

Case No. 5,718.

GRAY V. JAMES ET AL.

{Pet. C. C. 394;<sup>1</sup> Robb, Pat. Cas. 120.}

Circuit Court, D. Pennsylvania.

April Term, 1817.

PATENTS—INFRINGEMENT—SIMILARITY—USE OF IMPROVEMENTS—DEFECTIVE SPECIFICATIONS—ABANDONMENT—DAMAGES—NAIL-MAKING MACHINE.

1. Action for the violation of a patent right. Where two machines are substantially the same, and operate in the same manner to produce the same kind of result, they must be in principle the same.

{Cited in Whitney v. Emmett, Case No. 17,585; Smith v. Pearce, Id. 13,089; Brooks v. Bicknell, Id. 1,944; Hogg v. Emerson, 6 How. (47 U. S.) 481; Stephenson v. Hoyt, Case No. 13,373. Followed in Nichols v. Harris, Id. 10,244. Cited in Teese v. Phelps, Id. 13,819; Rapid Service Store Ry. Co. v. Taylor, 43 Fed. 251.}

{Cited in Tillotson v. Ramsay, 51 Vt. 311.}

2. If an invention for which a patent has been obtained, is improved by any person other than the patentee, the inventor of the original machine has no right to use the improvements, and the inventor of the improvements has no right to use the original machine, without the license of the patentee.

{Cited in Reed v. Cutter, Case No. 11,615.}

3. A patent “for an improvement in the art of making nails, by means of a machine which cuts and heads the nail at one operation,” is not a grant of an abstract principle, nor is it the grant of the different parts of any machine; but of an improvement applied to a practical use, effected by a combination of various mechanical powers to produce a new result.

{Cited in Wilson v. Rousseau, Case No. 17,832; Aiken v. Bemis, Id. 109.}

4. It is not sufficient to invalidate a patent, that the specification is materially defective, unless the patentee intended by concealment of parts of the machine to deceive; and where practical mechanics are enabled to supply any omissions

{Cited in Whitney v. Emmett Case No. 17,585; Hogg v. Emerson, 6 How. (47 U. S.) 482; Cutting v. Myers, Case No. 3,520; Dederick v. Cassell, 9 Fed. 312; Webster Loom Co. v. Higgins, 105 U. S. 588.}

5. Quere: If in an action for the violation of a patent right, where the general issue has been pleaded, it is competent to the defendant to give in evidence that the machine is useless, and has been abandoned.

6. After a patent is granted for an invention or discovery, the disuse of it by the patentee is not an abandonment of the rights of the patentee to the same, but they continue for fourteen years from the date of the patent

7. It is the duty of the jury, should their verdict be in favour of the plaintiff in an action for the violation of a patent right to find the actual damages sustained by the plaintiff, which the court will treble.

{Cited in Allen v. Blunt, Case No. 217.}

{Cited in Heckle v. Grewe, 125 Ill. 60, 17 N. E. 437.}

[8. Cited in Whitney v. Emmett, Case No. 17,585, to the point that the want of utility may be a good reason for not issuing a patent hut is no cause for avoiding it]

GRAY v. JAMES et al.

This was an action [by Gray and Osgood against James, Odion, and Wilson.] for a violation of the plaintiffs' patent right, for an improvement in the art of cutting and heading nails by one operation. The specification which is part of the patent, describes the machine to consist in an upright and permanent jaw, and a moveable jaw, united by a pivot at the top, representing a vice; in each jaw there is a cutter fixed, to nip the bar of iron to the size of the nail, a gripping die to hold the iron, until the head is made, by what is called a set or heading die, which is placed below. The power which effects and completes this operation, is generated by a lever of the first order, passing through a mortice made in the standing jaw which acts upon a toggle or double joint connected with the moving jaw of the vice, which in its first movement compresses the jaws so as to cut the iron, and then as it is further depressed, forces up the set and completes the nail by heading it. This invention was made by Jacob Perkins, some time in the year 1798, who, on the 24th of July of that year, assigned his right to the same to Guppy and Armstrong, to whom a patent was granted the 14th of February, 1799, and on the 14th of December, 1801, Guppy and Armstrong assigned the patent to the plaintiffs. The machine, which it was proved had been used by the defendants prior to the expiration of the patent to Guppy and Armstrong, was invented by Jesse Read, who obtained a patent for the same in February 1807. It consisted of the two jaws of a vice, the one fixed and the other moveable, with cutters inserted in each for cutting off the iron, intended for the nail, and gripping the heading dies for holding and heading it. These jaws are united by a pivot below, in consequence of which, a lever, of the second order, is used to generate the

power, being forked and embracing the two jaws, which are compressed together by a friction roller, fixed between the forks of the lever, which acts on an inclined surface of the moveable jaw.

It was proved by witnesses that more than 200 pounds of iron were made into nails by Perkins's machine which was erected by Guppy and Armstrong at their works at Amesbury; that for the want of machinery to force the piece of iron down into the gripping die, the machine would clog if an attempt were made to work it with rapidity, and on this account it would not make more than thirty or forty nails in a minute; in consequence of this defect, it was altogether abandoned by Guppy and Armstrong, and it did not appear that Perkins's machine had been ever used afterwards by any person. All the defects in this machine were cured in Read's. In the latter there was a forcing slide, which instantly removed the piece of cut iron into the gripping die and thus enabled the machine to operate with all the rapidity that it was capable of, insomuch that it has made in one working day to the amount of 1,500 pounds of nails, and upwards of 200 nails in a minute. From the models of the two machines exhibited in court, it appeared that independent of the difference in the position of the two machines, of the levers, the friction roller on the inclined plane instead of the toggle joint and the forcing slide, there were others which gave to Read's a preference over Perkins's. For instance, in the former the dies were in contact nearly with each other and with the cutters; they are visible, can be easily taken out and sharpened or otherwise repaired without taking the machine to pieces; whereas in Perkins's the dies were at such a distance from the cutters, that the witnesses supposed the piece of iron might not always fall regularly into the dies; and the cutters and dies being concealed in the jaws, they could not be taken out and sharpened and adjusted, but by taking the machine to pieces and wasting much time. It was proved by many witnesses examined on the part of the plaintiffs, that the two machines were precisely the same in principle, and that from an inspection of the specification and drawing, they or any artist skilled in nail machinery might make the machine. The defendants examined a number of witnesses, who stated that they considered the two machines to be different in principle from each other, and that from the specification and drawings, they should not know the form of the cutters and dies, or where or how to fix them, as nothing in relation to their form or situation, positive or relative, is stated in the specification or appears in the drawings. The defendants produced a number of patents, for cutting and heading nails at one operation, all prior to Perkins's discovery, with the specifications and drawings; but not a single witness was examined to explain them, so as to show the principle on which they operated, nor did it appear in evidence, that any machines for cutting and heading nails, at one operation, had ever been erected or used prior to Perkins's; except that one witness said he had seen in the year 1797, a machine like Perkins's invented by Rodgers, which cut and headed nails at one operation, but no particular description of it was given.

It was contended by the defendants' counsel. First, that Perkins is proved not to have been the original inventor of this machine. Second. That the two machines are entirely different in principle from each other. Third. That the patent is for the whole machine, which comprehends the lever, and the other parts of the machine, of which it is agreed Perkins was not the inventor. That the patent therefore is broader than the invention, and is therefore void. Fourth. That Perkins's machine was altogether useless, and was abandoned. Fifth. That the specification is not sufficiently precise within the words of the law. Bull. N. P. 77; 2 H. BL 470, 463.

WASHINGTON, Circuit Justice (charging jury). Many defences have been set up to this action, each of which will require a distinct consideration. I shall derange somewhat the order in which the points have been argued, and present first to the consideration of the jury, that which is involved in the general issue. First, it is denied that the defendants have at any time used the machine for which a patent was granted to Guppy and Armstrong. It is not denied, that the defendants have used a machine for cutting and heading nails at one operation, but it is contended that that machine is different, not only in form, but in principle from the plaintiffs' machine.

What constitutes a difference in principle between two machines, is frequently a question of difficulty more especially if the difference in form is considerable, and the machinery complicated. But we think it may safely be laid down as a general rule, that where the machines are substantially the same, and operate in the same manner, to produce the same result, they must be in principle the same. I say substantially, in order to exclude all formal differences; and when I speak of the same result I must be understood as meaning the same kind of result though it may differ in extent. So that the result is the same according to this definition, whether the one produce more nails, for instance, in a given space of time than the other, if the operation is to make nails. The application of this rule will be more obvious and better understood, by dissecting the machine invented by Perkins, and afterwards the machine which the defendants have used. In the former, we find the two jaws of a vice, the one fixed and the other moveable on a pivot at the top, which connects them together.

In each of these jaws Is fixed a cutter, the use of which is to cut off from the bar of iron as much as will be necessary to form the nail, which, being separated, falls by its own gravity into a die, which holds it by a firm gripe until the head is formed, by what is called the set or heading die. The power which produces this double operation, is a lever of the first order, acting upon a toggle joint which compresses the two jaws, and consequently the cutters together and also raises the set, in such a manner as to “head the nail. But the whole is performed by the same movement of the lever. It is impossible to describe the parts of the defendants’ machine, and its operation, without using the same expressions, except that his is inverted, the pivot of the vice being below, and a lever of the second order embracing the jaws with a friction roller, acting on an inclined plane made on the moving jaw of the vice, instead of the lever of the first order, and the toggle joint. But it is in full proof, that these differences as to the lever and the friction roller, are the necessary consequences of the machine being inverted. After having made this comparison and ascertained the mode of operation by each machine, connected with the result of each, the jury can find little difficulty in deciding whether they are the same in principle or not.

The witnesses have differed in opinion, as to the comparative merit of the toggle joint in Perkins’s machine, and the friction roller in Bead’s. If their operation is precisely the same, the difference in form does not amount to an invention of any kind. If the friction roller is better than the toggle joint, which seems to be the opinion of some of the defendants’ witnesses, then Bead has the merit of having discovered an improvement on Perkins’s machine, and no more. If the jury should be of opinion, that the parts of the two machines which I have noticed are the same in principle, and that each will by the same operation cut and head nails; then it will follow, that the forcing slide, the proximity of the cutters and dies to each other, the balance wheel, and some other additional parts in Bead’s machine, which give it a great and acknowledged preference over Perkins’s, are merely improvements, but do not change the principle of the machine. If improvements only, what is the legal consequence? Most clearly this and no more: that Perkins and those claiming under his patent, have no right to use those improvements without a license from the inventor. But on the other hand, neither Bead nor any other person, can lawfully use the discovery of Perkins of the principal machine without a license from him. The law wisely and with justice, discriminates between, and rewards the merit of each, by granting an exclusive property to each in his discovery, but prevents either from invading the rights of the other. If then the jury should be of opinion, that the two machines are the same in principle, it is no defence for the defendants for using Perkins’s discovery, that they have improved it, no matter to what extent.

The next objection made to the plaintiffs’ right of recovery is, that the plaintiffs’ patent is void, for the following reasons:

First. Because Perkins was not the original inventor. It is insisted, that the patents which have been read, show that machines for cutting and heading nails at one operation, had been discovered prior to the discovery of Perkins. Whether this be so or not, this court feels itself incompetent to decide. No explanation of those machines has been given, and we cannot from the specifications and drawings which accompany these patents, form the slightest idea of their structure, operation or result. It will be for the jury to examine these papers and decide for themselves. It is however not unworthy of remark, that in addition to the circumstance, that no explanation of those machines has been given to the jury, it does not appear that any one of them was ever put into operation. As to Bodgers's machine, there is but one witness who gives evidence respecting it, and that in a very imperfect manner. It is not mentioned in the notice of special matter to be given in evidence, and although this affords no sufficient ground for rejecting the evidence, it furnishes a reason why the defendants should be expected to lay before the jury, a satisfactory explanation of the principles of that machine, and the manner in which it operated. Upon the whole, the jury, after examining carefully the evidence given in support of this objection, will apply to it the same rule which the court has laid down under the former head, for testing the similarity between Perkins's and Bead's machines, and will be governed by it.

Second. The next reason assigned against the validity of the plaintiffs' patent, is, that it is too broad; or if not so, that the patent is for a principle merely. The court is of opinion, that there is not the slightest foundation for this objection. The patent is supposed to be for the machine itself, which is composed of parts which have long become public property. This is not the fact. The patent is for an improvement in the art of making nails, by means of a machine which cuts and heads the nails at one operation. It is therefore not the grant of an abstract principle, nor is it the grant of the different parts of any machine; but of an improvement applied to a practical use, effected by a combination of various mechanical powers to produce a new result. The lever, the vice, the cutters, the dies, &c. may be used by any person without a violation of the plaintiff's patent. But they cannot be used in their combined state, to produce, by the same operation the same result, which is the distinguishing characteristic of the plaintiffs' machine, without a license from the owners. If, indeed, Perkins was not the original inventor, then the plaintiffs' patent is void,

without inquiring whether it is too broad or not But if the jury should be of opinion that he is the original inventor, then there is nothing in this objection.

The third objection made to the validity of the patent is, that the specification is defective. The law declares that it must be full, clear, and explicit, so as to distinguish it from all other machines of the same kind, and to enable any person skilled in the art, of which it is a branch, to make and use the same. These expressions are very strong, and seem intended to accommodate the description which the patentee is required to give, to the comprehension of any practical mechanic skilled in the art of which the machine is a branch, without taxing his genius or his inventive powers. "Whether the specification in this case be defective, within this interpretation of the law, must depend upon the evidence of the practical mechanics, who have testified on each side of the question, as well as upon the judgment of the jury.

Those examined on the part of the plaintiffs, have stated, that the position of the cutters and dies would necessarily be understood by any practical mechanic acquainted with nail machines, upon examining the specifications and drawings. This is denied by some of the defendants' witnesses. But if the jury should be of opinion, that the specification is materially defective, the objection will not be sufficient to invalidate the plaintiffs' patent, unless they should also be satisfied, that the concealment of the circumstances not described, was intended to deceive the public<sup>2</sup> What degree of evidence ought to be required to prove such fraudulent intention, must rest with the jury to decide. Positive evidence can seldom be expected, nor is it necessary. The law it is true, requires that such intention should fully appear; but still it may be presumed from circumstances entirely to the satisfaction of the jury, which would be sufficient to authorise them to find the fact. As if the parts concealed are so essential and so obviously necessary to be disclosed, that no mechanic skilled in the art could reasonably be expected to understand the subject, so as from the description given to make the machine; it would be difficult to impute the omission of the patentee to a fair motive. But, this presumption would seem to be much weakened in a case like the present, where so many practical mechanics have testified that they could not hesitate in supplying the omissions in this specification. With these observations this objection is submitted to the jury.

The last objection to the plaintiffs' patent, is, that the machine is not a useful one, and that it was abandoned both by the inventor and his assignees. Whether this objection can, in an action for a violation of a patent right, upon the general issue, be made to the validity of the patent may well be doubted. If true, it might afford a good reason against granting the patent as well as for repealing it on a scire facias, on the ground of the patent having issued upon a false suggestion. But, the defence is by no means involved in the general issue, which merely denies that the defendants have used the plaintiffs' machine; nor does the 6th section of the law authorise the defendants to give it in evidence, on the

general issue. They are therefore not bound to give notice of such a defence under that section, and the consequence would be, that the plaintiffs could not fail to be surprised at the trial, with a defence which they could not from the general issue, anticipate. As to this however, no positive opinion is given. But, is not such a defence in the mouth of these defendants, totally irreconcilable with the act which forms the basis of the action? If the machine be useless, it may fairly be asked, why do they use it? If they give the answer which has been given in this case by their counsel, that it was used with improvements which make it valuable, may it not be replied, that this proves that the original invention was useful? For, if that had not been made by some person, it is most obvious that the improvements could not have been made. If Perkins, or some other person, had not made the discovery which he did, can any person doubt that the present improved and valuable nailmachinery would be unknown in the world? How then, can it be said with truth, that the original discovery was useless? It is contended that this discovery was abandoned. But after it was patented, no disuser of it could amount to an abandonment, so as to deprive Perkins or his assignees of their exclusive right to it for fourteen years. There is no doubt but that it went into disuse in consequence of the subsequent improvements; but this does not prove it to be useless, any more than it impairs the plaintiffs' right to the original discovery. If the jury should be in favour of the plaintiffs upon these points, they will find for the plaintiffs the actual damages sustained by them, by reason of the use by the defendants of the discovery to which they are entitled; which the court will treble.

Verdict for 750 dollars single damages; judgment for the treble damages.

{Two rules were subsequently obtained (see Case No. 5,719), one to show cause why a new trial should not be awarded, the other, why judgment should not be arrested. In support of the first rule it was contended that the evidence showed that Perkins was not the original inventor of the machine, and also that the damages were excessive. In support of the second it



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was contended that the description of the patent in the declaration rendered it too vague, and that the breach was too generally stated. Both rules were discharged.]

<sup>1</sup> [Reported by Richard Peters, in the specification, such an intention will not be presumed.]

<sup>2</sup> If the invention be specifically described in the patent, so as to distinguish it from what was before known, the patent is good, although the specification does not describe the invention in such full, exact and clear terms, that a person skilled in the art or science, of which it is a branch, could construct or make the thing invented; unless such defective description or concealment, was made with intent to deceive the public. Lowell v. Lewis [Case No. 8,568].