

Case No. 4,931. FORBUSH ET AL. V. COOK ET AL.

[2 Fish. Pat. Cas. 668; 20 Law Rep. 664; Merw. Pat Inv. 423.]¹

Circuit Court, D. Massachusetts.

May, 1857.

PATENTS—ANTICIPATION—ELEMENTS OF COMBINATION.

1. The defendant, in a patent cause, may show that the thing patented, or some substantial part thereof, existed in a foreign country, and was known to the patentee before his application for a patent, and may have put to the jury the question whether the patentee believed himself to be the original inventor, though such foreign invention had not previously been patented or described in any printed publication.
2. To make a valid claim for a combination, it is not necessary that the several elementary parts of the combination should act simultaneously.

[Cited in *Herring v. Nelson*, Case No. 6,424; *Hoe v. Cottrell*, 1 Fed. 600; *Hoffman v. Young*, 2 Fed. 77; *Holmes Burglar Alarm Tel. Co. v. Domestic Tel. & Tel. Co.*, 42 Fed. 227; *National Progress Bunching-Mach. Co. v. John R. Williams Co.*, 44 Fed. 192; *Brickill v. Mayor of City of Baltimore*, 50 Fed. 275.]

3. Nor is it requisite to include in the claim for a combination, as elements thereof, all parts of the machine which are necessary to its action, save as they may be understood as entering into the mode of combining and arranging the elements of the combination.

[Cited in *Parham v. American Buttonhole Over-Seaming & S. M. Co.*, Case No. 10,713; *M'Millan v. Rees*, 1 Fed. 725; *Hancock Inspirator Co. v. Jenks*, 21 Fed. 916.]

4. If the patentee first made a new and useful combination, he is entitled to a patent for it, though each one of its elements were known before, and two out of three of them had actually been combined in a prior machine.

[Cited in *Hoe v. Cottrell*, 1 Fed. 603; *Haffcke v. Clark*, 50 Fed. 535.]

5. It is decisive evidence that a new mode of operation has been introduced, if the practical effect of the new combination is either a new effect, or a materially better effect, or as good an effect more economically attained. And, in such case, it is not material how much study, thought, time, expense, or experiment was required to make the change.

[Cited in *Celluloid Manuf'g Co. v. Comstock & Cheney Co.*, 27 Fed. 360; *Ligowski Clay-Pigeon Co. v. American Clay-Bird Co.*, 34 Fed. 332.]

This was an action on the case [by Merrill A. Forbush and others against Willis Cook and others], tried before Mr. Justice CURTIS and a jury, to recover damages for an infringement of letters patent [No. 491] for an "improvement in power looms for weaving figured fabrics," granted to William Crompton November 24, 1837, extended for seven years from November 24, 1851, assigned to plaintiffs and surrendered by and reissued to them September 13, 1853 [No. 247]. The particular claim which was alleged to have been infringed by the defendants, was for a combination of a pattern cylinder, with double-hooked jacks, and a lifter and depressor, which were described as so constructed and arranged that the pattern cylinder, in the act of revolving and presenting a section of the pattern, pressed by its projections, which corresponded with the section of the pattern,

upon such of the jacks as were required to be raised, and pushed these jacks into a position to have one set of their hooks caught by the elevator, the other jacks not thus acted on remaining in a position to have the other set of their hooks caught by the depressor; the elevator and depressor rising and sinking, and carrying with them the required jacks thus disposed to receive their action; the shed of the warp being thus opened both ways simultaneously, and the threads necessary to form the figure being disposed in the upper part of the shed.

The defendants insisted that a valid claim for combining these three elements, namely, the pattern cylinder, the double-hooked jacks, and the lifter and depressor, could not be made—First, because the office of the pattern cylinder was fully performed,

and the cylinder was at rest when the jacks, and lifter, and depressor began to act, and so they did not act in combination, but separately; and, second, because the shed could not be formed without the assistance of a fourth part, namely, certain inclined wires, whose office it was to hold in position the jacks not acted on by the pattern cylinder, so that the depressor would catch their hooks in sinking, and that it was necessary to embrace this fourth element in the claim for a combination.

Causten Browne, C. M. Keller, and Rufus Choate, for plaintiffs.

E. F. Hodges and T. A. Jenckes, for defendants.

CURTIS, Circuit Justice, (charging jury): To make a valid claim for a combination, it is not necessary that the several elementary parts of the combination should act simultaneously. If those elementary parts are so arranged that the successive action of each contributes to produce some one practical result, which result, when attained, is the product of the simultaneous or successive action of all the elementary parts, viewed as one entire whole, a valid claim for thus combining those elementary parts may be made. Nor is it requisite to include in the claim for a combination, as elements thereof, all parts of the machine which are necessary to its action, save as they may be understood as entering into the mode of combining and arranging the elements of the combination. If inclined wires are necessary to the action of the combination specified, so are many other parts of the machine, and all parts necessary to the action and combination specified might be said to enter into the mode of combining and arranging the elements of the combination, but need not be and ought not to be included in the combination claimed.

The defendants have offered evidence to prove that two looms, models of which were produced, existed in England long before William Crompton made the thing patented, and were well known to him there. One called the Jones and Milldun loom contains the double-hooked jacks combined with the lifter and depressor, and a pattern cylinder and chain; but the pattern cylinder and chain differ from Crompton's in this: The cylinder revolved so as to present toward the jacks the protuberances corresponding with one section of the pattern, and then stopped; by another combination of mechanism it is then moved horizontally against the jacks, which are thus pushed out into position to have their hooks caught by the elevator. The pattern cylinder is then restored to its former position.

This machine was patented in England, and described in a printed publication before Crompton's alleged invention was made. There is evidence tending to prove that those two movements of the cylinder, when compared with the mode of operation of Crompton's cylinder, are more complex, involve greater cost of construction and repair, and require more time; and that for these reasons Crompton's has a decided practical advantage over Jones and Milldun's.

The other loom relied on is what is called the Witch loom. It has a pattern cylinder like Crompton's, but only single-hooked jack, and opens the shed but one way. It is con-

ceded that to open the shed but one way strains the warp, and is an imperfect mode of operation. This loom has not been patented, nor described in any printed publication.

But the defendants insist that Crompton, having knowledge both of the Witch loom and the Jones and Milldun loom, it required no invention to combine the pattern cylinder of the former with the double jacks, and lifter and depressor of the latter, and therefore that he has made no invention.

The act of congress of July 4, 1836, § 15 [5 Stat. 123], has provided that when it shall satisfactorily appear that the patentee, at the time of his making his application for a patent, believed himself to be the first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or any part thereof, having been before known or used in any foreign country, it not appearing that the same, or any substantial part thereof, had before been patented or described in any printed publication. If you find that when Crompton made application for the patent, he believed himself to be the first inventor of the thing patented therein, his patent is not invalidated by the prior existence of the Witch loom in England. But in considering whether he did believe himself to be the original inventor of what was patented to him, it is material to determine whether he was, in fact, the original inventor thereof. If he was, there is an end to all inquiry on this subject. If he was not, still he may have believed himself to be so.

It has not been denied that in point of fact he first combined the pattern cylinder of the Witch loom with the double-hooked jacks, and elevator and depressor of the Jones and Milldun loom; but some witnesses have testified that in their opinion it did not require invention to devise this combination. Other witnesses have expressed the opposite opinion. The true inquiries for you to make in this connection are, whether the combination made by Crompton was new and useful? If it was a new and useful combination within the meaning of the patent law, it was the subject-matter of a patent, and is not important whether it required much or little thought, study, or experiment to make it or whether it cost much or little time or expense to devise and execute it. If it was a new and useful combination of parts, and he was

the first to make the combination, he is an inventor, and may have a valid patent. When I say it must be new, I do not refer to the materials out of which the parts are made, nor merely to the form or workmanship of the parts, or the use of one known equivalent for another. These may all be such as never existed before in such a combination, and yet the combination may not be new, in the sense of the patent law. To be new in that sense, some new mode of operation must be introduced. And it is decisive evidence, though not the only evidence, that a new mode of operation has been introduced, if the practical effect of the new combination is either a new effect, or a materially better effect, or as good an effect more economically attained by means of the change made in the combinations of the patentee. A new or improved, or more economical effect, attributable to the change made by the patentee in the mode of operation of existing machinery, proves that the change has introduced a new mode of operation, which is the subject-matter of a patent; and when this is ascertained, it is not a legitimate subject of inquiry, at what cost to the patentee it was made, nor does the validity of the patent depend on an opinion formed after the event, respecting the ease or difficulty of attaining it. Witnesses have described to you the practical advantages of Crompton's loom over any other loom for the weaving of fancy fabrics, previously known, and have pointed out the cause of these practical advantages. They attribute them to the modification made by Crompton in the Jones and Milldun loom, changing the double action of the cylinder to a single rotary motion. If this is so, if he first made this modification, and thus made a combination not only new in fact, but which produced the practical advantages described, he was entitled to a patent for that combination, though each one of its elements were known before, and two out of three of those elements had actually been combined in the Jones and Milldun loom. When he introduced the third element, which had not previously been combined with the others, and thereby made a better loom, he made an invention within the meaning of the patent law.

The judge then summed up the evidence respecting Crompton's belief that he was the first inventor, and also on the question of infringement.

The jury found for the plaintiff.

[NOTE. For another case involving this patent, see [Forbush v. Bradford, Case No. 4,930.](#)]

¹ [Reported by Samuel S. Fisher, Esq., and here reprinted by permission. Merw. Pat Inv. 423, contains only a partial report]