

Case No. 17,861.

WINANS V. EATON ET AL.

[1 Fish. Pat. Cas. 181; Merw. Pat. Inv. 419.]¹

Circuit Court, N. D. New York.

Sept., 1854.

INFRINGEMENT OF PATENT—PRELIMINARY INJUNCTION.

1. If there exist any reasonable doubt about the originality or novelty of the improvement as arranged and constructed by the patentee, or about the substantial identity of that manufactured by the defendant with the plaintiff's, the court is not at liberty, upon a motion for a preliminary injunction, to interfere and arrest the manufacture.
2. The determination of such questions must be postponed until the case is matured and disposed of at the final hearing.

[Cited in *Sargent Manuf'g Co. v. Woodruff*, Case No. 12,368.]

This was a motion for a provisional injunction to restrain [Orsamus Eaton from] the infringement of letters patent for “a new and useful 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 portion of the specification which is material to a correct understanding of the opinion, is as follows: “The object of my invention is, among other things, 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 smooth, 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 before-mentioned desideratum of combining the advantages of the near and distant coupling of the axles, and other means to be hereinafter described. For this purpose, I construct two bearing-carriages, each with four wheels, which are to sustain the body of the passenger or other car, by placing one of them at or near each end of it, in a way to be presently described. The two wheels on either side of these carriages are to be placed very near to each other, the spaces between their flanges need be no greater than is necessary to prevent their contact with each other. These wheels I connect together by means of a very strong spring—say double the usual strength employed for ordinary cars—the ends of which spring are bolted, or otherwise secured, to the upper sides of the boxes, which rest on the journals of the axles, the longer leaves of the springs being placed downward, and surmounted by the shorter leaves. Having thus connected two pairs of wheels together, I unite them into a four-wheel bearing-carriage, by means of their axles, and a bolster of the proper length, extending across, between the two pairs of wheels, from the center of one spring to that of the other, and securely fastened to the tops of them. This bolster must be of sufficient strength to bear a load upon its center of four or five tons. Upon this first bolster I place another of equal strength, and connect the two together by a center-pin, or bolt, passing down through them, and thus allowing them to swivel or turn upon

each other in the manner of the front bolster of a common road-wagon. I prefer making these bolsters of wrought or cast iron; wood, however, may be used. I prepare each of the bearing-carriages in precisely the same way. The body of the passenger or other car I make of double the ordinary length of those which run on four wheels, and capable of carrying double their load. This body I place so as to rest its whole weight upon the two upper bolsters of the two before-mentioned bearing-carriages, or running gear. I sometimes place these bolsters so far within the ends of the body of the car as to bring all the wheels under it, and in this case less strength is necessary in the car body than when the bolster is situated at its extreme ends. In some cases, however, I place the bolster so far without the body of the car, at either end, as to allow the latter to hang down between the two sets of wheels or bearing-carriages, and to run, if desired, within a foot of the rails. When this is done, a strong frame-work projects out from either end of the car or carriage-body, and rests upon the upper bolsters of the two bearing-carriages. This last arrangement, by which the body of the car is hung so low down, manifestly affords a great security to the passengers, exempting them, in a great degree, from those accidents to which they are liable when the load is raised. * * * I do not claim as my invention, the running of 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 and 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 car, 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. Boss Winans.”

Much testimony was offered to impeach the novelty of the patent, and the attention of the court was mainly directed to this point.

G. M. Keller and S. Blatchford, for complainant.

W. A. Beach and D. B. Eaton, for defendants.

NELSON, Circuit Justice. This case should have been decided at an earlier day, but such has been the pressure of business in court since the argument, that I have been unable to devote that time to its consideration which its difficulty and magnitude required. The papers are very voluminous, and some of the questions involved depend upon complicated and contradictory evidence.

As this is a motion for a preliminary injunction, I shall not deem it necessary to go into the case at large, or as fully as if it stood for a final hearing; but shall content myself by stating briefly the ground upon which I have arrived at the conclusion that the motion must be denied. This patent has been before me heretofore in the case of *Winans v. Schenectady & T. R. Co.* [Case No. 17,865], on a motion on the part of the defendants for a new trial. The case had been tried at law before his honor, Judge Conkling, and the questions involved were, the correctness of the rulings at the circuit.

In deciding upon these questions, it became necessary to give a construction of the patent, which will be found in the opinion then delivered, and which I do not understand is a matter of dispute on this motion.

The patent is for a new and useful improvement in the construction of cars or carriages intended to travel on railroads, which is particularly adapted to passenger cars; and after stating the difficulties to be encountered in running these cars on the road at great speed, from curvatures and consequent friction between the flanges of the wheels and rail, and from other obstructions and impediments specified, and after describing the parts and manner of the construction of a car, with a view to overcome these difficulties and impediments, the patentee closes by saying: “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 and for the purpose 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 and 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 car, so as to accomplish the end proposed by the means set forth, or by others which are analogous and dependent upon the same principles.”

In the arrangement of this passenger car, the patentee constructs the bearing-carriages each with four wheels, which sustain the body of the car, by placing one of them at or near each end of it; the two wheels on either side of the truck are to be placed very near each other. The spaces apart between the flanges need be no greater than are necessary to prevent contact. The car body rests upon bolsters supported on each of the two bearing-carriages or four-wheeled trucks, the bolsters so constructed as to swivel or turn on each other like the two front bolsters of a common wagon; the trucks may be so placed within and under the end of the car, as to bring all the wheels under it or without the end, so as to allow the body to be suspended within the two bearing-carriages. The closeness of the fore and hind wheels of the trucks, taken in connection with the use of them—the trucks arranged as distant from each other as can be done consistently with the proper support of the car-body—is considered by the patentee as an important feature of the invention, as, by the contiguity of the fore and hind wheels of each truck, while the two trucks may be at a considerable distance apart, the lateral friction from the rubbing of the flanges against the rails is most effectually avoided, while, at the same time, all the advantages attendant upon placing axles of a four-wheeled car far apart are obtained; for the two wheels on either side of the trucks, may, from their proximity, be considered as acting like a single wheel, and as the two trucks may be placed at any distance from each other, consistent with the required strength of the body of the car, all the advantages are obtained that result from having two axles of a four-wheeled car at a distance from each other, while its inconveniences are avoided.

The two wheels on either side of the trucks are connected together by means of a very strong spring, the ends of which are bolted or otherwise secured to the upper sides of the boxes which rest on the journals of the axles, the

longer leaves of the spring placed downward. The bolsters extend across, between the two pairs of wheels, from the center of one spring to that of the other, and are securely fastened to the top of them. This is the car substantially as arranged and constructed by the patentee without going into all the details of the specifications.

As we held when the patent was formerly before us—the improvement claimed is the car itself, arranged and constructed as described in the patent, and which we have above in substance set forth; and the question now before us, is the same as before the jury on the former case, viz: whether or not cars or carriages for running on railroads as a whole, like the one described in the patent, had been before known or in public use? And whether or not the cars manufactured by the defendants are, in arrangement and construction, substantially like it?

The case, in its present posture, does not call for a definite determination of these questions, as that must be postponed till the final hearing. These questions are only important to be considered now, so far as they may aid us in deciding upon the right of the complainant to have the defendants enjoined pending the litigation. For if there exist any reasonable doubt about the originality or novelty of the car, as arranged and constructed by the patentee, or about the substantial identity of the cars manufactured by the defendants with the plaintiff's, then I am not at liberty to interfere and arrest the manufacture at this stage of the proceedings. The determination of that must be postponed till the case is matured and disposed of at the final hearing.

A good deal of proof has been furnished by the defendants in this case, bearing directly upon the question above stated, not before the court and jury in the case against the Schenectady and Troy Railroad Company. The most material is that relating to what is called in the proceedings the "Quincy Car." We have a description of this car from Gridley Bryant, the inventor and constructor of it. He is an engineer, and in 1826 superintended the building of a railroad leading from the Quincy quarries, in Massachusetts, to the landing at Milton, a distance of between three and four miles. This is said to be the first railroad built in the United States. Bryant states that the eight-wheeled car on this road was constructed in the summer of 1829, and has been used on it from that time to the present; that the objects of the construction were to carry a large load on the eight wheels without injury to the road; to turn the curves freely, descend the inclined plane, and run on the road carrying the stone as smoothly and safely as possible. It consisted of two four-wheel trucks, securely held by center pivots or king bolts about ten feet apart, which passed through the bolsters of a rigid body or platform framing, and the centers of the trucks. The body, with its bolsters thus secured by the vertical king bolts, had side bearings on curved plates on the trucks, and the truck swivelled under them to conform to the curves and switches or turnouts of the road, while the body connecting the trucks sustained and carried the load smoothly and safely. That the trucks consisted of rigid rec-

tangular wheel frames with the double cross bolsters, and held the bearing points of the wheels on the rail, the same distance apart as the gauge of the track, which was five feet. He further observes that this car contained a combination of the two four wheel trucks; rigid wheel frames, with a permanent body to carry the load by means of vertical king bolts, allowing the two trucks to swivel to conform to the curves of the road, the same in principle of construction and operation as the eight-wheeled cars now in general use on railroads in the United States.

Bryant continued in the service as superintendent and engineer of the road till 1836, at which time," two of these eight-wheeled cars were in use, including the one originally constructed. This witness is fully confirmed by three others, each of whom were engaged upon the road at the time spoken of by him, and since. The railroad has a steep inclined plane, on which the cars are raised and lowered by means of an endless chain, and has several sharp curves and turnouts. One of the heavy curves that encircle the hill of the quarry, is said to be about two hundred feet radius.

Several experts have been examined in relation to the arrangement and construction of this "Quincy car," and a decided preponderance in numbers, and among them persons of the highest skill and of the greatest experience in their professions, concur in saying that it embodies the principles, arrangement and construction of the cars in general use upon railroads, which it is admitted are the kind manufactured by the defendants. The evidence furnished on behalf of the defendants, in resisting the motion upon this branch of the defense, is very full and strong; and as the case stands, overcomes the contrary proofs given in support of the bill.

In addition to this "Quincy car," the defendants have furnished a model and drawing of the eight-wheeled steam carriage, devised and constructed by Horatio Allen, and put in operation in February, 1832, on the South Carolina Railroad. The drawings were made in the winter of 1830 and 1831. A few of the carriages were running on the road before the close of the year 1833. This car was therefore devised and completed in working order, by Allen, prior to the patent of Winans, and indeed prior to the perfection of his improvement preparatory to obtaining the patent.

As in the case of the "Quincy car," the decided preponderance of the evidence is, that this steam carriage embraces all the elements, arrangements and organization to be found in the cars manufactured by the defendants.

I do not find that this evidence was before the court and jury in the former trial upon this patent. Although it may not be regarded (looking at the particular construction and purpose of this steam carriage) as bearing so directly upon the novelty of the Winans car, or speaking

perhaps more accurately, as showing the principles and arrangements of the defendants' cars to have been discovered and applied before the date of the Winans improvement, it is undoubtedly entitled to a good deal of consideration; and as the case now stands, sufficient at least, in connection with the "Quincy car," to forbid the granting of the injunction.

The defendants have also given in evidence a model of a carriage for railways and roads, described by W. and E. W. Chapman, in their patent granted in England, in 1812. The specification is published in the 24th volume of the Repertory of Arts, etc., under the date of February, 1814, with drawings. Fig. 8, says the patentee, shows a carriage of six wheels for the engine, which may rest equally, or nearly so, on each of its wheels, and move freely round the curves, or past the angles of a railway; 1,1, the fore pair of wheels are, as usual, on railways, fixed to the body of the carriage; 2 2, and 3, 3, the other two pair, are fixed on axles (parallel to each other) to a separate frame, over which the body of the carriage should be so poised as that two-thirds of its weight should lie over the central point of the fore wheels where the (pivot?) 4, is placed, and the remaining third over the axis (axle) 1, 1. The two-thirds weight of the carriage should rest on conical wheels, or rollers, bearing upon the curved plates 1,1, so as to admit the ledges of the wheels, or those of the way to guide them on its curves, or past its angles, by forcing the transom, or frame, to turn on the pivot, and thus arrange the wheels to the course of the way, similar to the carriage of a coal wagon; and the patentees add, if the weight of the locomotive engine should require eight wheels, it is only requisite to substitute, in place of the axis (axle) 1, 1, a transom, such as described, laying the weight equally upon both, and then, similarly to two coal wagons attached together, the whole four pair of wheels will arrange themselves to the curves of the railway.

The weight of the evidence of the experts who have been examined in respect to the Chapman car, is, that the elements and arrangement, as described in the specification, and delineated in the drawing, comprise all the substantial elements and arrangements to be found in the cars of the defendants, and a critical examination of the description and of the drawing, certainly tends to confirm rather than weaken the inference of these witnesses. This Chapman car is probably the origin of the "Quincy car," the Horatio Allen car, and of all that class now in use upon the railroads of this country, and was devised by the Chapmans not simply to equalize the greater burden, attained by the multiplication of the wheels, and to relieve the stress upon the rail; but also by the arrangement of the four pairs of wheels, so that each of the pairs should be fixed to separate frames (the axles parallel to each other), and the burden resting upon the central points of the four wheels, and turning upon a pivot, or swiveling, to permit the trucks to accommodate themselves to the curves and angles of the road, and cause them to move more freely and smoothly round these.

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This description and drawing of the Chapman car, as given in the volume of the Repertory of Arts, were before the court and jury in the former trial; but as the novelty and improvement of the plaintiff's patent were left, as questions of fact, to the jury, the subject was not a matter of particular examination on the motion for a new trial.

There are many other parts of this case which, were this a final hearing, it would be necessary to notice, but in the present stage of it are not important; as, for the reasons given, we think, upon the well-settled principles governing applications for a preliminary injunction, this motion must be denied.

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

¹ {Reported by Samuel S. Fisher, Esq., and here reprinted by permission. Merw. Pat. Inv. 419, contains only a partial report.}