

NAT. CAR-BRAKE SHOE CO. V. D., L. & N. R.
CO.

Circuit Court, E. D. Michigan. —, 1880.

1. PATENT No. 40,156, issued October 6, 1863, to James Bing, for an improvement in car-brake shoes for railway cars, *held*, not infringed under the circumstances of this case.
2. SAME—INFRINGEMENT—EVIDENCE.—Where a device was not intended as an evasion of a patent, but was intended for an entirely different purpose, and the infringement, if any, was purely accidental, the evidence of such infringement must be so clear as to admit of no other reasonable construction.
 - , for complainant.
 - , for defendant.

BROWN, D. J. This is a bill in equity for the alleged infringement by the defendant of patent No. 40,156, issued October 6, 1863, to James Bing, for an improvement in car-brake shoes for railway cars. The case was submitted upon the pleadings and stipulation of the parties as to the facts.

The validity of the patent is, for the purposes of this suit, admitted, but the defendant denies the infringement, and this is the only issue in the case. It seems that in the construction of car-wheels the tires or peripheries are slightly bevelled outward from the flanges, in order to secure a slight outward pressure upon the rails and to relieve the flanges of some portion of the strain put upon them in holding the wheels upon the track; and that in stopping the cars it is desirable that the brakes should be bevelled in an opposite direction, to correspond and fit closely to the bevel of the wheels, although this is not always done.

Various patents, English and American, were introduced by the defendant, to exhibit the state of the art prior to the issue of complainant's patent. It appears

from them that car brakes were originally constructed in a single piece, attached to the end of a beam running across the car. This method of construction, however, was open to the objection, that when that portion of the shoe (technically called the sole) applied to the flanges was worn out, the whole shoe 225 became worthless. To remedy this, a separate iron sole was provided and bolted to a piece of wood known as the shoe, and attached to the end of the beam. When the sole became worn it could then be unbolted, taken off, and reversed, or discarded, and a new sole be attached to the shoe without injury to the latter. One of these devices, taken from the Michigan Central Railroad, was introduced as an exhibit under the name of the "Michigan Central Railroad Shoe."

Plaintiff's invention was a new departure. In stating the nature of his improvement he says: "My invention relates to the construction of shoes or rubbers for car-wheels, and consists—*Firstly*, in constructing the shoe of two parts, in the peculiar manner described hereafter, so that the part in contact with the wheel can accommodate itself to the same. * * * Even when the usual shoes are properly fitted to the bevelled peripheries of the wheels the lateral movement of the axles, as the wheels traverse curves of the track, is such that ordinary shoes cannot fit accurately at all times. Another evil attending the use of ordinary shoes or rubbers is that as the lateral movement of axles takes place an undue strain is imparted to the brake-beam. These difficulties are avoided by my invention, inasmuch as the sole, B, is permitted to have a lateral rocking motion on the shoe, and can at once accommodate itself to the bevel of the wheel, or to any variation caused in that bevel by the lateral movement of the axle."

His improvement, in brief, consists in having the sole loosely fitted to the shoe, so that, when pressed against the periphery of the wheel, the sole

accommodates itself to the bevel of the wheel, however much or little it may be. The claims of the patent are stated as follows:*Firstly*, the shoe, A, and the sole, B, both being constructed and adapted to each other substantially as described, so that the sole can have a lateral rocking movement on the shoe for the purpose specified;*secondly*, the combination of the shoe, A, sole, B, clevis, D, and bolt, G, the whole being constructed and arranged substantially as specified.

The device of the defendant, undoubtedly, resembles this in 226 some particulars. It contains a bolt and a clevis, by which the sole is attached to the shoe, and is made removable simply by withdrawing the bolt, as in plaintiff's invention. It is quite obvious, however, that it was not intended as an infringement or evasion of the plaintiff's patent, and that the object of the device was to render the sole reversible, so that when worn upon one side it could be taken off the shoe and turned upside down.

Whether it be an infringement of the plaintiff's first claim depends upon two questions:*First*. Does the sole have a lateral rocking movement on the shoe for the purpose specified, viz., to accommodate itself to the bevel of the wheel? *Second*. If this result is produced, is it produced by means used by the plaintiff, or by a mechanical equivalent thereto?

Whether the defendant's device has the lateral rocking movement must be determined as a question of fact, and by an actual inspection of the devices, one of which, as well as a model, is made an exhibit in the case. The model certainly contains no possibility of such a rocking movement. The sole is firmly attached to the shoe—as firmly as if it were bolted to it, as in the Michigan Central exhibit. Plaintiff, however, claims that this is not a fair representation of the shoe used by the defendant. On an examination of the iron shoe actually employed upon the defendant's cars, I

am satisfied that if there be any rocking movement at all it is due to a slightly imperfect construction, or to wear, and that in either case it does not sufficiently answer the purpose of the plaintiff's patent. In a case of this kind, where it is obvious defendant's device was invented for an entirely different purpose, and was not intended as an evasion of the plaintiff's patent, the infringement, if any exists, being purely accidental, it seems to me the evidence of actual infringement should be so clear as to admit of no other reasonable construction. If, upon the other hand, I were satisfied that an evasion was attempted, I should be disposed to resolve any doubts I might have upon the question of infringement or mechanical equivalents as favorably as possible for the complainant.

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It is true that when defendant's shoe is hung loosely by the clevis it has a rocking movement like that of the plaintiff's, but when pressed forcibly against the wheel the sole accommodates itself to the shoe and not to the periphery of the wheel, and consequently no rocking movement is produced; or, if there be any at all, it is so slight as to have no perceptible effect. The fact that the sole of the defendant's shoe is worn principally upon one side, is strong evidence to show that it has not accommodated itself to the bevel of the wheel. Nor am I satisfied that, conceding that defendant's shoe has a lateral rocking motion, it is produced by the means employed by the plaintiff or by a mechanical equivalent thereto. It is useless to set forth here at length the difference between the two devices, as no description we could give would be comprehended without an actual inspection of the models. The principal distinction between the two is that in the plaintiff's patent the sole is attached to the shoe only at one end by a bolt passing through a lug of the sole and two corresponding lugs of the shoe, the clevis by which the shoe is supported being attached

to this bolt. The other end of the sole is not attached to the shoe at all, but has a pyramidal projection, fitting into a corresponding socket in the sole, by which the latter is prevented from escaping entirely, and the lateral motion is produced. In defendant's device the sole contains a lug at either end fitting to two corresponding lugs in the shoe, and is fastened at one end by a bolt and at the other by a clevis. I am not satisfied that one is the mechanical equivalent of the other.

As this finding disposes of both of plaintiff's claims, an order will be entered dismissing the bill.

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