

SALADEE *v.* RACINE WAGON & CARRIAGE  
CO. AND OTHERS.

*Circuit Court, E. D. Wisconsin.*      April 28, 1884.

1. PATENT LAW—WHAT IS NECESSARY PROOF OF  
INFRINGEMENT.

To make the defendant liable as an infringer it must appear that he has appropriated all the elements of the plaintiff's combination, or their equivalents.

2. SAME—SUBJECT-MATTER OF THE INVENTION  
INFRINGEMENT AS ALLEGED.

Alleged infringement of reissued patent No. 9,729, for a running gear for vehicles, in which there are combined an endless perch and an equalizing bar, connected to the adjacent ends of semi-elliptic springs, supporting the body of the vehicle between the perches, *held* not established.

In Equity.

*Cotzhausen, Sylvester & Scheiber*, for complainant.

*Fish & Dodge*, for defendants.

DYER, J. This is a bill to restrain the alleged infringement by the defendants of reissue letters patent No. 9,729, granted to the complainant, May 31, 1881, for certain improvements in running gear for vehicles. The original patent (No. 148,497) was issued March 10, 1874. It is essential to determine, first, precisely what the complainant's invention is. The specifications and claims of the original patent are as follows:

“The first part of my invention consists in bending the front and rear bolsters and side perches in one piece, and splicing them together at or about the cross-center of the gearing in such manner as to make literally an endless perch for carriage gearing. The second part of my invention consists in supporting and operating two half-elliptic side springs between the two outside perches, and upon two separate connecting rods, the bearings of which latter are also secured to the perches. Carriage gearing with two or more

perches have a bolster resting upon both the front and rear axles, and in or upon which are secured the opposite ends of the two outside perches, each corner of the gearing presenting two ends, viz., the end of the perch and the end of the bolster, to be finished with a scroll, or otherwise, besides involving the cost of bolts and other necessary fastenings to make these connections secure. To obviate all this I proceed to unite the bolsters and side perches as follows, viz.: In the first place I take two pieces of wood, of the required thickness and depth, for the bolsters at their heaviest point, and of a length equal to the length of one bolster and the half length of each perch. These pieces are now bent into substantially the form shown from H to F of the drawing, and with the round corners, SS, SS. The opposite ends of these pieces, A and A<sup>1</sup>, are then finished up as required, and are spliced together at F and F, after which the side perches, A and A, are plated with iron in the usual way. It will now be seen that I have produced an endless perch by bending the bolsters, A<sup>1</sup>, with the side perches, A, and splicing the latter at or about the cross-center of the gearing. By this means I not only get rid of joining the perches, A, to the ends of the bolsters, A<sup>1</sup>, at S, and the work of finishing the ends of each, as is required upon the old plan, but I produce a cleaner and smoother finish at these points, and save a great deal of work in the iron connections, otherwise necessary at these points. In all cases where elliptic springs are to be used over the front and rear axles, they are made to rest upon the ends of the perches or bolsters, A<sup>1</sup>, between the dotted lines, E; but in this case the front bolster, A<sup>1</sup>, will be made considerably shorter than 687 the hind one, so that the rear ends of the perches, A, will be further apart than the front ends, and not parallel to each other, as seen

in the drawing. If preferred to bend the perches in one piece only, one splice, F, will be necessary.

“I am aware that two perches have been bent in one piece, as shown and described in the patent of John Curtis, of Cincinnati, Ohio, and in a former patent of my own. In the former case the perches are closed by the bend in front of the head-block over the front axle, with the rear ends of the perches left open and framed into the hind axle-bed or bolster, while in the latter case the perches are closed by the bend in the rear of the hind axle, and the front ends left open and framed into the head-block over the front axle. But my present invention, let it be well understood, differs materially from both of the forms above described, as well as from all other kinds of bent perches of which I have any knowledge, in this: that both ends of the perches are closed by the bend of the wood, making the bolsters and perches, when completed, in one continuous piece, or, in other terms, an endless perch.

“The half-elliptic side springs, B and B, are linked to two separate connecting rods, C and C, at D, between the two opposite perches, A and A, and the body of the vehicle is then supported upon the center of the springs in the usual way. The bearings, in which the connecting rods are hung and operate, are also secured to the perches, and not to the bolsters, as is the general custom.

“Two advantages are attained in this mode of suspending the springs upon and between the perches, viz.: *First*, the springs being suspended and operating between the perches, instead of on the one side of them, as is usual, the body can never strike the perches by the over-depression of the springs. I can attach the steps directly to the perches and not to the springs, as is usual, by which I gain the advantage of relieving the springs of the strain imposed upon them in all

cases where the steps are secured to either the body or springs, as is now the almost universal custom.

"I claim as my invention (1) an endless perch, A and A<sup>1</sup>, substantially as and for the purpose set forth; (2) connecting rods, C and C, pivoted at or near the opposite ends of the perches, A and A, and provided with links, D, and springs, B and B, all combined to operate between the opposite perches, A and A, substantially as and for the purpose set forth."

The specifications and claims of the reissue patent are as follows:

"My invention relates to that class of road wagons in which the front and rear bolsters or axles are connected by side-bars or perches, and in which the body is hung upon semi-elliptic springs; and the object of my invention is to hang the body low down and close to the side-bars without being liable to strike the latter. This object is secured by arranging the side springs inside the side-bars or perches instead of outside, as heretofore, and by connecting their adjacent ends to an equalizing device arranged to operate between said bars, as fully described hereinafter.

"The frame connecting the axles is made of one or more strips or pieces, as shown in the accompanying drawing, which is a plan of sufficient of a road wagon to illustrate my invention. It consists of two pieces, A, A<sup>1</sup>, each sufficient to form one bolster and the half of each perch, and bent to the U" shape shown; the ends of the two bent pieces being then spliced at F, F. The frame thus formed has no jointed corners, and constitutes an endless perch of great strength.

"Heretofore, in hanging the bodies between side-bars or perches, it has been necessary, to prevent the body from tilting and striking said bars, to arrange the latter at such a distance from the body that they limit the movement of the wheels in turning so that a 'short

turn' cannot be made. I obviate this by hanging the springs inside the perches, and by so equalizing the  
688 action, of the springs that the body is prevented from tilting laterally, permitting the perches to be arranged much closer to the body than heretofore. To secure this action I unite the adjacent ends of the side springs, arranged between the perches to ears, D, of an equalizing bar, C, turning in suitable bearings so that any excess of weight upon one spring turning the bar, C, also lowers the other spring to an equal extent, and preserves the body horizontal, so that it will not strike the side perches.

"The arrangement of equalizing bars in combination with both ends of the springs, as shown, secures a like effect at each end of the spring platform. Another result of this arrangement is the suspending of the body lower down than is possible when the springs are outside of the perches, which would be struck by the body if it were not raised well up above them. I am aware that equalizing bars have been used in connection with bodies hung to springs outside the perches; but in such cases the result which I effect is not attained, which is the perfect support of the body, while allowing all desirable vertical movement without unduly spreading the springs apart.

"I claim, (1) in a road wagon, the combination, as set forth, of a body, side perches, semi-elliptic springs arranged between the perches, and means for equalizing the action of such springs, as set forth; (2) the combination, with the semi-elliptic springs supporting a body between the side-bars or perches of a vehicle, of an equalizing bar arranged opposite and connected to the adjacent ends of said springs, substantially as set forth."

From the language of the specifications in the original patent and of the claims, also, it is plain that the invention of the complainant consisted of (1) the endless perch; and (2) the connecting rods pivoted at

or near the opposite ends of the perches, and provided with links and springs so as to operate between the opposite perches. In the reissue patent the same form of perch is described; that is, it is constructed so as to form by its connection with the bolster an endless perch without jointed corners. Neither of the claims in the reissue distinctly specify an endless perch, as in the original, but the claims must be read with the specifications; and, when so read, there is no doubt the patentee intended to claim the same form of perch in the reissue as in the original patent. So, too, in the reissue, the parts described in the original patent as connecting rods, are made another essential element in the patentee's invention. In the reissue they are described as equalizing bars, and their operating effect is more elaborately stated than in the original patent; but in both it is evident that it was the intention of the patentee to claim that the effect of the connecting rods or equalizing bars is to equalize the action of the springs. The conclusion, then, must be that the endless perch and the equalizing bars, constructed as described, are alike claimed in the original and reissue patents.

These devices are not, either separately or in combination with other parts of a vehicle, anticipated by any patent here exhibited. In the Curtis patent, No. 147,613, dated February 17, 1874, two perches bent in one piece are shown, but the perches are closed by the bend in front of the head-block over the front axle, with the rear-ends of the perches left open and framed into the rear axle bed or bolster. In the Saladee patent of February 20, 1872, No. 123,937, 689 the perches are closed by the bend in the rear of the rear axle, and the front ends left open and framed into the head-block over the front axle. In the Miller patent of September 6, 1870, No. 107,076, for an improvement in buckboard wagons, the backboard rests upon the Springs, which are attached

to a cross-bar at the forward end, which is fastened to the reaches, but the springs at the rear end are attached to two hangers, fastened to the under side of the axle. In the Miller patent, No. 134,916, dated January 14, 1873, the endless perch is not shown, nor the half-elliptic side spring. In the Topliff and Ely patent, No. 122,079, of December 19, 1871, the springs are outside the perches or reaches, and are arranged upon separate rock-rods, secured directly to the front and rear axles. In the Curtis patent of March 26, 1867, No. 63,223, the perches are open at the rear end and mortised into the rear axle, with end springs attached to the axles. But these various inventions, which preceded the complainant's, show the state of the art when the complainant obtained his patents, and narrow the scope of his invention to such extent that the defendants cannot be adjudged infringers unless they have appropriated, in substantial form of construction, the identical elements which the complainant has the right to claim as new in his patent. Side springs placed between the perches are shown in the Curtis patent, No. 147,613. The complainant, in the specifications of his patent, No. 123,937, states that the idea of equalizing the action of springs by means of cross-bars or connecting rods was at that date, February 20, 1872, old and well known, although the particular form of construction and attachment of such connecting rods, shown in the patents in suit, was not exhibited before the issuance of these patents. Perches bent at one end were also old when the complainant obtained his patents. Assuming, therefore, that the reissue patent sued on is valid, the question is, do the defendants make a running gear for vehicles in which there are combined an endless perch and an equalizing bar connected to the adjacent ends of semi-elliptic springs, supporting the body of the vehicle between the perches? If they do not, then there is no infringement. In other words, to make the

defendants liable as infringers it must appear that they have appropriated all the elements of the complainant's combination, or their equivalents, and this they have not done.

*First*, the gearing made by the defendants does not exhibit the endless perch. It is true that in their gearing two perches are bent in one piece, but only the front end is closed, while the rear ends are open, each end being connected with the rear axle. In Short, instead of making the Saladee perches, the defendants make the perches shown in the Curtis patent of 1874.

*Secondly*, the defendants connect the springs with an equalizing rod at the rear of the gearing, substantially as is shown in the complainant's patents. But the springs are connected at the front end of the gearing directly with the bent end of the perches, and there is 690 no equalizing rod at that end of the running gear. That the complainant, when he obtained his patent, regarded two equalizing bars—one at each end of the vehicle—as essential parts of his invention, is apparent (1) from the drawings which he submitted to the patent-office; and (2) from the language of the specifications and second claim of the reissue. In the specifications he says that to secure an equalized action of the springs, "I unite the adjacent ends of the side springs, arranged between the perches, to ears, D, of an equalizing bar, G, turning in suitable bearings, so that any excess of weight upon one spring turning the bar, C, also lowers the other spring to an equal extent and preserves the body horizontal, so that it will not strike the side perches. The arrangement of equalizing bars in combination *with both ends of the springs, as shown*, secures a like effect at each end of the spring platform." In the second claim there is claimed as part of the combination "an equalizing bar arranged opposite and connected to the adjacent ends of said springs." From all this it is apparent that the defendants omit from their running gear one of the



parts necessary to make the complainant's combination. And, as the court has already indicated, the field of invention with reference to running gear for vehicles was so covered prior to the complainant's patents that upon settled principles of patent law his patents cannot have the broad construction to which a patent for a wholly new and original device might be entitled. The defendants make a vehicle with side-springs between the perches, which are as fully shown in the Curtis patent of 1874 as in the complainant's reissue. They make the Curtis perch and not an endless perch. They omit one of the equalizing rods described and claimed in the complainant's patent. Upon this state of facts can the defendants be adjudged infringers? The court is clearly of the opinion that they cannot; and upon the ground of non-infringement, without deciding the points made by defendant's counsel involving the validity of the reissue patent, the bill will be dismissed.

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