liens on said railroad, and all property appurtenant thereto, superior and paramount to the lien of the mortgages herein, and said road shall not be released or discharged from said liens until said debts and liabilities are paid."

It thus appears that prior to the present intervention the class of debts to which the intervener's claim belongs had been adjudged to be superior in equity to the claims of the mortgage bondholders, and that the property covered by the mortgages was sold upon the express condition that the purchaser or purchasers at said sale, as part consideration therefor, would satisfy and discharge all of that class of claims. In view of these facts the present appeal is evidently without merit. We cannot review the order of January 31, 1890, for the reason that it is not in the record, and for the further reason that the present proceeding is not an appeal from that order. For aught that we know, that order was made by consent of parties, and was at no time subject to an appeal on the part of any one who participated in the foreclosure proceedings. But in any event the appellants are not in a position to urge at this late date, with respect to the order of January 31, 1890, that the circuit court erred in holding that the debts therein mentioned were of a preferential character. With full knowledge of the terms of that order, and the class of claims to which it related, they became purchasers at the mortgage sale under a decree which required them to accept the property subject to the burden of those claims. It is clear, we think, that they must stand by the bargain they have made, and should not be heard to complain.

As the circuit court found that the claim now in dispute was in fact comprehended by the order of January 31, 1890, and as we cannot review that finding, it follows that the decree appealed from must be affirmed.

PACIFIC CABLE RY. CO. v. BUTTE CITY ST. RY. CO.

(Circuit Court, D. Montana. April 10, 1893.)

No. 20.

1. PATENTS FOR INVENTIONS—INFRINGEMENT—CABLE CARS.

Letters patent No. 182,663 were issued to Andrew S. Hallidie for an invention known as "Improvements in Railways." The claim was: "In combination with the cars of a street or other railway, which are intended to be propelled by means of an endless cable moving in an underground slotted tunnel, the truck or dummy, E, having the permanently attached gripping device, H." The specification described a dummy in which the grip was located under the forward axle,—there being two,—and which was not provided with seats for carrying passengers. *Held*, that this is infringed by a car used for the same purpose, and similarly constructed, save that the grip is located midway between the two axles, and the car is arranged to carry passengers.

2. SAME.

The infringement is not avoided by so attaching the gripping device that it may be detached when required; for the terms "permanently attached," in the claim import, merely, that the gripping device is an essential part of the car, and not that it is incapable of removal.

3. SAME—ANTICIPATION.

This patent is not anticipated by the prior patents to G. T. Beauregard and to A. Ely Beach, or by the former patent for a similar device issued June 1, 1875, to Hallidie himself, as the evidence shows that the present device was perfected before such former patents were issued.

4. SAME—PRIOR USE.

Where the defense to an infringement suit is prior use, the burden is on defendant; and it is not sustained where the evidence shows that the alleged prior use was only for experimental purposes, and had with a view to perfecting the device.

In Equity. Bill by the Pacific Cable Railway Company against the Butte City Street-Railway Company for infringement of a patent. Decree for complainant.

Wm. F. Booth and Dixon & Drennen, for complainant.

Geo. H. Knight, F. T. McBride, and Geo. Haldorn, for defendant.

KNOWLES, District Judge. The above-named complainant filed in this court its bill of complaint against the above-named defendant, and setting forth therein that defendant had infringed certain letters patent, No. 182,663, and which granted certain rights to one Andrew S. Hallidie for an invention known as "Improvements in Railways." The said Hallidie, it appears from the bill, obtained the said patent for said invention, and assigned the same to complainant. The claim of said Hallidie, in his patent is thus described:

"In combination with the cars of a street or other railway, which are intended to be propelled by means of an endless cable moving in an underground slotted tunnel, the truck or dummy, E, having the permanently attached gripping device, H, substantially as and for the purpose described."

Respondent, in its answer to complainant's bill, makes the following defenses: First, noninfringement; second, anticipation and nonpatentability; and, third, two years' public use.

The first question presented, then, is, does the respondent infringe upon complainant's patented device? That is, does it substantially use the dummy car specified in complainant's bill in combination with the cars of its street railway? Respondent owns and is operating a street railway at Butte City, Mont., upon which the cars thereon are propelled by means of an endless cable moving in an underground slotted tunnel. The evidence shows that defendant is using a car which may be called a "dummy car," to which is attached a gripping device which seizes the said cable, moving in an underground slotted tunnel, and to this is attached a passenger car. The difference between the dummy car of complainant and that of respondent is thus described by Jesse M. Smith, a witness for respondent:

"Comparing the car used by the defendant with the dummy of the patent, it appears that the dummy is a car having two axles and four wheels, and in this particular it is like the grip car used by defendant. The grip of the car of the patent is located directly under one of the axles of the car, while in the car of the defendant the grip is located midway between the axles of the car; and, therefore, does not have the advantage claimed for the dummy car of the patent, with its grip located as specified. The dummy car of the patent is not provided with seats, and is not designed to carry passengers.

The grip car of defendant is provided with seats, and is designed to, and does, carry passengers, and is used with or without a trail car connected to it. The gripping device of the patent is stated to be permanently attached to the dummy car, while the gripping device used by defendant is not permanently attached to the car, and is designed to be readily detached from the car, and is so detached, as often as may be required."

Except, perhaps, as to the last specification of difference, this statement may be considered as stating correctly wherein the grip car of complainant and that of respondent differ. The first difference consists in the moving of the gripping device back from the front axle of the car to a point about midway between the two axles of the same. Is this a substantial variation? It is apparent, then, it operates the same as though it were placed under the first axle, unless it be upon very uneven ground. It can readily be seen that, in passing over a very short and abrupt rise or hillock in the car track, the gripping jaws attached to the grip arm or lever would always remain about the same distance from the bottom of the tube or tunnel through which the cable travels, if the gripping device was placed under the front axle of the car. When such an abrupt rise does not occur in the car track, the jaws of the gripping device of complainant and respondent would act in the same manner, and maintain about the same position in respect to the bottom of said tunnel. I cannot see that there would be any perceptible difference between their action or position. Recurring to the claim in complainant's patent as to what constituted the invention of Hallidie, and we find that it is not limited to a gripping device attached to the gripping car, under the first axle. Hallidie was required by the statute, (see Rev. St. U. S. § 4888,) in his application for a patent, as his invention must be classed as a machine, "to explain the principle thereof, and the best mode in which he had contemplated applying that principle, so as to distinguish it from other inventions." It will be seen that he was not required to state every mode in which the principle of his machine might operate, but only the best mode he had contemplated applying it. This would imply that an applicant for a patent is not confined to this best mode of applying the principle of his machine, and that he can claim other modes of applying the same. The part of the patent in which the mode of applying the gripping device under the first axle of the car appears is in the descriptive part thereof. As before stated, it is not in the claim. It is not evident that what is claimed as the invention of Hallidie is not alone the gripping device under the first axle, but the whole car, in combination with cable in an underground, slotted tunnel, gripping device, and passenger car. I find that in the case of *Tilghman v. Proctor*, 102 U. S. 707, the supreme court said of a patent for a process:

"There is, then, a description of the process, and of one practical mode in which it may be applied. Perhaps the process is susceptible of being applied in many modes, and by the use of many forms of apparatus. The inventor is not bound to describe them all in order to secure to himself the exclusive right to the process, if he is really its inventor or discoverer; but he must describe some particular mode, or some apparatus by which the process can be applied with at least some beneficial result, in order to show that it is capable of being exhibited and performed in actual experience."

Taking this as a guide, and we come to the conclusion that when a person entitled to a patent, in his application therefor, describes one mode—the best—in which the principle of his machine acts, he should not be bound exclusively to that mode. If a variation from the best mode described in the application for a patent would prevent infringement, we are forced to the inquiry, how much of a variation would work this result? Take, for instance, the machine under consideration. Would the removal of the gripping device one foot back from the front axle of the car work this result? If one foot would not, how many feet would? A change of form does not avoid an infringement of a patent, unless the patentee specifies a particular form as a means by which the effect of the invention is produced. *Walk. Pat. § 363; Morey v. Lockwood*, 8 Wall. 230; *American Diamond Rock-Boring Co. v. Sullivan Mach. Co.*, 14 Blatchf. 119; *Ives v. Hamilton*, 92 U. S. 431. The change of the gripping device from the front axle to a place between the axles appears to me to be a change in form, only, from that indicated as the best form in which the car of complainant could be constructed. This change does not affect materially the principle embodied therein.

Respondent urges that there is also a material variation in the car described in complainant's patent and that of its car, in this: that its car is so constructed as to carry passengers, and that of complainant, as described in the patent, is not so constructed. The feature of respondent's car which furnishes seats for passengers is only an improvement, at best, on complainant's car. All the features of complainant's car are retained, and the passengers' seats are additional. When a machine embodies a patented device or combination with an addition thereto, it infringes the patented device. *Carter v. Baker*, 1 Sawy. 512-526; *Pitts v. Wemple*, 1 Biss. 87. It should be observed that the evidence in the case shows that, as finally perfected, complainant's car was so constructed as to have seats for carrying passengers, but the applicant, Hallidie, did not claim this as any feature of the car he patented. This contention of respondent cannot, upon the facts, and the law applicable thereto, be maintained.

The next point presented for consideration by respondent is its contention that the description and claim in complainant's patent states that the gripping device was permanently attached to the dummy car, while that of its car is not so attached, and that, as a consequence, there is here a material variation between them. Considering the construction of complainant's car with the language used in the patent, and I think that all that was intended by the claim of the patent, that the gripping device was permanently attached to the car, was that it was a part of the car,—one of its essential parts,—and was not to be taken off to be used on any other car, such as the passenger car. The idea sought to be expressed by the language was that it was not temporarily attached to the car, but constituted a permanent part thereof,—one of its essential characteristics. If it was attached to the same by bolts and screws, it would be permanently attached to the car, but could be removed.

This claim in the patent may be construed in the light of the fact as to the manner in which the inventor, Hallidie, did attach that gripping device to his car. The evidence shows that it was attached thereto in such a manner that it could be removed when necessary. The rule is that the language in a patent should be liberally construed, with the view of maintaining the validity of a patent. In the case of *Rubber Co. v. Goodyear*, 9 Wall. 788, the supreme court said:

"A patent should be construed in a liberal spirit, to sustain the just claims of the inventor. This principle is not to be carried so far as to exclude what is in it, or to interpolate anything which it does not contain. But liberality, rather than strictness, should prevail, where the fate of the patent is involved, and the question to be decided is whether the inventor shall hold or lose the fruits of his genius."

With this as a guide, I do not see how the contention of respondent can be maintained on this point. It would be a most narrow construction of the terms, "permanently attached," as they appear in the claims of the patent, to say that they imported that the gripping device should be so attached to the car that it could not be removed when necessary. I therefore find that the dummy car of respondent is substantially the same as that of complainant, and does infringe upon the letters patent owned by complainant therefor.

I now come to the point that the car of complainant was anticipated by previous inventions, and hence not patentable. It is urged by respondent that a patent granted to G. T. Beauregard, of New Orleans, La., for "improvement in machinery for propelling cars," and that granted to A. Ely Beach for "improvement in street railroads," anticipated the invention owned by complainant. The Beauregard patent is used for propelling a car by means of a clamp or grip attached thereto on the side, or above the car, clutched to an endless rope or wire. This rope or wire is to be suspended from framing along the road. The clamp is to be connected by brackets upon the top of the car, and to be worked by a screw which is moved by an operating pulley, over which a cord extends to the manager of the car. The Beach patent, I find, is somewhat difficult to describe, without an extended reference to its parts. In it there is no such gripping device as is used in complainant's patent, and no such cable combined therewith. In neither of these patents is there a dummy car. This is an important feature of complainant's patent. The patent of complainant is itself *prima facie* evidence of novelty, and that the patentee thereof was the first inventor thereof. This can be overcome only by evidence which shows want of novelty, and that Hallidie was not the first inventor of the car claimed in his patent, beyond a reasonable doubt. The burden of establishing want of novelty, and that Hallidie was not the first inventor of his car, as claimed, rests upon respondent. If, after weighing all of the evidence, the court has a reasonable doubt upon these points, he should find for claimant. *Walk. Pat.* § 76, notes 2, 3; *Coffin v. Ogden*, 18 Wall. 120; *Cantrell v. Wallick*, 117 U. S. 696, 6 Sup. Ct. Rep. 970. With this rule controlling me, I cannot

find that the said inventions of Beauregard and Beach anticipated that of complainant.

As to the previous patent obtained by Hallidie, it appears on its face that it was an improvement upon the very street railway described in the patent under consideration. It was obtained June 1, 1875. But before this Hallidie had invented the car alleged to be infringed in this case by that of respondent. The evidence shows that Hallidie had commenced his experimental use with this car as early as 1873, and was a year or a year and a half in perfecting the same. This would show that the car was perfected before the patent was issued, June 1, 1875, which respondent offers in evidence. Under such circumstances the patent of June 1, 1875, cannot be said to anticipate that of claimant's, under consideration, if it did refer to the same. *Plow Works v. Starling*, 140 U. S. 189, 11 Sup. Ct. Rep. 803.

The last point for consideration is the defense that the invention of Hallidie presented in this case was in public use for two years before he made application to patent the same. This is a defense which respondent must make out by a preponderance of evidence. There is such a thing as experimental use of a machine which is not a public use. As an experiment, a machine may be tried in public, as well as in private. "So long as an inventor is actually engaged, in good faith, in testing the operation of a machine, to ascertain if it will accomplish the desired result, and show it to be a practicable invention, it is not a public use." *Elizabeth v. Pavement Co.*, 97 U. S. 126. In regard to this invention, it appears that there was a period in which the use may be termed experimental. The car was first used about September 1, 1873. A. S. Hallidie, the inventor, in his evidence, said he thought it was a year or a year and a half after the first trial before the invention was considered perfected; that it was only after a considerable time, and various changes, that he succeeded in getting the dummy car to work; that during the time he was testing the car no other company than the one he was connected with used the same, nor did he sell it to any one, and that the cable road upon which he used it was the first one ever actually built, and put into practical operation. The witness Britton testified that they, referring to the company with which Hallidie was connected, had great trouble with the grip car at first; that after the first trials the whole affair was remodeled; that, for a year and a half or two years after they first started the grip car, it was changed and altered and fixed over until "we matured the thing in the shape in which it is used to-day."

Respondent relies upon the evidence of Peter H. Campbell, who says that when the Clay Street Hill road, in San Francisco, was started, in August, 1873, the first dummy car was a mere framework which carried the gripping apparatus; that the dummy, at first, would not run; that three or four months after starting the road the dummy car was fixed so it would carry passengers. He was not positive about this last statement, however. He finally said it might not have exceeded six months or a year. But nowhere in his evidence does this witness positively say that the dummy car

was perfected within a year after starting up the Clay Street Hill road, in San Francisco. According to the evidence, the said Clay Street Hill road was started about the last of August or the 1st of September, 1873. Hallidie made his application for the patent in question March 24, 1876. It was then about seven months after the starting of said road before said application was made. As it appears that when started the grip car was not perfected, and that for some time its use was experimental, I cannot say that the grip car was perfected, and in public use, for two years prior to said application. The burden of proof was upon respondent to show that the patented device was in public use for that time, and I think it has failed.

Some of the legal questions involved in this case, it would appear, must have been presented in a case tried by the circuit court of this circuit, sitting at San Francisco, entitled Traction Railway Co. v. Sutter Street Railroad Co. The judgment roll in that case was introduced in evidence in this case. So far as the court can see that the points of law necessarily involved in that case are the same as those involved in this, it will and has been treated as persuasive authority.

It will be seen that I have found all the issues presented in this case in favor of complainant. It is therefore ordered that complainant have a decree as prayed for in its bill.

THE COLUMBIA.

THE ELLEN HERON.

SULLIVAN v. THE COLUMBIA et al.

(District Court, E. D. Pennsylvania. May 9, 1893.)

1. SHIPPING—STEAMERS—INJURIES TO BARGES—SWELLS—EVIDENCE.

The barge E., loaded with brick, in tow with three other barges, going down the Delaware river in the customary course, well eastward of the channel, met the steamer C. at a narrow part of the channel, during ebb tide, going at full speed, and creating swells, the effect of which was to sink the E. by bringing her in contact with the barge in front. *Held*, that the steamer having failed to slow down, as was her custom when meeting these tows on their daily trips, was liable for the injury.

2. SAME—EVIDENCE.

The "swells" and violent commotion of the water, together with the positive testimony of libellant's witnesses, sufficed to overthrow the steamer's contention that she slowed down in time.

3. SAME—CONTRIBUTORY FAULT—EVIDENCE.

The steamer's claim of contributory fault on the part of the barge in being overloaded, in not having a longer hawser, and in the failure of her tug to sound a signal, could not be sustained; it appearing that the load was no more than usual, that a lighter load would have increased the danger from swells, and a longer hawser would have exposed her to other dangers; and, in respect to the signal, that the tug had every reason to believe, being in plain view, that the steamer would slow down as usual.

4. SAME—EVIDENCE.

The fact that another steamer passed down the stream to the eastward of the tow immediately after the C. had passed to westward was