

The inventor to whom appellee's patent issued described his invention as an "Improved Car Axle Box"; and all he said in his specification relevant to claim 1 was as follows:

"The object of my invention is to provide a cheap and convenient manner of securing the springs in place between the housing and the pedestal, to ease the side movement of the car, and also an effective way or means of excluding the dust and dirt from the axle bearings; and I accomplish these objects by the means illustrated in the accompanying drawings. * * * In the drawings, C represents a car axle; B, the car wheel; E, the axle box; and A, the housing at the inner end of the box, on the inner part of which housing is made a tubular sleeve, 2, tapered on its periphery, as shown clearly in Fig. III. That part of the housing nearest the car wheel is filled with wood blocking or other suitable material, 8, with a circular space between the blocking, 8, and the sleeve, 2, to receive the sleeve or flange, 1, cast on the outer face of the wheel. A washer, 3, is placed on the sleeve, 2, the hole through the washer being a little smaller than the largest part of said sleeve, 2; and when the axle bearing is in its proper position in the axle box, the end of the sleeve or flange, 1, on the wheel, impinges against the washer, and tends to crowd the latter further upon the sleeve, 2; and when in this position, as there is always contact between the end of the flange on the wheel and the side of the washer, and also contact between the inner rim of the washer and the outer surface of the sleeve, 2, on the housing, of course the dust cannot get past the washer into the axle box."

Claim 1, in issue here, is as follows:

"The combination, in a car axle box, of the car wheel provided with a flange projecting out from the side of the wheel and around the axle, a tapered sleeve on the box or its housing projecting into the said flange on the wheel, and surrounding the axle, and a washer placed upon said tapered sleeve on the box, and there confined by contact with the end of the flange on the wheel, substantially as described."

For the purpose of attacking the novelty of this device, and also for the further purpose of limiting its range, the respondent below (now the appellant) introduced many prior patents, both domestic and British. We are unable, however, to perceive that any of them contained all the elements found in the appellee's device, or were intended to perform precisely the same function. The elements found in the claim are (1) the projecting flange; (2) the tapered sleeve; (3) the washer; (4) the location of the washer so as to be "confined by contact"; and (5) some elasticity in the washer, implied from common knowledge, and from the words "confined by contact," as well as from the words in the specification "always contact between the end of the flange on the wheel and the side of the washer." A combination of all these is not found in any prior device proved in the record, and the novelty of the appellee's device is established to our satisfaction.

As bearing on the question whether the device involved patentable invention, the appellee's expert testified as follows:

"I understand that the purpose of the tapered sleeve on the axle box is to provide a part which will hold a flexible washer thereon, which washer in the patent is indicated by 3, and that the purpose of the flange which projects out from the side of the wheel is to provide a suitable part which rotates coincidingly with the wheel and the axle, to have such a bearing against the outer side of said flexible washer as will prevent dust from entering into the box between the edge of said flange and the adjoining side of the washer. The flexible nature of the washer permits a certain end motion of the axle, or its journal, within the box, or of a similar motion of the box and its journal brass on the journal, such as is common in car constructions, and still keeping the outer side of the washer and the flange on the wheel so in contact that, even

under such motions, the contact of the edge of the flange with the washer is maintained."

The function thus described is plainly within the purview of the patent, and is clearly useful. It cannot be supposed that appeals to the common knowledge of the state of the art in 1881, with reference to a device of this character, could yield any substantial results beyond what is shown by the proofs; and, usefulness and novelty being established, it is plain that the appellant cannot find enough in this record to overcome, under the circumstances, the presumption arising from the patent itself in favor of the proposition that they are of a character which involves patentable invention.

But the appellant maintains that, in view of the state of the art and the phraseology of the claim, the patent is narrow, and that, therefore, its own manufactures do not infringe it. Its expert says:

"In the defendant's structure there is a car wheel, but there is no flange or projection cast thereon, and projecting out therefrom. Neither has the defendant's box a tapered sleeve on the box or housing projecting into the said flange of the wheel, and surrounding the axle, in the same sense or for the same purpose as this tapered sleeve is shown and described in the Bemis patent. In the defendant's structure, as shown by both exhibits, the washer rests against an abutment formed in the box, and its inner diameter is larger than the portion of the projecting flange of the box, which is at the extreme end rounding, as shown in the model. There can be no crowding up of the washer upon this sleeve, but the washer, when placed in position, is at once received and held by the abutment in its final position, the washer not having the capacity of being pushed further and further up, and upon a tapering sleeve."

It is true that the appellant's manufactures have no flange cast on a wheel, but they have one projecting from a collar shrunk on the axle in proximity to the wheel, and answering all the functions of the appellee's flange. Also, it does not have the tapered sleeve, but its abutment unquestionably answers all its functions, unless one. As to this the appellant maintains as follows:

"This tapered sleeve is not a chance method of construction, but is described as having a distinctive function to perform. When the parts are assembled, it takes the washer at a point on the taper about midway between the ends of the sleeve, the washer opening being described in the patent as being 'a little smaller than the largest part of' the tapered sleeve, and holds it there with a tight joint to prevent the entry of dust; and, when the wear of the inner edge of the sleeve enlarges its inner circumference, the flange on the wheel presses—or, in the language of the patent, 'crowds'—the washer further along the tapered sleeve, thus continuing to maintain a tight joint."

If this proposition was true, and yet, if this alleged function was incidental, and was not, according to the fair construction of the patent, one of the essential functions the invention was intended to promote, then the facts would present only questions analogous to those of "double use," and could not limit the claim. On the other hand, an alleged infringing combination, which has no adaptation for accomplishing the essential functions which the combination patented was, on the face of the patent, intended to accomplish, cannot ordinarily be held to truly infringe. We explained these propositions in *Long v. Manufacturing Co.*, 21 C. C. A. 533, 75 Fed. 835, 838, 839. We do not find that this function set up by the appellant is described in the patent, or contemplated by it; nor do we perceive that its existence in practice is established by the proofs, or attempted to be sup-

ported otherwise than by the suggestions of the expert witness, which we cannot regard when the fact, if it was in truth a fact, could be so easily shown by direct evidence. The word "crowd," found in the specification, and so much relied on by the appellant, is at the most only descriptive, and is sufficiently apt to indicate crowding against the taper of the sleeve merely to make a close joint, exactly as the appellant crowds the washer against its "abutment" for the same purpose.

If it be conceded, however, that the appellant does not use the "tapered sleeve," nor the flange projecting out from the side of the wheel, in precisely the forms described in the appellee's patent, the case becomes a question of equivalents. We have discussed this general question so fully in *Long v. Manufacturing Co.*, *ubi supra*, in *Reece Buttonhole Mach. Co. v. Globe Buttonhole Mach. Co.*, *ubi supra* (an extreme case one way), and in *Ball & Socket Fastener Co. v. Ball Glove Fastening Co.*, 7 C. C. A. 498, 58 Fed. 818 (an extreme case the other way), that we do not deem it necessary to go over it here. The patent at bar lies between the two cases last cited; and it clearly is not shut out from the expression of the supreme court, cited by us in *Reece Buttonhole Mach. Co. v. Globe Buttonhole Mach. Co.*, at page 962, 61 Fed., and page 198, 10 C. C. A., that "the range of equivalents depends upon the extent and the nature of the invention." This invention did not relate to a matter of mere simplicity of form, or of mere convenience, or to cheapening the cost. It involved a new and useful function, although, perhaps, in view of what the record shows of the art, in a limited field of operation. It is therefore entitled to some aid from the doctrine of equivalents; and we cannot conceive of any case where it could be so entitled unless it is in the present one, where the departures are only in matters of form, and of such character as to suggest that they are studied evasions of those described in the claim in issue.

As we have reached the same result as the learned judge who sat in the circuit court, and by substantially the same process of reasoning, we might well have excused ourselves if we had merely adopted his opinion as ours; but, as the case presents some new phases which have not been exhibited by any appeal we have heretofore disposed of, it seems useful to state our views at length. The decree of the circuit court is affirmed, and the costs of appeal are adjudged to the appellee.

SESSLER et al. v. BORCHARDT.

(Circuit Court of Appeals, Second Circuit. March 19, 1897.)

PATENTS—INFRINGEMENT—SLIPPER SOLES.

The Sessler patent, No. 525,746, for an insole for slippers, made of leather, paper, and wool, and used as an outsole for knit slippers by turning the thickness of leather over the thickness of paper, and uniting it to the braid to which the knit slipper is to be attached, is not, in view of prior devices, infringed by the slipper of the Borchardt patent, No. 539,337, which has a cord running under stitches in the turned-over edge of the leather, for attachment to the knit upper by stitches under it. 78 Fed. 482, affirmed.