

TURRILL ET AL. V. ILLINOIS CENT. R. CO.

[3 Biss. 66; 3 Fish. Pat. Cas. 330.]¹

Circuit Court, N. D. Illinois.

Nov., 1867.

PATENTS—UTILITY—ANTICIPATION—NEW
RESULT—REPAIRING RAILROAD BARS.

1. Letters patent granted to Joseph D. Cawood, September 9, 1856, for an “improvement in repairing railroad bars,” examined and sustained, as being both new and useful.
2. The use by the defendants of the invention patented is evidence of its utility.
3. Combinations of similar elements, which could not be successfully used to produce the effect produced by the patented machine, do not anticipate the patent.
4. A modification of the parts of a combination by which a new result is obtained may be the subject of letters patent.

384

This was an action on the case by Samuel H. Turrill and Charles Wormley, tried by the court (DAVIS, Circuit Justice, and DRUMMOND, District Judge) without a jury, to recover damages for the infringement of letters patent [No. 15,687], granted September 9, 1856, to Joseph D. Cawood for an “improvement in repairing railroad bars,” of which patent the plaintiffs were the assignees. The disclaimer and claim of the patent was as follows: “I do not claim the anvil bar or its recesses, but I claim the movable press-block D, having its edge formed to the side of the rail G, in combination with another block D, with its edge of a similar but reversed form, the movable block to be operated by two cams, or in any other convenient manner, for the purpose of pressing between them a T or otherwise shaped rail, thereby facilitating the difficult operation of welding or renewing the ends of such rails after they have been damaged, in the manner described and for the purpose set forth.” The facts and

process are elaborately stated in the ease of *Turrill v. Railroad Co.*, 1 Wall. [68 U. S.] 491, and are also further stated in the opinion of the court.

Beckwith & Kales, E. W. Stoughton, and B. R. Curtis, for plaintiffs.

J. N. Jewett, S. D. Cozzens, and J. H. B. Latrobe, for defendant.

Before DAVIS, Circuit Justice, and DRUMMOND, District Judge.

DRUMMOND, District Judge. This is an action at law against the defendants for a violation of a patent of the plaintiffs, which they hold as assignees of Joseph D. Cawood, and which was issued to him September 9th. 1856, for a new and useful improvement on the common anvil or swage-block, for the purpose of welding up and reforming the ends of railroad rails when they have become injured by wear. The questions of law and fact have by agreement been submitted to the court, and we have had all the assistance in their investigation which the very able arguments of counsel on both sides could furnish. The patent has already come before the supreme court for examination, and a construction has been given to the specifications by that court, which is a guide to us on this occasion. *Turrill v. Michigan Southern & N. I. R. Co.*, 1 Wall. [68 U. S.] 491.

The specifications set forth the manner of constructing the machine. There is a bed-sill on which there is an anvil or swage-block of iron. There are dies across the face of the shape of the side of the rail. There is a raised solid block, making a part of the anvil. There is then a movable press-block operated back and forth by eccentric cams. The sides of the raised block and the movable press-block are made to fit and receive the rail, so that when they are pressed together by the motion of the press-block, they, in conjunction with the anvil beneath, hold the rail firmly for the purpose of welding and reforming the ends

of the rails. The machine and its mode of operation are particularly described, the foregoing being a mere sketch.

The supreme court say in the case just referred to: "Obviously it is not a claim for any kind of movable press-block, combined and operating in any way with any kind of fixed block to accomplish any purpose or effect any kind of result. The invention was of such a movable press-block as is described, having its edge formed to the side of the rail in combination with such other block as is described, with its edge of similar, but reversed form, arranged as described, and combined and operating in the particular way described, for the special purpose of effecting the described result."

With this construction of the patent before us, the inquiry is, whether any of the machines introduced by the defendants are substantially the same as that of the plaintiffs. The infringement is admitted, but it is insisted that the machine of the plaintiffs, in all essential particulars, is identical with several machines previously well known, viz., the bayonet machine, as used in the United States armory at Springfield, Massachusetts, for the construction of bayonets, the angle-iron machine, as used at Cincinnati, for the construction of the frames of locomotive engines; and the machine described in the English patent of William Church, issued in 1846. The bayonet machine was one form of a common vise, operated by a treadle and elastic spring, the jaws of the vise having dies cut in them of the contour of that part of the bayonet and socket which they were to hold while the welding or hammering process was going on. If the machine of the plaintiffs was no more than this, then the patent would fail. We are inclined to agree with the defendants' witnesses, that as soon as the jaws of a vise are cut to the form of any instrument to be held, the idea would naturally be suggested that they

might be changed to suit any shape. But the Cawood machine is something more than a vise with jaws shaped to receive the thing to be held. It has what is, in some respects, similar to the jaws of a vise adjusted to the thing, but there was a modification of some of the elements of the bayonet machine, so as to change the mode of operation and to produce a new result. And to properly appreciate the difference, we must regard its adaptation of means to ends, and ascertain whether there is not something new, in this respect, in the patented machine. We think there is, and to hold otherwise would very much limit the field of discovery confessedly within some of the elements and combinations of the bayonet machine. The angle-iron machine bears a stronger analogy to the Cawood machine. In the angle-iron machine there is the main 385 anvil beneath, and above, a fixed anvil, and at the side of the latter, and upon the lower anvil, is a movable press-block. The sides of "the fixed anvil were rounded, and the two bars of iron were flattened or brought to any desired shape, and welded together by means of the fixed anvil and the press-block, the result of the hammering under these circumstances, being the welding of the iron, so as to produce the angle-iron, with a fillet, as it was termed, at the angle, thereby strengthening the iron to be used for the frame work of the locomotive. The press-block in this machine was moved towards the fixed anvil by a cam, but back by hand, or other force in that way applied. Now, it is clear that this machine cannot be successfully used to produce the effect caused by the operation of the Cawood machine. In the latter the structure at the side of the anvil and press-block is different and adjusted to the rail. The rail in the act of hammering and welding is held by the press-block and raised solid block, and at the same time supported by the main anvil. The forming process is effected differently. In the angle-iron machine the

relation of the parts of the machine to the thing to be constructed was not the same. The fixed anvil performed a different function, and the anvil beneath took no part directly in the working of the iron. The angle-iron machine would not effectually perform the function of mending rails. A change was made in that machine. There was a modification of some of the various parts, and in consequence of that, the other result is obtained. It may be said that the change here is not very great, and that the plaintiffs' patent has somewhat narrow ground to stand on; but not more so, we think, than many patents that have been sustained by the courts. A slight change, sometimes, of a known machine, or in some of its parts, will effect surprising results, and to protect a party who, by inventing such change, has produced a new and useful result, was certainly one of the objects of the patent laws. The English patent of William Church, though in one part it described a machine for holding railroad rails during a certain working process therein set forth, it is clear does not contain in substance the machine of Cawood, applying it to Church's specifications. There are jaws to hold the rail in Church's machine, and there is what has been termed the press-block, but it is manifest, we think, that it would not be a practical machine for producing the results effected by Cawood's; besides, there is no evidence before us that Church's machine has ever been used for any practical purpose having a bearing on the machine of the plaintiffs, nor indeed, for any practical purpose whatever.

The question in this case is mainly one of fact, and we have not gone into details as to the differences between the three machines relied on by the defendants, and the Cawood machine, but have only referred to them in a general way. And we have rather given our conclusions than the reasoning upon which they are founded. We have had the benefit of the testimony of several eminent experts, but, as is

not uncommon in difficult cases, they do not agree in their opinions as to what are matters of form, and what matters of substance, and we have been obliged to draw our own inferences, aided by them and the arguments of counsel, chiefly from an inspection of the machines and the models which have been produced before us. And applying the construction of the plaintiffs' patent, as given by the supreme court to the three machines introduced by defendants, we think they are not substantially the same as the machine of the plaintiffs, and, therefore, that the Cawood patent is valid.

By stipulation between the parties, it seems there were repaired, between August 20, 1860, and June 20, 1861, three thousand and forty-one bars of railroad iron, the average length of weld being 17.4 inches per bar. There is great conflict in the evidence as to the utility and value of the Cawood machine, as designed and used by the inventor, but we think the weight of the testimony is that it is both useful and valuable, and, indeed, under the circumstances, the defendants having made use of it so long, can hardly question it. On the whole, we have fixed the actual damages sustained by the plaintiffs for the infringement of their machine by the defendants during the time above-mentioned, at the sum of twelve hundred and ninety-two dollars.

Judgment accordingly.

{In a subsequent case against the same defendant and others the court reaffirmed the patent. Case No. 14,271.}

¹ [Reported by Josiah H. Bissell, Esq., and by Samuel S. Fisher, Esq., and here reprinted by permission.]

This volume of American Law was transcribed for use
on the Internet

through a contribution from [Google](#). 