Case No. 313.

AMERICAN PIN CO. v. OAKVILLE CO. ET AL.

{3 Blatchf. 190;[1] 3 Amer. Law Reg. 136.}

Circuit Court, D. Connecticut. Sept., 1854.

PATENTS FOB INVENTIONS—INFRINGEMENT—DIFFERENT MEANS TO PRODUCE SAME EFFECT.

1. The case of O'Reilly v. Morse, 15 How. {56 U. S.} 62, cited and applied, as to the extent of the rights secured to an inventor by letters patent.

2. Slocum's patent, of September 30th, 1841, for "a machine for sticking pins into paper," defined and construed.

3. Howe's patent, of February 24th, 1843. for an improvement on Slocum's machine, defined and construed.

4. A machine constructed according to Crosby's patent, of April 1st, 1851, does not infringe either Slocum's patent or Howe's patent.

5. The effect of a patent granted to a defendant, on the question as to whether the machine covered by it is, or is not, an infringement of a prior patent, considered.

{Cited in Burden v. Corning, Case No. 2,143; Seymour v. Osborne, Id. 12,688.}

{6. A patent secures to the patentee only the means specified to produce the effect; and a patented machine is not infringed by a machine which produces the same effect, but in which the means used are not substantially the same.}

In equity. This was a bill in equity, founded upon letters patent. {Nos. 2,275 and 2,970.} The facts are fully set forth in the opinion of the court:

Roger S. Baldwin and Charles M. Keller, for plaintiffs.

Ralph I. Ingersoll and Edwin W. Stoughton, for defendants.

Before NELSON, Circuit Justice, and INGERSOLL, District Judge.

INGERSOLL, District Judge. The plaintiffs, by their bill, seek to enjoin the defendants from using a machine to paper pins, the right to use which they claim to be exclusively vested in them. The foundation of their claim rests upon two certain patents, the right to which patents, with the privileges by such patents granted, they now have by virtue of assignments from the patentees. One of these patents was issued to Samuel Slocum, and bears date the 30th of September, 1841, and was to run for fourteen years from the last-mentioned date. The other patent was issued to John J. Howe, and bears date the 24th of February, 1843, and was to run fourteen years from the 5th of December, 1852. The validity of these patents is not contested by the defendants. They admit that the plaintiffs have all the rights which these patents purport to grant. They admit further, that they are using a machine for papering pins; but they deny that, by such use, they have infringed upon any of the rights so granted by such patents.

The defendants claim a right to use the machine for the papering of pins which they are operating, upon the ground that, by such use, they do not infringe upon any rights

granted by such patents, or either of them. They claim, also, that the right to use such machine, so operated by them, is exclusively vested in them, by virtue of a patent granted to Chauncey O. Crosby, and which last-mentioned patent they own, by virtue of an assignment from the patentee.

There has been heretofore, at times, some diversity of opinion as to the extent of the rights secured to an inventor or discoverer by the patent issued in his favor. The supreme court of the United States has, however, settled and determined what rights are so secured to the patentee; so, that now, there can be no diversity of opinion on the subject. In the case of O'Reilly v. Morse, 15 How. [56 U. S.] 62, the rule, as laid down by the chief justice, in giving the opinion of the court, is, in substance, as follows: "He who discovers that a certain useful result will be produced in any art, machine, manufacture, or composition of matter, by the use of certain means, is entitled to a patent for such discovery, provided he sets forth, in his specification, the means he uses to procure such useful result, in a manner so full and exact, that any one skilled in the art or business to which it appertains, can, by using the means he specifies, without any addition to or subtraction from them, produce precisely the result he describes. And, if this cannot be done by the means he describes, the patent is void. And, if this can be done, then the patent confers on him the exclusive right to use the means he specifies, to produce the result or effect he describes, and nothing more. And it makes no difference, in this respect, whether the effect is produced by chemical agency or combination, or by the application of discoveries or principles in natural philosophy, known or unknown before his invention, or by machinery acting together upon mechanical principles. In either case, he must describe the manner and process, as above mentioned, and the end it accomplishes. And every one may lawfully accomplish the same end, and without infringing the patent, if he uses means substantially different from those described. But. if the means used to accomplish the same end, are

substantially like those which the patentee describes, the patent has been infringed, and the one using them must be responsible for such infringement."

The rules thus laid down must govern this case. The patent does not secure to the patentee the result or effect produced, but only the means described, by which such result or effect is produced. The means which he specifies, to produce the result or effect, are secured, and nothing more. And all other means to produce the same result or effect, and not patented to any one, are open to the public. A mere change in the form of the machinery, however, or the means specified, by which the result or effect described is produced, or an alteration in some of the unessential parts, or a substitution or use of known equivalent mechanical powers, not varying essentially the machine, or its mode of operation or organization, will not make the new machine a new invention. The patentee may, however, limit his claim, in his specification, to one particular form of machine, and thus exclude all other forms, though such other forms would embody his invention, and thereby not secure to himself the whole that he has invented. In such a case, he is secured only in the particular form claimed. The patent law was intended to secure to the inventor his whole invention or discovery, but not unless he claimed to be secured in the whole. And, if he claims only a part, or some particular form, such part, or particular form only, is secured to him. No more can be secured by the patent than has been invented or discovered; and no more can be secured than is claimed to be secured in the specification.

In the case of Winans v. Denmead, 15 How. [56 U. S.] 330, the substantial means used by the defendant to accomplish the object sought, were the same as those described and claimed in the specification of the plaintiff's patent. There was no other change than a slight change of form, not varying in substance the means used by the plaintiff, and set forth and described in the specification of his patent. And, as a mere change in the form of the machinery, or the means specified, by which the result is produced, not varying essentially the mode of operation of the thing patented, will not vary its organization, or be deemed a new or different invention, the defendant was deemed to have been an infringer of the plaintiff's rights secured to him by his patent.

The invention of Slocum, as described in his specification, is a "machine for sticking pins into paper" in a row. It consists of a horizontal plate, as described, with as many grooves as the number of pins intended to be stuck in a row, which grooves are of sufficient length and depth to receive one pin and one only; a sliding hopper, so constructed as to hold a number of pins, one directly over the other in a horizontal position, and so made to slide directly over the grooves, as to deposit one of the pins in each groove by gravitation; and a sliding plate or follower, upon the front edge of which projects a system of points or wires corresponding with the grooves, so that, when the sliding plate or follower is driven forward, the wires enter the grooves in which the pins are separated, and

drive forward the pins which are thus made to perforate the previously adjusted folds of a folded and crimped paper, which is held between clamps. And, in the specification, Slocum claims, as his invention, the plate with grooves, as described, for separating the pins, the sliding hopper, which deposits the pins in the grooves, as described, and the sliding plate or follower, with the wires attached thereto, in combination with the grooved plate, as described, and also these in combination with the hopper, as described.

The invention of Howe, as described in his specification, is for an improvement on Slocum's machine for sheeting pins, that is, for sticking pins in rows into sheets of paper. The machine of Slocum did not crimp the paper. But the paper was crimped in the old way, by a separate operation, and then taken out of the crimping apparatus, and placed in clamps, and, while in such clamps, and out of the crimping jaws, the pins perforated through the crimps previously formed, and in that way were sheeted. The improvement of Howe upon the machine of Slocum, crimped the paper, and the pins were stuck in rows into the paper, while the paper was within and held by the crimping apparatus. This improvement consisted of transverse notches made in the crimping jaws of the old crimping apparatus, so that the plus could enter at proper distances between the crimping jaws, and perforate the paper, while the same was being crimped. Before this improvement, no method was known by which the pins could be made to penetrate the paper, and thus be sheeted, while the paper was under the process of being crimped. The old mode was to stick the pins after the paper had been crimped. Howe's improvement was, by means of these transverse notches, to stick the pins while the paper was in the crimping process, and while the crimper, which crimped the paper, held the paper in the form in which it was crimped. It was not to sheet the pins after the paper had gone through the crimping process, and had passed out of the crimping jaws. He, in substance, took the old English crimping bar, and made transverse notches in it, at suitable distances between the jaws, so that the pins could penetrate through these notches, into and through the crimps of the paper, while the paper was within the crimping jaws, and in the process of being crimped.

The patent which was granted to Crosby, bears date the 1st day of April, 1851. The machine which the defendants are operating, is constructed substantially according to

the specification annexed to that patent. Crosby, in his specification, claims to be the inventor of "a new and useful machine for sticking pins." and the patent is granted to him, according to his claim, for "a new and useful improved machine for sticking pins on paper." The specification and claim are not for an improvement on Slocum's machine, or on Howe's machine, for sticking pins; but for an independent machine, governed by different principles; for a machine to produce a result by means substantially different from the means secured to either Slocum or Howe to produce a like result, to wit, the "sticking of pins on paper." The patent is prima facie evidence that Crosby has an exclusive right to that which the patent purports to grant; that he is the first inventor of the machine specified and described in his specification; and that he is the first inventor of an independent machine, governed by different principles, and using means substantially different from the means used by either Slocum or Howe to produce the like result. Corning v. Burden, 15 How. {56 U. S.} 252. The patent to Crosby affords prima facie evidence, therefore, that the means described by him, in his specification, to produce the result of sticking pins on paper, are substantially different from the means described by either Slocum or Howe to produce the like result. And the plaintiffs, to succeed in the case, must counteract this prima facie evidence by sufficient countervailing testimony.

The object of Crosby's machine, is to stick pins in a fillet of paper, across the strip of paper, the crimps being lengthwise of the paper; and to crimp the paper in that way, and coil the fillet, when stuck, into a roll of any convenient size, so that the heads of the pins will be presented on the disc of the roll, and all by one continuous operation. The essential parts of the machine, as operated by the defendants, or the substantial means by which the desired result of sticking the pins on paper is produced, are crimping rollers, by which the paper is crimped; an inclined channel-way, formed by two bars, by which the pins are made to slide down, in a vertical position, hanging by their heads, between the two bars; a revolving screw, one end of which is placed at the bottom of the channel-way, and which, by revolving, is made, at each revolution, to take, in its thread, from the bottom of this channel-way, one pin from the body of pins in the channel-way, separate the same from the body of pins, carry it, by the mechanical force of the revolution of the separating screw, to the other end of the screw, change the pin from a vertical to a horizontal position, and, at the end of the screw to which the pin is carried, cause it to drop, in a horizontal position, into a groove-channel; and a punch at the head of the pin, as it is dropped into the groove-channel, which is made, by machinery, to drive the pins forward at regular intervals, as fast as they drop into the groove-channel, into the crimped paper, after it has passed out of the jaws of the crimping rollers. When the paper is stuck, it has, in the place where it is being stuck, passed out of the crimping jaws; and, during this operation of sticking, one end of the paper is held in a rigid state by the crimping rollers, and the other end by the coiling roller. The paper is stuck on its passage from the

crimping rollers to the coiling roller; and, as the paper is stuck, it is coiled into a roll. The machine is automatic, while other machines known before were not so.

The object of Slocum was to paper the pins at given specified distances apart. And, for that purpose, he uses a plate, with a certain number of grooves in it, into which the pins are placed by certain machinery, and through which grooves the pins are pushed into the paper. The distances apart at which the pins are pushed into the paper, are regulated and controlled by the distances apart of the grooves in the plate, and by those distances only. And his machine is so organized as to regulate the distances at which the pins shall be separated and stuck into the paper, by the distances apart of the grooves in the plate. This is a mechanical law of the machine. There is no such mechanical law in the defendants' machine. As, in the machine of Crosby, there is only one groove, through which the pins are pushed, one at a time, into the paper, the distances apart at which they are pushed into the paper by his machine, cannot be regulated by any such mechanical law. These distances are dependent, therefore, upon upon some other mechanical rule—upon some other mechanical organization. In Slocum's machine, these distances are regulated by one organization. In Crosby's machine they are regulated by another and different organization. In Slocum's machine, the distances apart of the grooves in the plate control the manner in which the pins are placed in the paper. In Crosby's machine, an entirely different organization of the machine controls the manner in which the pins are placed in the paper.

Before the invention of Slocum, grooves or channels had been used, in which to place the pins, with the view to push them into paper, and they had been pushed in in various ways. The grooves used by him as the channels to push the pins into the paper are also used to separate the pins—as channels to deposit the pins in, one by one, one in each groove, as they drop from the hopper, when the hopper passes over the plate. Previous to his invention. the separation had been made by hand, and he invented a particular mode of separation, other than by hand, and sets forth, in his specification, the particular means he uses to produce the result. The plate with grooves, as he describes it, for separating the pins, he claims

as his invention. He also claims the sliding hopper, which passes over the plate, and deposits a pin in each groove, as his invention. He also claims the sliding plate or follower, with the series of wires attached thereto, as described by him, in combination with his groove-plate, as described; and these also in combination with the sliding hopper, as described. This is all he does claim. Grooves, as such merely, through which the plus are pushed into the paper, he does not claim. The object of his machine is, to separate the pins from a pile or mass of pins, and place them in channels, at suitable distances apart to be pushed into the paper, and then, by means of the plate, with the series of wires attached, as described, to push them into the paper.

The instrumentalities, or substantial means, in Slocum's machine, by which the pins are separated from a pile or column, preparatory to being pushed into the paper, are a hopper, and a bed containing grooves of the exact size of the barrel of the pin. And, to effect this separation, the hopper must either slide over the plate with grooves, or the grooved plate must slide or otherwise pass under the hopper. And, to enable the pin to be separated, it must be in the hopper in a horizontal position, or nearly so. The separation cannot be accomplished by that machine, unless the hopper slides over the plate, or the plate slides, or in some other way passes, under the hopper. Without one of these operations, the machine, for this purpose, is useless. One of these operations is essential to it. It is not a Slocum machine for separating, without one of these operations.

Neither of these operations can be found, either in form or in substance, in the Crosby machine. There is no hopper in Crosby's machine, unless the inclined channel-way, in which the pins hang by their heads in a vertical position, be considered as a hopper. That, if it be considered as a hopper, does not move. It is stationary. Of course, it neither slides nor passes over anything. From the lower extremity of the inclined channel-way, the pins are taken, one by one, by the thread of a screw, while it is revolving, and while the pin is vertical, and, by force of mechanical power, the pin is carried, in the thread of the screw, to the other end of the screw, and is there deposited by the screw, in a horizontal position, in a groove-channel. The screw, while operating, has no motion but a revolving motion. During the whole time, it remains in the same space. It neither moves forward nor back. There is, then, nothing in the machine, which, either in form or in substance, has any resemblance or similitude to a sliding hopper, sliding or passing over recesses in a plate, to receive the pins as they drop from a hopper, or to recesses for receiving pins, sliding or passing under a hopper. In Slocum's machine, one of these processes must take place; and, without one of them, a machine for this purpose cannot be a Slocum machine.

In the Slocum machine, the recess in the plate, which receives the pin from the hopper, must be of the exact size of the barrel of the pin. In the Crosby machine, the recess in the thread of the screw, which receives the pin, and by which it is transported to the other end of the screw, and which, it is claimed, is a mechanical equivalent for the recess

in the plate with grooves in Slocum's machine, need not be of the exact depth or breadth of the barrel of the pin. It may be of any size, provided it is not sufficiently large to permit the head of the pin to fall through. The essential means used in Crosby's machine to bring about the result, to wit, a separation of the pins from the pile or column, are, therefore, substantially different from the means used in Slocum's machine to produce the same result. In this respect, the two machines operate differently, and depend upon distinct organizations. The same substantial means are not used in each.

The mode in which the pins are pushed into the paper by the defendants' machine, is by a punch applied to the head of the pins, after they are deposited by the screw in the groove-channel, by which the pins are made one by one to penetrate the paper through the crimps. Slocum does not claim, as his invention or discovery, the mode generally of pushing pins through a grooved channel into paper, by means of a punch applied to the head of the pin. The state of the arts, as shown to exist prior to the time of his invention, shows that he could not with success have made any such claim. His claim is for his plate, with a series of wires attached, in combination with the grooved plate, as described by him, by which combination a row of pins is stuck by one operation. The mode adopted by the defendants in their machine is, therefore, not embraced in Slocum's claim. They have a right, therefore, to use it, notwithstanding the patent granted to him.

From the descriptions already given of the Howe machine and of the Crosby machine, and from the working of the machines, as exhibited on the hearing, it appears manifest, that the mode of operation of Crosby's, as it respects the improvement or invention claimed by Howe, is different from the mode of operation of Howe's. Howe's invention is but an alteration of the old English crimping bar, by the cutting of transverse notches through the bar, where the two jaws meet, to enable the pins to pass through these notches, and thereby stick the paper, while it is within the crimping jaws, and while it is being crimped. Notches or apertures of some kind are an essential means to effect the result which Howe designed by his invention. Without them his improvement does not exist. There are no notches or apertures in Crosby's crimping rollers, and nothing

which bears any resemblance or similitude to them. The pins are stuck, not when the paper is within the crimping jaws, but after it has passed out of them. The device of Crosby is essentially different from that of Howe. The pins are stuck, by Howe's invention, while the paper is within the crimping jaws, by means of notches or apertures in the crimping bars. No such means are used by Crosby. The principles of the two machines, in their modes of operation, and in the means used by each to effect the result accomplished, are different. Therefore, they are not identical. One is not an infringement upon the other. With this view of the case, the decree must be that the plaintiffs" bill be dismissed, with costs to the defendants.

NELSON, Circuit Justice, concurs.

{NOTE. There are no other cases reported prior to 1880 known to involve these patents.}

[1] {Reported by Samuel Blatchford, Esq., and here reprinted by permission.}