

CROMPTON *v.* KNOWLES AND OTHERS.

*Circuit Court, D. Massachusetts.* April 18, 1881.

1. PATENT—RE—ISSUE—PURPOSE TO COVER INFRINGING DEVICE.

Where the purpose of a re-issue is to cover an alleged infringing device by the use of a general term, the new claim will be closely scrutinized; but if the term is intelligible, or can be made so by expert evidence, it will not be fatal to the patent that it may be used in a new sense.

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2. SAME—INVENTOR—PRESUMPTION AS TO STATE OF ART.

It is a legal presumption that mechanics interested in upholding or defeating a patent were fully acquainted with the state of the art when they took out their patents. Each is assumed to have borrowed from the other what was first invented or used by the other.

3. SAME—COMBINATION OF OLD DEVICES—FORMULA OF “KNOWN SUBSTITUTE.”

Where the combination of *horizontal* fingers and jacks, and the combination of *vertical* fingers positively *attached* to jacks, were old, and the complainant claims *horizontal* fingers positively *attached* to jacks, the formula of known substitutes will not apply.

4. SAME—INFRINGEMENT.

The true test of infringement is whether the defendant uses anything invented by the complainant.

5. SAME—SAME.

In a patent on harness mechanism, for looms, the complainant's device, in which the heddle levers are actuated by *horizontal* reciprocating bars engaging with hooked levers, *held*, not infringed by defendants' device, in which they are actuated by a cranked wheel pivoted to a finger connected with them, and engaging with *horizontal* rotating cylinders.

In Equity.

*Causten Browne*, for complainant.

*Chauncey Smith* and *B. F. Thurston*, for defendants.

LOWELL, C. J. The parties to this suit hold patents for the harness mechanism of looms. That of the complainant was granted to him in 1866 and re-issued in 1874, No. 5,718; and that of the defendants, No. 37,760, was issued to Lucius J. Knowles in 1863. In the plaintiff's loom, the levers which raise and depress the threads of the warp by means of the heddles, are, themselves, moved backward and forward by reciprocating bars placed at right angles to the heddle levers, and engaging with them through small levers, which are pivoted to the heddle levers, and provided with hooks at each end. A pattern chain determines which end of the small lever shall engage with the bar, and, consequently, which way the heddle lever shall be moved. In the defendants' machine, as they now use it, each heddle lever is provided with a rod which is pivoted to it, and is connected by a crank-pin with a toothed wheel; and this wheel is pivoted to an arm, or "finger" as 201 it is called by the complainant's witnesses. This toothed wheel, with its arms, lies between two constantly-rotating toothed cylinders, situated at some distance above and below it, and is brought up to engage with the upper cylinder by the finger, when a protuberance in the pattern mechanism forces the finger to rise, and, when that obstacle is passed, it drops back by its own weight to engage with the other cylinder. The difference between the reciprocating bars and the rotating cylinders, and their mode of action and combination, is so great that no one has suggested that they interfere with each other as mechanical contrivances, excepting in one particular, which I will now describe:

The small levers of the plaintiff fall in one direction by gravity, and to enable them to do so (as they are pivoted in the middle) a spur is added to that side of each which is towards the pattern; and this spur works in a slot of the finger, or piece of iron, which is in contact with the pattern. In the defendants' loom, as

patented, the central wheel stood upright on its finger, like a flower on its stalk, and was pushed backward and forward to meet the rotating cylinders, instead of up and down, as now; and therefore the wheel itself had no tendency to fall back when the pressure of the pattern was released. This movement was effected by making the stem, or finger, heavier on the side of the pattern than it was on the other side, so that it fell back by gravity and pulled back the wheel. The defendants' loom, as used, then, differs from the patent in this: that it is set up sidewise. There is no other change; but this seems to be an improvement, because the wheel now falls by its own weight, and the finger is no longer made heavy and one-sided.

The plaintiff, in his re-issued patent, calls his small hooked levers "jacks," and claims the combination of horizontal fingers positively connected with jacks in such a way that the jacks will be pushed up by the fingers, and will be brought back wholly, or in part, by the weight of this positively-attached finger. The reason for insisting on the positive connection between jack and finger is that in the Greenhalgh loom, formerly patented, but now open to the public, there was a horizontal 202 finger which pushed up a jack, but which was not connected with it by a pin or slot, and did not assist it to fall. In that loom the jack was very much heavier than the finger, so that the aid of the latter would have been of no practical benefit.

There is no question about the pushing up: the claim is for a finger which assists, or may, under some circumstances, assist, the jack to fall back. It is not contended that the defendants' finger has this effect, excepting when the jack works stiffly and tends to stick. In the ordinary use of the loom the jack and finger fall simultaneously, as in Greenhalgh. The defendants insist that their central wheel and connecting rod, engaging alternately with the rotating cylinders, are not a jack, according to any use of

language know to mechanics or others; that their stem or arm, whether weighted on one side or not, is not properly called a finger; that the whole contrivance of the wheel, and its two arms, which they call an extensible and contractible link, was described in their patent of 1863, and is their property, which they may set up horizontally, if they choose, in view of the state of the art; that the finger, if it be a finger, does not, in fact, assist the wheel and connecting rod to fall, under any circumstances.

They further say that the plaintiff's patent was re-issued in order to enjoin the use of their loom, and that the vague and general word "jack," not found in the original, was employed to conceal or slur over the great differences between the two mechanisms.

That this was the plaintiff's purpose in his re-issue is not denied; and, under the recent decisions of the supreme court, this circumstance calls for careful scrutiny of the new claims, to make sure that they do not exceed the limits of the invention; but if the word "jack" is intelligible, or can be made so by expert testimony, it is not necessarily fatal to the patent that it may be used in a new sense. Again, the defendants insist that if the word is applicable to their wheel and connecting-rod, which differ so much from the plaintiff's hooked levers, these claims are void upon their face, because they will cover any possible mechanism heretofore or hereafter 203 invented for a similar purpose. The plaintiff replies that it means all known mechanism of that sort. I will assume this to be its true limit in the intent of the plaintiff.

The question, after all, will be whether the plaintiff can hold the defendants as infringers of his invention. If he can, his claim is broad enough for that purpose. If he cannot, it is too broad.

What the plaintiff's invention was, so far as these claims are concerned, is not disputed. He added a pin or slot to the horizontal finger of the Greenhalgh loom,

which adapted his light-balanced levers to operate like the heavy vibrating attachment of Greenhalgh, which, like the defendants' vibrating wheel and rod or rods, was pivoted at one side.

It is a presumption of law that all mechanics interested in upholding or defeating a patent were fully acquainted with the state of their art when they took out their patent, or when they built their machine. This presumption is founded upon a policy like that which imputes to all persons charged with crime a knowledge of the law. It is necessary to the safe administration of justice. Each party may then be assumed to have borrowed from the other whatever was actually first invented and used by that other. So far as this case discloses the positive connection between the jack and the finger was first used by the defendants; but the horizontal position of the finger was not first used by the plaintiff. The only change made by the defendants in their actual from their patented machine is in this horizontal position; and this was not the plaintiff's property. This fact forbids the application of the formula of "known substitutes". That doctrine, first announced by Mr. Justice Clifford, and often applied by him, is that one who has invented and patented a new combination, however small and easy, if it be patentable at all, may treat as an infringement anything which is a purely colorable variation of his invention, obtained by substituting one well-known part or ingredient for another equally well known and fully understood by persons skilled in the art to be exchangeable in similar combinations for the part or ingredient which it replaces. It is a doctrine of very limited application, and, as a formula, 204 is, perhaps, rather misleading. The true question always is whether the defendant uses anything which the plaintiff invented.

In this case, the plaintiff first united the finger and jack when they were placed horizontally; but the

defendants had already united them, for a similar use, when vertical. The whole emphasis, therefore, of the plaintiff's claim is on the word "horizontal." Now, whatever may be the advantages of this horizontal position in the defendant's jack and finger, and whether they took it from the plaintiff's patent or not, they may lawfully take it, because it was old at the time of the plaintiff's invention.

I cannot frame an argument which will sustain the broad claim of the plaintiff to a horizontal finger positively connected to a jack so as to aid its fall, which would not sustain a re-issue by the defendants, in which they should claim the positive connection, generally, between jacks and fingers, by which the finger should and the jack to fall; and as the rights of the parties do not depend upon their skill and diligence in re-issuing their patents, but upon priority of invention, I cannot hold that there is any infringement of the plaintiff's invention. If there is any infringement of his claims they are void.

Bill dismissed, with costs.

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