

v.11, no 5-33
IVES & MILLER V. HARTFORD SPRING &
AXLE Co.

Circuit Court, D. Connecticut.

REISSUE—PATENTS FOR
INVENTIONS—ANTICIPATION.

Where the invention as secured by the original patent was a narrow one, and a broader claim was made upon its reissue, the patent is not infringed if the broader claim embodied matters which had been anticipated by a prior machine.

John Kimberley Beach, for plaintiffs.

Wm. E. Simonds, for defendant.

SHIPMAN, D. J. This is a bill in equity to restrain the defendant from the alleged infringement of reissued letters patent No. 8,179, issued May 20, 1879, to the plaintiffs, as assignees of Welcome C. Tucker, for an improvement in wagon hubs, and also from the infringement of letters patent granted to Willis E. Miller, February 12, 1878, for an improvement in carriage axles. The original Tucker patent was issued on September 10, 1867. The defendant is manufacturing carriage axles under letters patent granted to Ellsworth D. Ives on June 10, 1879, and on November 2, 1880. The invention of Tucker, as secured by his original patent, related to an improvement in wagon hubs made of iron or other suitable metal. It consisted, in the language of the specification, "in connecting the hub with the axle by cup flanges, and securing the hub on the axle with a cup-flanged nut, in such manner that the bearing of the axle shall be entirely closed at both ends to retain the oil and exclude dust and dirt." The improvement also included "an arrangement of adjustable collars for securing the wheel to the hub by a firm attachment." The construction of the flanges upon the hub and axle is described with sufficient accuracy in the second claim of the reissue, which is hereafter quoted.

The claims were as follows:

“(1) The cup flanges, *c*, *c*, on the back and front ends of the wagon hub, *B*, upon which are fitted the corresponding flanges, *a*, on the axle, *A*, and *n* on the nut, *d*, as herein shown and described. (2) In combination with the above, I claim the stationary collar, *m*, and the adjustable collar, *m*, on the hub, *B*, combined and arranged as and for the purpose specified.”

The flanges and the collars were distinct improvements. It was feared that the language of the first claim limited the cup flanges to those on the hub, *B*, and thus improperly limited the invention to a combination of flanges and collars. A reissue was obtained, in which the claims were as follows:

“(1) The axle arm, on which the wheel takes its bearing, with the shoulder at its inner end, and the flange projecting forward from the shoulder parallel with and concentric to the arm, all made as a part of the axle, combined with the box fitting said arm, and constructed to enter beneath said flange, and with a concentric recess corresponding to and so as to enclose said flange at the shoulder of the axle arm, substantially as described. (2) The combination of the box constructed with a cup-shaped flange at the outer and inner ends, the axle with a cup-shaped flange at the shoulder, and so as to be enclosed by the cup-shaped flange on the box, the nut constructed with a cup-shaped flange, the corresponding cup-shaped flange on the box enclosing the flange of the nut, a stationary collar, *m*, and adjustable collar, *m*’, and so as to enclose the wood center of the wheel, substantially as described.”

Infringement of the first claim only is alleged. It will be perceived that, in the claims of the reissue, the word “box” is substituted for the word “hub” in the claims of the original patent. Axle boxes are

“bushings for hubs. Their duty is to take the wear incident to revolving on the spindle of the axle.” Knight’s Mechanical Dict. The original specification described an iron hub. The plaintiffs now desire to claim themselves of the distinction between hub and box, and to claim that the Tucker invention consisted, in part, in a peculiar construction of box, as distinguished from the same construction in a wooden hub enclosing a straight iron tube or box. In my opinion the reissue does not make a box, as distinguished from a hub, a characteristic feature of the invention.

In the next place, the flanges at the outer end of the hub disappear from the first claim of the reissue. It is said by the plaintiffs that the application of the flanges to both ends of the hub is a mere duplication of the invention, and that this mode of construction, while practicable when applied to a hub which had adjustable collars, could not be used in connection with the ordinary methods of fastening the wheel to the hub. I assume that this change does 512 not introduce the vice of new matter into the reissue. It will be perceived from this statement that the invention, as secured by the original patent, was a narrow one. An examination into the state of the art shows that the actual invention was also a very narrow one, and that, unless the general language of the reissue is construed in accordance with the state of the art and with the limitations of the original patent in regard to the form of the flanges, the reissue will be broader than the invention, and will include devices quite different from those which were intended to be the subject of the original patent. Interfitting or intermeshing flanges and recesses upon an axle and hub were not only old, but the flanges and recesses of Tucker were old at the date of his invention. They are found in the patent to R. W. McClelland of October 12, 1858, but in his axle the wheel bears wholly upon

the flanges at each end of the hub, whereas in the Tucker axle "the box fits the axle arm throughout its entire length."

In the patent to John W. Crannell, of July 15, 1862, the flanges and recesses are the same as in the Tucker patent. The differences in construction are that the recess, which in the Tucker device is at the end of the so-called "box," is, in the Crannell axle, the end of the wooden hub outside of the iron lining, and the flanged collar is not an integral part of the axle, but is secured to it. In the Tucker reissue the latter difference is pointed out in the clause, (referring to the arm, shoulder, and flange,) "all made as a part of the axle." The invention of Tucker, so far as it relates to the flanges, consisted in putting the cup-shaped recess of Crannell upon an iron hub or box instead of upon a wooden hub, and in making the axle arm and its flange in one piece instead of in separate pieces. The character and extent of the invention are clearly shown in the following extract from the decision of the acting commissioner of patents upon the plaintiffs' appeal from the board of examiners' rejection of the application for a reissue.

Applicant's claims are as follows:

"*First.* The combination of the axle arm on which the wheel takes its bearing, shoulder at the inner end of said arm, a flange projecting forward from the shoulder, parallel with and concentric to the axle, a box fitting said arm and extending beneath said flange at the shoulder, and a concentric recess in the box to receive said flange, formed by a concentric flange extending from the rear end of the box, over and so as to inclose said flange at the shoulder of the axle arm, substantially as described. * * * One of the references, the patent of John W. Crannell, of July 15, 1862, for an improved axle, shows and describes a structure so nearly like applicant's in form and operation, as covered by his first and second

claims, that the differences can 513 be described by the mention alone of the superiority of applicant's device in the matter of mechanical construction. As the board of examiners in chief in their decision remark, 'Crannell' patent is much the closer anticipation, having the same configuration of flanges for the same precautionary purpose. Applicant's device is, however, mechanically superior as a whole, in that his hub, axle, shoulder, and nut, with their entering flanges, are all made of similar material, admitting of machine fitting, and thus enabling the present application to dispense with the packing which Crannell, with his fitting of wood upon iron, is obliged to resort to. If these superior mechanical qualities constitute a patentable invention, it cannot receive protection by the present first and second claims, which do not rest upon those qualities, but cover a structure not only like Crannell's, but which in terms also include the patent of McClelland, No. 21,766, of October 12, 1858."

The first claim of the reissue was thereupon substituted for the rejected first claim, and the application was granted. The plaintiffs' reissue rests upon the superior mechanical method in which the patentee constructed Crannell's hub, axle, and shoulder with their flanges and recesses. It is limited to the cup-shaped flanges and recesses of the original patent, and cannot be enlarged to take in any shape of concentric flange on the shoulder and a correspondingly-shaped concentric recess in the hub to enclose the flange, although the device has all the other requisites described in the first claim. The defendant's device has a conical or concave recess in the shoulder or collar on the axle, and a corresponding convex or conical projection on the box or hub. Its flanges and recesses are not cup-shaped. The Crannell intermeshing flanges contain four angles. The defendant's device contains but two, and is a simpler piece of mechanism. The Miller patent is for an

improvement on the Tucker axle. The claim is for “the combination of an axle arm, the collar of which is constructed with a flange projecting forward parallel with the axis, and a box constructed with a groove corresponding to said flange, and so as to extend over the said collar, with an annular recess between the said collar and the box, substantially as described.” The defendant has a groove between the collar and the box. If the Miller claim is to be construed as the addition of the annular recess to the Tucker device there is no infringement. If the claim is for the device as broadly as it is described, the invention was anticipated by the McClelland axle.

Let the bill be dismissed.

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