

30FED.CAS.—18

Case No. 17,864.

WINANS v. NEW YORK & H. R. CO.

[4 Fish. Pat. Cas. 1; Merw. Pat Inv. 421; 61 Jour. Fr. Inst. (3d S.) 316.]<sup>1</sup>

Circuit Court, S. D. New York.

Nov., 1855.

PATENTS FOR INVENTIONS—RAILROAD CARS—ORIGINAL INVENTION—PUBLIC USE.

1. The invention of Winans was an improvement in the four-wheeled car previously in existence, and consisted in the arrangement and construction and adjustment of the eight-wheeled car, as a whole, as described in his specification.
2. The circumstance that a person has had an idea of an improvement in his head, or has sketched it upon paper, or has drawn it, and then gives it up, or neglects it, does not in judgment of law constitute or have the effect to constitute him a first and original inventor.

[Approved in *Reeves v. Keystone Bridge Co.*, Case No. 11,660.]

3. It is not the person who has only produced the idea that is entitled to protection as an inventor, but he who has embodied the idea into a practical machine, and reduced it to practical use.
4. Where one is engaged in producing some new and useful instrument, and who has embodied it into a machine and endeavored to reduce it to practice by experiments, if he fail of success and abandon it, that consideration affords no impediment to another, who has taken up the same idea and has gone on perseveringly until he has perfected it and brought it into practical and useful operation.
5. Upon the trial of an action brought after the act of 1837 [5 Stat 191], upon a patent granted prior to that act it is a defense, that the invention was in public use prior to the application.
6. Public use means the use of the perfected invention. If it be experimental, to ascertain the utility, value, or success of the thing invented, by practice, it will not be fatal to the patent.

[Cited in *Harmon v. Struthers*, 57 Fed. 641.]

7. A patent for an improvement does not absorb the thing improved, or give the right to the patentee to use it.
8. The court, having given all instructions and stated all principles of law deemed necessary, declines to give special instructions prayed for by the parties.

This was an action on the case tried before NELSON, Circuit Justice, and a jury, to recover damages for the infringement of letters patent for “improvement in the construction of cars or carriages intended to travel upon railroads,” granted to Boss Winans, October 1, 1834, and extended for seven years from October 1, 1848. The material portion of the specification is quoted in the report of the case of *Winans v. Eaton* [Case No. 17,861].

C. M. Keller and J. H. B. Latrobe, for plaintiff.

C. W. Sandford and W. Whiting, for defendants.

NELSON, Circuit Justice (charging jury). The first question in this case is, what is the thing, the machine or instrument, which the plaintiff claims to have invented? It is essential to comprehend this, in order to ascertain whether it is new, never before known, or in

public use; and is also essential to enable you to determine whether the cars used by the defendants are a violation of the patent. It will be necessary, therefore, in the first instance, to turn your minds to the patent and the description of the improvement claimed, which is there to be found. The description, I think I may say, is one of unusual clearness and precision for instruments of this character. We have had no difficulty in ascertaining from it the improvement as claimed by the patentee, as it defines not only the arrangement and construction of the car—the running gear and the body—but also the principles governing the same, and upon which the improvement is founded. The patentee refers in the beginning to the numerous curvatures in the railroads of this country, the radius of which, in many instances, is but a few hundred feet, and to the friction arising between the flanges of the wheels and the rails, causing a loss of power, and destruction of both wheels and rails. He then refers to the high velocities on railroads by the modern improvements in locomotive engines, and the demand of public opinion—of the business interests of the country—for this description of speed, and also to the consideration, that certain things in the construction of both roads and cars become important which were not, and would not have been, at the old rates of speed. He observes that the great momentum of the load and intensity of the shocks and concussions are among the things to be noted and provided for.

The patentee then refers to the fact that passenger and other cars, in general use upon railroads, have but four wheels, the axles of which are placed from three and a half to five feet apart, the distance being governed by the nature of the road upon which they are run, and other considerations. He then observes that when the cars (meaning the four-wheeled cars) are constructed so that the axles retain their parallelism, and are at a considerable distance apart, there is, of necessity, a tendency in the flanges of the wheels to come in contact with the rails, especially on a curvature of a short radius, as the axles then vary more from the direction of the radii; and that, from this consideration, when taken alone, it would appear to be best to place the axles as near each other as possible, thus causing them to approach more nearly to the direction of the radii of the curves, and the planes of the wheels to be more in the line of the rails. But there are other considerations, he says, that must not be overlooked in the construction of the car, namely, the increased force of the shocks from obstructions at high velocities; and he observes that the greater the distance between the axles, while the length of the body

remains the same, the less is the influence of these shocks and concussions. In consequence of this, he says a compromise is most commonly made between the evils resulting from a considerable separation and a near approach, as by the modes of construction now (meaning then) in use in respect to the four-wheeled cars, one of the advantages which he has referred to must be sacrificed to the other. The patentee then refers to the fact that the lateral curvatures of the roads, together with their irregularities, create these difficulties—are at the foundation of these difficulties. It becomes very important, therefore, he observes, both as regards comfort, safety and economy, to devise a mode of combining the advantages derived from placing the axles a considerable distance apart, with those of allowing them to be situated near to each other.

Now, gentlemen, this is a result to which the patentee arrives after his discussion of the various difficulties to be encountered in the construction of the car, and it may be said to be the leading idea—the general principle—the fundamental principle, if you please—embodied in the eight-wheel car, and which he has subsequently described. I will call your attention to it again, because it brings out the principle upon which the eight-wheel car has been constructed by the patentee. It tends, therefore, very much to develop the leading features, the controlling features of that construction. He says: It becomes very important, both as regards comfort, safety, and economy, to devise a mode of combining the advantages derived from placing the axles at a considerable distance apart, with those of allowing them to be situated near to each other. He then refers to the attempt to overcome these difficulties by the use of coned wheels, and to the partial remedy thereby, but points out the failure of the use of those alone, under high velocity, to get rid of the embarrassment.

The patentee then explains the object of his invention, which, among other things, is to make such an adjustment or arrangement of the wheels and axles as shall cause the body of the car or carriage to pursue a more even, direct, and safe course than it does as cars are ordinarily constructed, both over the curved and straight parts of the road, by the desideratum of combining the advantages of the near and distant couplings of the axles, and other means which he has described.

He then describes the arrangement and construction of his cars, which I will not take up your time in reading. It has been read so often and so frequently illustrated and exemplified in the progress of this trial, that I have no doubt you are familiar with it. It will be found upon the copy of the patent which I have between folios twenty-one and twenty-eight. And then comes the claim. The patentee says, after describing the construction of his car:

“I do not claim as my invention the running of cars or carriages upon eight wheels, this having been previously done; not, however, in the manner or for the purposes herein described, but merely with a view of distributing the weight carried more evenly upon a rail

or other road, and for objects distinct in character from those which I have had in view, as hereinbefore set forth. Nor have the wheels, when thus increased in number, been so arranged or connected with each other, either by design or accident, as to accomplish this purpose. What I claim, therefore, as my invention, and for which I ask a patent, is, the before described manner of arranging and connecting the eight wheels, which constitute the two bearing carriages, with a railroad ear, so as to accomplish the end proposed by the means set forth, or by any others, which are analogous and dependent upon the same principles.”

The claim itself explains the improvement set up by the patentee. It is the arrangement and construction and adjustment of the eight-wheeled car, as described in his specification, the ear as a whole. The patentee claims no right as inventor to any of the constituent parts of the car, the wheels, the axles, and peculiar construction or framing of the running gear of the bearing carriages, the contrivances by which they are connected together, the springs, the bolsters, the turning of them upon the center, or the swiveling of the trucks—nothing of this is claimed as new on the part of the patentee. This is plain from the terms of the claim, which is the construction and arrangement and adjustment of these various parts into a car as a whole, combining the advantages which he has set forth as he claims.

Now, it is proper to observe, that this improvement, as claimed by the patentee, is made upon the existing four-wheel car then in general use, and which, as has appeared in the progress of this trial, is still in use in England, and probably upon the Continent, unless they have adopted our eight-wheel cars, some specimens of which I have understood have been sent to the Continent. It will, therefore, be proper and useful for you to examine this four-wheel car as then in general use, and the evidence in respect to it. Models have been introduced and exemplified, and no doubt you understand it. But you should inquire into this fact, in order to ascertain whether or not the difficulties described by the patentee existed upon curved roads at great velocity, I mean as respected this four-wheel ear then in use upon roads with high velocity and with short curves—and whether or not the eight-wheel car, as arranged and constructed by the patentee, is an improvement upon it. This is one of the questions in the case for your consideration, and, as to this, you will probably not have much difficulty. From the time they were first brought out in Baltimore—I mean the eight-wheeled cars—it is admitted on all

sides, that they have generally taken the place of the previous four-wheel car, and their use soon spread throughout the railroads of the United States, and, for aught that appears before us in this trial, the first construction and arrangement, and adaptation of those eight-wheel cars to the railroads of this country was in Baltimore, and they were constructed and arranged for the Baltimore and Ohio Railroad Company, and the Washington branch of it. It was offered, it is true, to be shown, on the part of the defendants, that one—that is, an eight-wheel car—was brought out in Massachusetts in 1838, but that fact, at that late day, affords no exception to the truth of the remark I have made; for the eight-wheel car, what is claimed by the patentee to be the perfected car, the car completed, and upon which the patent was founded, was made as early as the beginning of the winter, some time in December, 1834—the Washington cars, four years before the eight-wheel car in Massachusetts.

Now, gentlemen, if I have succeeded in explaining to you the improvement described in the plaintiff's patent, and claimed by him, upon these four-wheel cars, by the construction of an eight-wheel car, as I hope I have, the next question to which your attention must be called is this—whether or not this improvement as thus described in the patent, and as first brought out in Baltimore—whether this was the improvement of the plaintiff. This is one of the material questions in the case, which, as you have already discovered, has been most seriously contested between the parties. After calling to your minds the construction given by the court to the patent, and to what constitutes the improvement which is claimed to have been reduced to practical use—after you have ascertained and comprehended this improvement claimed by the plaintiff, and described in his patent—after this, which is a question of law (I mean so far as the construction of the patent is concerned), after you have ascertained what is claimed by the plaintiff as his improvement, the question whether or not he was the first inventor of it is a question of fact, which belongs to you to determine. The burden of the evidence—for the greater portion of the time, the long time which has been consumed in this trial—has been directed on both sides to the solution of this question. The patent of the plaintiff, given in evidence, and the extension of it for seven years, which has been given in evidence, together with the testimony of the experts introduced on the part of the plaintiff in the opening of the case, furnish prima facie evidence that the plaintiff was the first and original inventor of the improvement claimed, and of its utility; and therefore, the burden of showing that he was not the first and original inventor, and of the inutility of the patent, rests upon the defendants. They are obliged to assume this position in that stage of the trial. Accordingly, they have gone into evidence at large for the purpose of satisfying you upon these points, and you have before you, first, the evidence from Baltimore, for the purpose of showing this—that, assuming the car described in the plaintiff's patent to be the improvement upon the four-wheel car, and that it was new and useful, yet the defendants insist upon this

evidence, that the plaintiff was not the first inventor, but that somebody else was. They refer to the timber, the wood, and the trestle cars, and much evidence has been given in respect to these cars. The plaintiff, on the contrary, insists that neither of them embodied his improvement, or that if any of them did, it was constructed after, his invention, which it is claimed is carried back upon the evidence to the fall or beginning of the winter of 1830. Now, gentlemen, I am not going over this evidence on either side. It has been so amply and ably discussed by the learned counsel upon both sides, that I can not doubt that you are familiar with every material portion of it. It will be for you to say, upon the evidence, whether or not the defendants have furnished evidence to satisfy you that the plaintiff was not the first and original inventor, but that somebody else was. They have, that burden upon them. It will be for you to determine, upon the whole of the evidence, whether they have overcome the patent, and the evidence furnished in support of it.

Then another ground is taken, viz: that there is nothing new in the arrangement or construction of the car, as described in the patent, but that it was old, and before in public use; and they say that it is to be found in Chapman's patent and drawings, and also in Tredgold and Fairlamb's—although as to the two latter, they are not much relied upon—in the Quincy car, in the Allen locomotive, and in the Jervis locomotive. All these have been brought out in the progress of the trial, and amply examined and discussed, and I am persuaded that you are entirely familiar with all the evidence bearing upon this branch of the case. The question upon it will be, whether or not you find the improvement of the plaintiff—the improvement existing in the arrangement and construction of his eight-wheel car upon the four-wheel car—whether you find that improvement in any one or all of these patents or machines—not whether they have eight wheels and two trucks, free to swivel or rock; but the question is, whether the peculiar arrangement, adjustment, and construction of the car—the wheels and trucks in relation to the road—claimed in the patent, and which I have endeavored to explain to you, on the principles which the patentee has developed—whether that embodiment thus found in the eight-wheel car is to be found in either of these structures to which you have been referred. That is the question.

Another ground of defense set up on the



part of the defendants is, that Mr. Imlay is the inventor. You recollect his testimony, I have no doubt. It is claimed that he carries back the construction, or the idea, if not the construction, of the eight-wheel car, to 1829. It is, however, proper to say, in respect to this witness, that he spoke doubtfully as to time. He would not speak positively. It was a matter of memory with him. I noted his evidence particularly. He was uncertain as to time. But, whatever that time was (and I refer to his interview with the committee of the French Town Railroad), he says he made a rough sketch of his idea of an eight-wheel car at this time, whatever time that may be, and that he made a contract with the road to build a car, as he thinks, but which fell through in consequence of his partners not concurring with him; and then we hear no more of his connection with an eight-wheel car until he removes from Baltimore to Philadelphia, in 1833, and brings out, I think, the "Victory," in 1834 or 1835, I am not certain which. I refer more particularly to the evidence of this witness, for the purpose of stating to you a principle of law. Now, the circumstance that a person has had an idea of an improvement in his head, or has sketched it upon paper—has drawn it, and then gives it up—neglects it—does not, in judgment of law, constitute or have the effect to constitute him a first and original inventor. It is not the person who has only produced the idea, that is entitled to protection as an inventor, but the person who has embodied the idea into a practical machine, and reduced it to practical use. He who has first done that is the inventor who is entitled to protection.

A kindred principle, also, it may be proper to state here, which is, that where a person engaged in producing some new and useful instrument or contrivance, and who has embodied it into a machine, and endeavored to reduce it to practice by experiments—if those trials fail—if he fail in success and abandon it, or give it up, that consideration affords no impediment to another person, who has taken up the same idea or class of ideas, and who has gone on perseveringly in his studies, trials, and experiments, until he has perfected the new idea, and brought it into practical and useful operation. He is the person—the meritorious inventor—who is entitled to the protection of the law.

Another ground of defense set up is, that the patentee allowed the public use of his improvement, of his eight-wheel car, upon the Baltimore and Ohio Railroad, before he made his application for a patent. Now, it is undoubtedly true, as the law stood at the time of this patent, in October, 1834, that the public use of the invention, with the consent of the patentee, or sale of it, prior to the time of his application for a patent, operated as a forfeiture—as a dedication to the public. This, however, means the use of the perfected invention—the invention complete.

If the use be experimental, to ascertain the value, or the utility or the success of the thing invented, by putting it into practice by trial, such use will not deprive the patentee of his right to the product of his genius. The plaintiff, therefore, in this case, had a right to use his cars on the Baltimore and Ohio Railroad, by way of trial and experiment, and to

enter into stipulations with the directors of the road for this purpose, without any forfeiture of his rights. He could not probably obtain the opportunity of trial which was essential to the perfection of his improvement without obtaining their consent, and, as I have already said, it is the use of the improvement after it has been completed and reduced to practical success, which operates as a forfeiture—as a dedication to the public—as a giving it up to the public.

Now, gentlemen, if, upon consideration of these questions which I have submitted to you, you should come to the conclusion that this improvement is a useful one, and that the plaintiff is the first and original inventor of it, the next question for your consideration is, the question of infringement. If you are against the plaintiff upon either of the two-first questions of utility and originality, then, of course, this other question will not be reached.

Then, as to the infringement by the defendants' cars, the question is: Do they embody the arrangement and construction of the plaintiff's car—in other words, the improvement in the plaintiff's specification? Improvements, as you have seen during the progress of this trial, have been made upon the eight-wheel car, since it was brought out and put in operation. The swinging bolster-is an instance, and there are also others that have been mentioned in the course of the trial. Now, the improvements thus made upon the eight-wheel car do not give any right to the thing improved. The plaintiff in this case would have had no right to use a four-wheel car, if there had been a patent for it, because he had improved it by the eight-wheel car. So an improvement upon the eight-wheel car does not absorb, or give a right to the inventor of that improvement to use the thing improved. Therefore, the question still is, whether or not you find in the defendants' organization and arrangement the organization and arrangement of the plaintiff's improved car. If you do, the additional improvements since made upon it do not disprove the infringement. It is a question of fact for you to determine. Having ascertained and comprehended what the improvement of the plaintiff is, as claimed in his patent, and which I have endeavored to explain to you in the beginning of this charge, you will apply that to the defendants' cars, and see whether it is embodied there. If it is not, then there is no infringement. If it is, there is an infringement.

Then, as to the question of damages. It is admitted by the counsel for the plaintiff



that the amount stated in the declaration is ten thousand dollars. This suit was brought January 16, 1849, as stated. They claim damages for the years 1847 and 1848. It is in evidence that twenty-four eight-wheel passenger cars, thirty-two freight cars, and eight baggage cars were used in 1847 by the defendants, upon their road; and in 1848, twenty-five eight-wheel passenger cars, thirty-five freight cars, and eleven baggage cars. It is also in evidence, and it does not seem to be contradicted, that the patent fee for the right to use an eight-wheel passenger car is worth two hundred dollars a car per annum for license, and that the freight cars and baggage cars would be worth twenty dollars per annum. Taking this evidence, and there seems to be no contradiction about it, the damages claimed, upon the principle which I have stated, would exceed considerably ten thousand dollars. There is no doubt about that. But you are limited, and you can not go beyond that sum. These, gentlemen, are all the observations I think it is necessary to make to you.

I have prayers for instructions here, by the defendants' counsel, numbering, I believe, eighty, but the counsel must excuse me from going over them. I have given all the instructions, and all the principles of law that I deem necessary or useful in the submission of this case to you, and whatever else may be found in these numerous prayers is beyond what I deem proper to trouble you with, for I regard them as not pertinent, nor relevant, and not material to comment upon.

The jury, not being able to agree upon a verdict, were discharged.

[For other cases involving this patent, see note to [Winans v. Schenectady & T. R. Co.](#), Case No. 17,865.]

<sup>1</sup> [Reported by Samuel S. Fisher, Esq., and here reprinted by permission. Merw. Pat Inv. 421, contains only a partial report]