## UNION IRON WORKS v. SMITH et al.

(Circuit Court of Appeals, Eighth Circuit. September 2, 1895.)

No. 589.

1. Patents—What Constitutes Invention—Mechanical Skill.

Where a guide bar is adapted to slide laterally upon a rod or shaft, and to carry with it a circular saw, also movable upon its shaft, it requires only mechanical skill to apply the lever, which actuates the guide bar, between the points of resistance, so as to obviate a tendency to bind when it is applied only at one end. Nor does it require invention to construct in two pieces a guide bar formerly made of a single piece, where the latter form is inconvenient or unserviceable.

2. SAME-GANG EDGERS.

The Armstrong patent, No. 445,647, for improvements in gang edgers, held void as to claims 1 and 3, for want of invention over the Parish patent No. 369,025.

Appeal from the Circuit Court of the United States for the District of Minnesota.

This was a suit in equity by Henry H. Smith and Alvarado Richardson, copartners doing business as Smith & Richardson and as the Diamond Iron Works, against the Union Iron Works, a corporation, for alleged infringement of a patent relating to improvements in gang edgers. In the circuit court a decree was rendered for complainants. 64 Fed. 583. Defendant appeals.

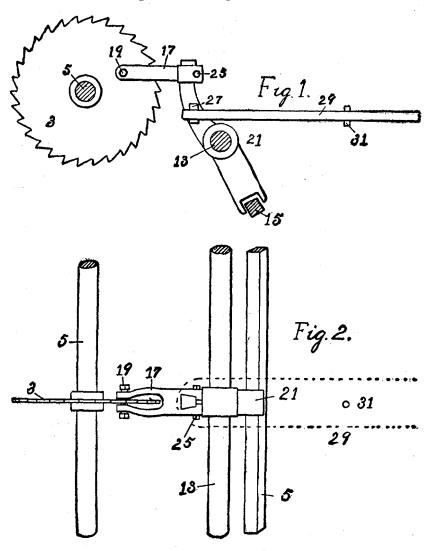
P. H. Gunckel, for appellant.

A. C. Paul (C. G. Hawley, on the brief), for appellees.

Before CALDWELL, SANBORN, and THAYER, Circuit Judges.

SANBORN, Circuit Judge. This is an appeal from a decree enjoining the Union Iron Works, a corporation, the appellant, from constructing and vending machines containing the combination described in the first and third claims of letters patent No. 445,647, issued February 3, 1891, to Henry H. Smith and Alvarado Richardson, the appellees, as assignees of Frederick N. Armstrong, for improvements in gang edgers. The machine manufactured by the appellant was made according to a pattern copied from one of the machines made under these letters patent, and, if these two claims of the patent are valid, they were undoubtedly infringed by the appellant. The real defense to this suit is that there was no patentable novelty in the improvements shown in the combinations so claimed. Gang edgers are machines used in modern sawmills to cut the rough edges from boards in order to make them of uniform width. They had been described in many patents, and had been used in substantially the same form in which they appear in the patent in suit for many years before this patent was issued. They consist of a number of circular saws driven by a shaft on which they are free to move lengthwise of the shaft. suitable machinery for feeding the boards to the saws, and suitable machinery for moving and adjusting the saws in proper positions upon the shaft while they are in motion, and for holding them steadily there, so that without any unnecessary waste they will strip off the rough edges of successive boards of varying width as the latter come

in contact with the saws. The improvements claimed in the patent of the appellees are to the machinery used for moving the saws on the shaft, adjusting them, and holding them in position. The following sketch illustrates the mechanism to which the claims in suit relate, disencumbered of the parts of the edger not material in this suit:



In this sketch, 3 represents one of the saws, which is mounted upon a suitable arbor, 5, upon which it is adapted to be moved longitudinally. The following quotation from the specification which forms a part of these letters patent describes the various parts of appellees' combination, their relation and use:

"Arranged in front of the saws, and extending transversely across the machine, is a stationary shaft, 13, and below this is a bar, 15, preferably of rectangular form in cross section. A saw guide, 17, is arranged to engage each of the saws, being provided at its forward end with the threaded pins, 19, which engage the opposite faces of the saws. An inclined bar, 21, is mounted upon the shaft, 13, and is provided at its lower end with an opening or socket, 23, which engages the bar, 15. This bar is adapted to slide freely in the direction of the length of the shaft, 13, and is held in an upright and exact position by the guide bar, 15. Any desired number of these bars may be arranged on the shaft, 13. The upper end of the bar, 21, is of rectangular or polygonal shape, and the rear end of the guide, 17, is provided with an opening that is adapted to fit upon this end of the bar, 21. The end of the bar, 17, is split or open, and a clamping bolt, 25, is passed through the end of the guide outside of the opening that fits upon the bar, 21. By this means the guide, 17, may be clamped upon the end of the bar, 21, and by loosening the clamping bolt, 25, the guide may be instantly removed from the bar. The bar, 21, is provided upon each side, preferably at a point above the shaft, 13, with a curved projection, 27. A pivoted lever, 29, is arranged upon the frame of the machine, and extends, preferably, to the end of the frame, passing beneath the feed roll. This lever is supported upon the ends of pointed screws, 31, that engage both sides of the lever. The opposite end of the lever is provided with a fork, which is adapted to engage the projections, 27, upon the bar, 21. By this means a horizontal movement of the lever, 29, will cause the bar, 21, to be moved laterally in the machine, thereby moving the saw guide and moving the saw longitudinally upon its arbor."

## The two claims involved in this suit are:

"(1) In a gang edger, the combination, with the movable saws, of a stationary shaft, 13, extending across the machine, the guide bar arranged below said shaft, the bars, 21, mounted upon said shaft, 13, each provided with a recess engaging said guide bar, 15, the saw guides secured to the upper ends of said bars, and engaging said saws, and the pivoted levers engaging said bars, substantially as described."

"(3) The combination, with the saws arranged to move longitudinally upon the saw arbor, of the transverse stationary shaft, 13, the guide bar, 15, arranged below said shaft, the bars, 21, mounted upon said shaft, 13, and engaging said guide bar, the saw guides mounted upon said bars, the curved projections, 27, upon said bars, and the pivoted levers, 29, engaging said pro-

jections, 27, substantially as described."

On August 30, 1887, letters patent No. 369,025 were issued to William F. Parish for certain improvements in gang edgers. The following sketch is a copy of the sheet attached to the specification to these letters patent, which exhibits Figs. 2, 3, and 4, referred to therein:

(No Model.)

3 Sheets-Sheet &

W. F. PARISH.

GAMO EDGER.

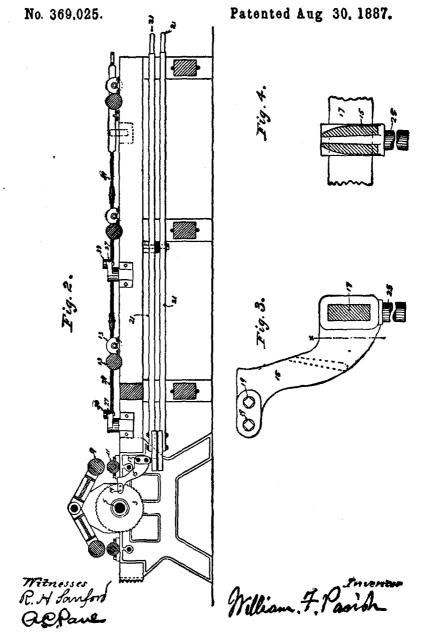


Fig. 2 is a longitudinal vertical section of the machine. Figs. 3 and 4 are details of one of the sliding vokes by which the saws are moved. In his specification Parish says:

"A yoke or guide, 15, is arranged in connection with each of the movable saws. These yokes are mounted and slide freely on rods or bars, 17, that are located below the feed rolls, and are parallel with the saw arbor. The movable saws each project between the two parts of the yoke, as shown in Figs. 1 and 2. Pins, 19, are provided in the yoke to bear against the opposite faces of the saws. These vokes serve a double purpose. They are the means by which the saws are moved and held at any point on the arbor, and they also engage the opposite faces of each saw at a point near its edge, and just below its cutting portion, thereby serving as guides and steadying the saws while they are cutting. The yokes are preferably constructed, as shown in Fig. 2, with sharp edges at the top, and with the space between the two parts increasing in width from the top towards the bottom. By the sharp upper edges of the yokes any slivers or splinters that come against them are broken. and the shape of the opening permits any refuse material that gets into it to drop out at the bottom. I prefer to form the yoke integrally of cast metal, with a tie between the two parts, as indicated by dotted lines in Fig. 3.

"Pivoted in the frame of the machine are a series of operating levers. 21, one for each movable saw. These levers extend to the end of the machine, where they are provided with suitable locking mechanism and a gauge by which the relative positions of the saws may be determined. The opposite ends of the levers are connected with the yokes, 15, by suitable means. As shown in the drawings, the ends of the levers are provided with slots, 23, into which extend lugs or projections, 25, on the yoke. The levers swing in horizontal planes, and, as the handle end of any lever is moved in one direction, the saw with which the lever is connected moves in the opposite direction. As the yoke slides on a support that is parallel with the saw arbor, the saws are moved without twisting or straining them, as would be done were the yokes carried

directly by the levers. \* \*

"In Fig. 3 I have shown an enlarged detail view of one of the yokes. I have here shown the yoke adapted to a single rectangular supporting bar. This form of bar may be used as an equivalent for the two bars shown in Fig. 2, or two rectangular bars may be used, if preferred, for the same purpose."

No one can carefully examine the specifications and drawings that form a part of the letters patent to Parish without being strongly impressed with the view that they describe the same elements and the same combination that are claimed by the appellees in this suit: and the combination of elements described in the patent to Parish certainly performs the same function as that performed by the combination claimed by the appellees in this suit. The only differences between the shifting device of Parish and the improved machine of Armstrong are that: (1) The guide bar slides on two circular shafts. which pass through it, or upon one rectangular shaft, as preferred, according to the specification of Parish, and according to the specification of Armstrong it slides upon one circular shaft that passes through it and upon a rectangular shaft, to which it is attached by a recess in the lower end of the guide bar; (2) the lever is attached to the guide bar below the bars upon which it slides according to the specification of Parish, and between those bars and the saw according to the specification of Armstrong; and (3) the saw guide is an integral part of the guide bar in the construction described by Parish, and it is detachable from the guide bar in the construction described by Arm-The first difference suggested is an immaterial variation of strong.

construction, that deserves no notice whatever. As to the second, it is strenuously argued that it evidences invention, and displays a marked improvement, because a guide bar would bind and slide with difficulty if the power was applied to one end of it, while it would move easily and smoothly if the power was applied between the two points of resistance,—between the saw and the bars on which the guide bar slides. If this be true, any mechanic, or any man of ordinary capacity who was not a mechanic, would know this fact, and would know how to remedy it immediately. If a bureau drawer binds when one pulls one side of it, it requires no exercise of the inventive faculty to apply the necessary force to the middle of the drawer or to both ends simultaneously.

It is contended that the fact that Armstrong made his saw guide detachable from the guide bar was a great improvement, and evidenced invention, because it enabled the operator to remove the saw without removing the guide bar, and to remove the guide bar without removing the saw. But does it require anything above the skill of the ordinary mechanic to make a standard in two pieces, attachable to and detachable from one another, where a standard in a single piece is inconvenient or unserviceable? We think not. If it does, there are few mechanics, skilled or unskilled, that are not inventors. Moreover, this feature of Armstrong's improved combination is not claimed as a part of his invention in either of the two claims of this patent

upon which this suit is based.

Many other patents which describe parts of the combination claimed by Armstrong in the patent in suit, and which illustrate the state of the art when this patent was granted, were pleaded in the an swer and proved upon the trial by the appellant. But the improvements upon the machine described by Parish that are here claimed by the appellees are so slight and so simple, and the description in the patent to Parish is, in our opinion, so clearly a complete anticipation of these claims, that it would be a useless waste of time to notice No change from or improvement upon the shifting other patents. device described in the Parish patent is claimed in the first and third claims of the patent here in suit that is not either a mere immaterial variation of the mechanical construction, or so simple and so obvious a change that any mechanic skilled in the art would naturally have made it immediately upon the suggestion of the evil or inconvenience to be remedied. Such improvements evince no invention, and are not patentable. Stirrat v. Manufacturing Co., 10 C. C. A. 216, 220, 61 Fed. 980, and cases there cited.

The decree below must be reversed, with costs, and the cause remanded, with directions to dismiss the bill; and it is so ordered.

## UNION SWITCH & SIGNAL CO. v. PHILADELPHIA & R. R. CO. et al.

(Circuit Court, E. D. Pennsylvania. September 25, 1895.)

No. 66.

 PATENT INFRINGEMENT SUITS — PARTIES DEFENDANT — RAILROAD COMPANY AND ITS RECEIVERS.

A railroad company and its receivers may be joined as defendants in a bill for infringement of a patent. Infringements committed by the receivers inure to the benefit of the corporation itself, and are to be viewed merely as a continuance of infringements alleged to have been committed by the corporation.

2. SAME-MULTIFARIOUS BILL.

A bill which claims upon several patents, covering several inventions, which are incapable of being unitedly used, or which are separately used by defendant, is multifarious.

8. SAME-PLEAS.

Where a bill claims under several separate patents, alleging that the subject-matter of each is conjointly used by defendants in one and the same connected machine, mechanism, or apparatus, the defendants cannot take issue upon this averment by means of a plea, but the same should be averred by answer.

4. EQUITY PLEADING-MOTION TO STRIKE PLEAS FROM FILES.

The question whether defendant may set up a certain defense by means of a plea may be determined by the court upon a motion to strike the plea from the files, where this question has been discussed on its merits in the briefs, although it is claimed that the proper practice would have been to set the pleas down for argument.

This was a bill by the Union Switch & Signal Company against the Philadelphia & Reading Railroad Company and its receivers for alleged infringement of five patents relating to apparatus for electric railway signaling. A demurrer to the bill on the ground of multifariousness was heretofore sustained by the court. 68 Fed. 913. Thereafter an amendment was allowed, and the order sustaining the demurrer was vacated, and an order entered overruling the same. Id. 914. Defendants thereafter filed certain pleas, which complainants have moved to strike from the files.

George H. Christy and J. Snowden Bell, for complainants. Witter & Kenyon and Thomas Hart, Jr., for respondents.

DALLAS, Circuit Judge. This suit is brought upon five patents. The bill, as originally filed, alleged:

"That the things patented in and by said recited patents constitute and are important elements of a railway electrical signaling apparatus, and are so nearly allied in character as to be capable of conjoint as well as separate use, and that they are and have been so used by the defendants."

Notwithstanding this allegation, the bill was demurred to, upon the ground, among others:

"That it nowhere in said bill of complaint appears, nor is it alleged, that the improvements recited in said patents are all conjointly used or infringed by these defendants, or are all conjointly used or infringed by the defendants in or upon one and the same machine, device, article, or apparatus, or are all capable of conjoint use in or upon one and the same machine, device, article,

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