

in which case his claims would properly receive a narrower interpretation." *Sewing-Mach. Co. v. Lancaster*, 129 U. S. 273, 9 Sup. Ct. 299.

Counsel have united in the statement that as to the defendants Wallace H. Jenkins, John Grist, and John Grist, Jr., who compose the Belmont Knitting Mills, Limited, the bill should be dismissed. Therefore, as to those defendants, a decree will be entered accordingly; but against the remaining defendants a decree in favor of the complainant, in the usual form, may be prepared and submitted.

LEWIS v. PENNSYLVANIA STEEL CO.

(Circuit Court of Appeals, Third Circuit. November 21, 1893.)

No. 19.

1. PATENTS—INFRINGEMENT—ROLLING MILLS.

A patent for a turn-over device for use in rolling mills, consisting of a combination, with a set of stationary abutments, of laterally adjustable carriages, having a tilting support arranged transversely to the same, and provided on their under sides with a bulge or projection, adapted to be struck by the abutments when the carriage is shifted, for the purpose of turning over the rail, being a mere improvement in the art, the claim of which is by its terms confined to the particular construction operating in the defined way, is not infringed by a turn-over device, mounted on vertically moving tables, without tilting support, the rail being sustained entirely by the table rolls, the grooves of which act as a stop to prevent lateral movement, and in which the turn-over finger is positively controlled and actuated at all times through an intermediary sway bar. 55 Fed. 877, affirmed.

2. SAME.

The fourth claim of patent No. 247,665, for a turn-over device for continuous rolling mills, construed, and *held* not to be infringed.

Appeal from the Circuit Court of the United States for the Eastern District of Pennsylvania.

In Equity. Suit by Christopher Lewis against the Pennsylvania Steel Company for infringement of a patent. Bill dismissed. 55 Fed. 877. Complainant appeals. Affirmed.

Henry N. Paul, Jr., for appellant.

Philip T. Dodge, for appellee.

Before ACHESON, Circuit Judge, and BUTLER and GREEN, District Judges.

ACHESON, Circuit Judge. This was a suit in equity, brought by Christopher Lewis, here the appellant, against the Pennsylvania Steel Company, for the alleged infringement of letters patent No. 247,665, dated September 27, 1881, granted to the plaintiff for an improvement in mills for rolling rails, girders, plates, etc. The invention described in the specification contemplates the taking of the bloom from the furnace, and entering it between the first pair of rolls, whence it proceeds on through the machine without handling, and comes out a perfect rail. The improvement consists in a series of two-high rolls, arranged alongside of each other,

whose alternate pairs have a reversed motion, a set of movable carriages running laterally on tracks, to convey the billet or unfinished rail from one pass to the next, means for causing it to be fed forward to the rolls, and means for turning over the article being rolled to suit the different positions in which it may be required to be passed through the rolls. According to the conception of the patentee, the combined devices would form an automatic rolling mill. The present controversy, however, involves only the turn-over device, which is the subject-matter of the fourth claim of the patent. The specification describes this device thus:

"For turning the rail or girder over upon its side, as is sometimes necessary in the successive operations of rolling, I have provided a means, as shown in Fig. 5. This consists in a support, K, grooved to fit the rail, and hung upon a bolt, m, held between two crossbars on the carriage, so that the supporting piece, K, will rest crosswise to the carriage. L is a stationary abutment or cam, bolted down fixedly beneath the carriage, in position to be struck by the bulge on the lower side of K as the carriage is shifted, so that when the carriage is shifted laterally the piece K is turned over by contact with L, and the rail or other object is also turned over. These devices, K, may be arranged in sufficient numbers, and at proper distances apart, to co-operate with fixed abutment, L, so as to efficiently accomplish the desired result."

The fourth claim is in the words following:

"(4) The combination, with a set of stationary abutments, L, of the laterally adjustable carriages having tilting support, K, arranged transversely to the same, and provided on their under sides with a bulge or projection adapted to be struck by the said abutments when the carriage is shifted for the purpose of turning over the rail or girder, as set forth."

The case turns upon the question of infringement.

The defendant uses three-high stand rolls and vertically moving tables. The bloom enters a pass between the lower and middle rolls on one side of the stand, and is received on the opposite side on a vertically lifting table, which lifts the piece to the upper side of the middle roll, whence it returns through a pass between the upper and middle rolls to the side from which it started, and is received on a table, and lowered so that it may be caused to enter the third pass, and so on through the several passes. The tables are furnished with a series of rolls to receive and support the piece, and these rolls are provided with grooves in which the piece lies when the turn-over begins to act upon it. The turn-over device consists of a finger pivoted near one end of the table, so as to rise and fall bodily therewith, and connected near its pivot to a link or sway bar extending to and connected with a standard near one side of the table. As the table rises, the finger, moved gradually by the sway bar, acts on the piece of metal so as to turn it over, and then the finger continues its movement, pushing the piece sidewise until it is brought in line with the next pass, when the finger retreats below the surface of the table.

Under the proofs we find ourselves unable to assent to the proposition that the plaintiff was a pioneer in this department of invention. The prior patents show various devices for turning the bloom or billet of metal; the mechanism for that purpose in some instances being operated by hand, and in some instances power-

driven. Nor was the plaintiff the first to contrive a turn-over automatically operated in connection with the rolls of a rolling mill. Such a device is shown and described in the patent to Stephens & Cooper of August 19, 1873. True, there the successive reducing rollers are in front of each other, the bar passing continuously from one to the next; but still the mechanism comprises an automatic turn-over for turning the bar of metal while it is in course of being rolled. The Fritz patent of December 10, 1872, shows and describes three-high rolls with rising and falling tables, and, co-operating therewith, a device for turning over the billet as the tables are lowered. This turn-over device consists of a post having steel points projecting from its upper end for engagement with the piece of metal being rolled, whereby it is turned over as the table upon which it rests descends. The Price & Lewis patent of May 2, 1876, shows and describes three-high rolls provided with rising and falling tables, having, in co-operation therewith, pivoted fingers, automatically actuated by the moving tables, whereby the billet or unfinished rail is pushed over laterally on the table, so as to bring it opposite the required passes. Now, while it must be conceded that none of the earlier patents anticipates the plaintiff's turn-over device, yet, in view of what they disclose, his true relation to this particular branch of the art seems to be nothing more than that of an improver.

Indeed, with respect to the turn-over device, the patent in suit does not purport to disclose an invention of a fundamental or primary character. The device is but one part of the described automatic rolling mill. The claim here in question, it is admitted, does not cover broadly the combination of a pivoted turn-over finger with a movable carriage, which, by its movement, automatically operates the turn-over. Now, when we look into the specification we discover that it simply describes a turn-over device of a specific form, only capable of use in connection with a transfer carriage moving horizontally from one pair of rolls to another pair. The patent says, "Fig. 5 is a detail of the device for turning the rail." This illustrative drawing does not show the device in place, but is a detached figure, exhibiting the features mentioned in the specification. As we have seen, the piece K is described as "a support," as "grooved to fit the rail," and as provided with a "bulge on the lower side," which strikes against the stationary abutment or cam, L, as the carriage is shifted laterally, so that when "the piece K is turned over by contact with L" the rail is also turned over. Fig. 5 shows two notches on the top of piece K. Evidently this notching is what is meant by the phrase "grooved to fit the rail." The combination claimed, it will be observed, includes not only "the laterally adjustable carriages," but all the other specific features above mentioned, except that the "tilting support, K," is not there expressly described as "grooved to fit the rail." The case, then, is this: The patentee has disclosed only one particular construction operating in a defined way, and this construction he has claimed. It is idle to speculate whether or not he might have made a broader claim. The court is powerless to relieve him from the

consequences of self-imposed limitations. *Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U. S. 274, 278; *Fay v. Cordesman*, 109 U. S. 408, 3 Sup. Ct. 236; *Rowell v. Lindsay*, 113 U. S. 97, 5 Sup. Ct. 507; *McClain v. Ortmyer*, 141 U. S. 419, 12 Sup. Ct. 76.

Upon any fair interpretation of the terms of the fourth claim, can it be truly said that the defendant employs the plaintiff's invention thereby secured to him? We are constrained to give a negative response. Not only is the defendant's turn-over mounted on vertically moving tables instead of "laterally adjustable" ones, but it altogether lacks the "tilting support" of the patent. The billet or unfinished rail is sustained, not by the defendant's pivoted finger, but entirely by the table rolls, the grooves of which act as a stop to prevent any lateral movement of the piece of metal under treatment. In mode of operation, also, the two devices are substantially different. In the defendant's apparatus there is no "bulge or projection" to turn the rail by contact with a stationary abutment, but the defendant's turn-over finger is positively controlled and actuated at all times through the intermediary sway bar. Moreover, the defendant's finger not only turns the billet or rail, but by a continuous movement pushes the piece of metal sideways on the table until it registers with the next pass. In our judgment, the two structures cannot be deemed mechanical equivalents.

Our conclusion is that no infringement is shown, and the decree of the circuit court dismissing the bill is therefore affirmed.

STEINER FIRE EXTINGUISHER CO. v. CITY OF ADRIAN.

(Circuit Court of Appeals, Sixth Circuit. November 13, 1893.)

No. 101.

1. PATENTS—ANTICIPATION—CHEMICAL FIRE EXTINGUISHER.

A claim for the connection of a hollow journaled reel with the generator of a chemical fire engine, so that the contents of the generator may be discharged through a hose wholly or partially wound on the reel, is anticipated by well-known prior devices for forcing water and other liquids through a hose, while wound upon a reel, by the use of a hollow journal. 52 Fed. 731, affirmed.

2. SAME—NOVELTY.

As a hollow journaled reel is not wholly impracticable in machines for throwing water, where pressure is applied in the usual way, its mere application to the generator of a chemical fire engine does not involve invention, for the result attained in either case is merely one of degree. 52 Fed. 731, affirmed.

3. SAME—VALIDITY.

Patent No. 147,442, for a chemical fire extinguisher, is void for anticipation and want of invention. 52 Fed. 731, affirmed.

Appeal from the Circuit Court of the United States for the Eastern District of Michigan.

In Equity. Bill by the Steiner Fire Extinguisher Company against the city of Adrian for infringement of a patent. Bill dismissed. 52 Fed. 731. Complainant appeals. Affirmed.