

Case No. 4,560.

EVANS v. EATON.

[3 Wash. C. C. 443;¹ Robb, Pat. Cas. 193.]

Circuit Court, D. Pennsylvania.

Oct. Term, 1818.²

PATENTS—COMPETENCY OF WITNESS INTERESTED IN SUIT—PATENTABILITY OF IMPROVEMENT IN OLD MACHINE—VALIDITY OF PATENT.

1. Where the record of a judgment in the circuit court, has been sent to the supreme court, and an appearance entered there, by the defendant in error; and a decision by the supreme court, reversing the judgment, and remanding the cause for a new trial; the defendant in error cannot object, that the judgment, in this cause, is in force, and unreversed, upon the ground, that no writ of error had been sued out.
2. A witness, who uses a machine resembling that of the plaintiff, is not an incompetent witness for the defendant; because the patent of the plaintiff may be defective, as the court cannot, in the case in which he is offered as a witness, declare the patent void, so as to benefit the witness; although in the case a verdict should be given for the defendant, on the ground that the plaintiff was not the original inventor of the machine.

[See note at end of case.]

3. If two machines be substantially the same, and operate in the same manner, to produce the same result, though they differ in form, proportions, and utility, they are the same in principle; and the one last discovered, can have no other merit than to be an improvement of the other; but for which the inventor can obtain no patent. If the improvement be in the principle, a patent may be obtained for the improvement.

[Cited in *Whitney v. Emmett*, Case No. 17,585; *Smith v. Pearce*, Id. 13,089; *Hovey v. Stevens*, Id. 6,745; *Crompton v. Belknap Mills*, Id. 3,406; *Converse v. Cannon*, Id. 3,144; *Willimantic Linen Co. v. Clark Thread Co.*, Id. 17,763.]

[See note at end of case.]

4. To the validity of a patent for an improvement, it is necessary to state, in the specification, in what the improvement consists.

[Cited in *Hogg v. Emerson*, 6 How. (47 U. S.) 484.]

[See note at end of case.]

[This was a suit by Oliver Evans against Eaton for the alleged infringement of a patent for an improved hopperboy granted to plaintiff under Act Cong. Jan. 21, 1808 (6 Stat. 70).]

The cause came on to be re-tried, under the mandate of the supreme court of the United States, to award a ven. fac. de novo. See 3 Wheat. 519. When the cause was called for trial, the defendant objected, that the judgment of this court, upon the former trial [Case No. 4,559], was still in force, and unreversed; as no writ of error had been sued out, to remove the record of that judgment into the supreme court; without which, that court would not take jurisdiction of the cause.

BY THE COURT. After an appearance of the defendant in error in the supreme court, and pleading, as it must be presumed he did, to entitle him to appear by counsel,

EVANS v. EATON.

and argue the cause, it is too late to take this objection. We must presume, that all formal objections, and particularly one to the want of the writ, were waived by consent of parties.

The jury being sworn, the competency of Philip Frederick, to give evidence for the defendant, was objected to by the plaintiff, on the ground that he uses a Stouffer hopperboy; and that if the defendant should obtain a verdict, upon the ground of the use of the Stouffer hopperboy by others, prior to the plaintiff's discovery, the court must declare the patent void; and thus incapacitate the plaintiff to recover against the witness.

BY THE COURT. This patent, according to the plaintiff's claim, covers eleven distinct things; and may be perfectly good for a part, though not so as to this particular machine. If, therefore, the jury should find for the defendant, on the ground that the hopperboy

was known, and in use, prior to the plaintiff's discovery, THE COURT could not declare the whole patent void, on account of the unsoundness of a part of it, in relation to a distinct machine; and we can find no authority for the judgment which has been hinted at—that is, to avoid the patent, quoad the hopperboy. It is only in this most extraordinary case, of one patent for a great number of different inventions, that this difficulty could occur. But we must say, that, on that account, it must be exempt from that provision of the 6th section [Act 1793; 1 Stat. 322], as to the judgment, where the objection goes only to the prior use of one of the patented machines.

The deposition of Michael Former was offered, and objected to, for the reasons urged against it in the case of *Evans v. Hettick* [Case No. 4,562]. The plaintiff's counsel examined the clerk of the court, to prove what the practice had been; who states, that rules to take depositions generally, have frequently been entered in the office; and depositions of witnesses living within the state, and above one hundred miles from Philadelphia, have been taken; that it has been rare, for twenty years past, to take depositions under the act of congress [1 Stat. 88, § 30].

THE COURT rejected the evidence, for the reason assigned in *Hettick's Case*.

The counsel for the plaintiff contended, that, under his patent, he was entitled to claim, 1. The entire hopperboy, which is protected by the judgment of the supreme court, in this very case (3 Wheat. [16 U. S.] 519); although it should appear that he was not the original inventor of it, which, however, they contended he was; and that the defendant's witnesses, who had testified as to the prior use of the Stouffer, hopperboy, must be mistaken in their recollection of dates. 2. An improvement on a hopperboy.—That it is not necessary to the validity of such a patent, to describe in the specification, in what the improvement consists, the 3d section of the law being, in this respect, merely directory to the secretary of state, authorizing him to refuse a patent, if such a specification be not filed. But, however this may be in common cases, they insisted, that the supreme court having decided that one of the plaintiff's claims, under his patent, is to an improvement on the hopperboy (3 Wheat. [16 U. S.] 517), the requisition (page 518) that he should show the extent of his improvement, must necessarily mean, that he should show it by parol evidence; since the chief justice having noticed, in the opinion (page 515), that the specification does not distinguish the improvement from the original machine, the court would never have sent the cause to another trial, upon the plaintiff's claim to an improvement, if the specification was deemed too defective to authorize his recovery.

WASHINGTON, Circuit Justice, (charging jury). This is an action for an infringement of the plaintiff's patent, which the plaintiff alleges to be,—1. For the whole of the machine employed in the manufacture of flour, called the hopperboy. 2. For an improvement on the hopperboy. The question is, is the plaintiff entitled to recover upon either of these claims? The question is stated thus singly, because the defendant admits, that he

uses the very hopperboy for which the patent is in part granted, and justifies himself by insisting,—1. That the plaintiff was not the original inventor of the hopperboy, as patented, but that the same was in use prior to the plaintiff's patent. 2. That his patent for an improvement is bad; because the nature and extent of the improvement are not stated in his specification; and if they had been, still the patent comprehends the whole machine, and is, therefore, too broad.

1. The first is a mixed question of fact and law. In order to enable you to decide the first, it will be well to attend to the description which the plaintiff has given of this machine, in his specification, of which a model is now before you. Its parts are—(1) An upright round shaft, to revolve on a pivot in the floor. (2) A leader or upper arm. (3) An arm set with small inclining boards, called flights and sweepers. (4) Cords from the leader to the arm, to turn it. (5) A weight passing over a pulley, to keep the arm light on the meal. (6) A cog at the top of the shaft, to turn it, which is operated upon by the water power of the mill. The flights are so arranged, as to track, the one between the other, and to operate like ploughs; and at every revolution of the machine, to give the meal two turns towards the centre. The sweepers are to receive the meal from the elevator, and to trail it round the circle, for the flights to gather it to the centre, and also to sweep the meal into the bolt. The use of this machine is stated to be, to spread any granulated substance over a floor;—to stir and expose it to the air, to dry and cool it, and to gather it to the bolt.

The next inquiry under this head is, when was this discovery made? Joseph Evans has sworn, that in 1783 the plaintiff informed him he was engaged in contriving an improvement in the manufactory of flour, and had completed it in his mind some time in July of that year. In 1784, he constructed a rough model of the hopperboy; but having no cords from the extremities of the leader to those of the arm, it was necessary, in making his experiments, to turn around the arm by hand. In 1785, he set up a hopperboy in his mill, resembling the model in court, and the machine described in his specification. The evidence of Mr. Anderson strongly supports this witness; and indeed, the discovery, as early as 1784, or 1785, is scarcely controverted by the defendant. The defendant insists, that a hopperboy, similar to the plaintiff's, was discovered and in use many years anterior even to the year 1783, and relies upon the testimony of the following witnesses: Daniel Stouffer, who deposes that he first saw the Stouffer hopperboy

in his father's, Christian Stouffer's, mill, in the year 1774. In 1775 or 1776, he erected a similar one in the mill of his brother Henry, and another in Jacob Stouffer's mill in 1778 or 1779. Philip Frederick swears, that in the year 1778, he saw a Stouffer hopperboy in operation in Christian Stouffer's mill, and in the year 1783 he saw one in Jacob Stouffer's mill and another in U. Charles's mill; and that it was always called Stouffer's machine. George Roup states, that in 1784, he erected one of these hopperboys in the mill of one Brenneman, and that in 1782, Abraham Stouffer described to him a similar machine which his father used in his mill. Christopher Stouffer, the son of Christian, has sworn, that his father having enlarged his mill in the year 1780, erected a new hopperboy, of the description above mentioned, which is still in use in the same mill, now owned by Peter Stouffer. If these witnesses are believed by the jury, they establish the fact asserted by the defendant, that the Stouffer hopperboy was in use, prior to the plaintiff's discovery.

The next inquiry is into the parts, operation and use of the Stouffer hopperboy.—This consists of an upright square shaft, which passes lightly through a square mortise in an arm, underneath which are fixed slips of wood, called flights; and the arm is turned by a cog on the upper end of it, which is moved by the power which moves the mill. The arm, with the flights, operates as it turns upon the meal placed below it; and its use is, in a degree, to cool the meal, and to conduct it to the bolt. It will now be proper to compare this machine with the plaintiff's. They agree in the following particulars:—They each consist of a shaft, a cog to turn it by the power of the mill, and an arm with flights on the under side of it. They each operate on the meal, below the arm, to cool, dry, and conduct it to the bolt. In what do they differ? The plaintiff's shaft is round, and consequently could not turn the arm, into which it is loosely inserted, if it were not for the cords, which connect the extremities of the arm to that of the leader. The shaft of the S hopperboy is square, and therefore turns the arm without the aid of a leader or of cords. It has neither a weight nor pulley, nor are the flights arranged in the manner the plaintiff's are; and consequently, it does not in the opinion of most of the witnesses, cool, or prepare the flour for packing, as well as the plaintiff's.

The question of law now arises, which is,—are the two machines, up to the point where the difference commences, the same in principle, so as to invalidate the plaintiff's claim to the hopperboy, as the original inventor of it? We take the rule to be, and so it has been settled in this and in other courts, that, if the two machines be substantially the same, and operate in the same manner, to produce the same result—though they may differ in form, proportions, and utility, they are the same in principle; and the one last discovered, has no other merit, than that of being an improved imitation of the one before discovered, and in use, for which no valid patent can be granted to any one; because he cannot be considered as the original inventor of the machine. If the alleged inventor of a machine, which differs from another, previously patented, merely in form and proportions, but not

EVANS v. EATON.

in principle, is not entitled to a patent for an improvement; (which he cannot be, by the 2d section of the law;) he certainly cannot, in a like case, claim a patent for the machine itself. The question for the jury, then, is, are the two hopperboys substantially the same in principle?—not, whether the plaintiff's hopperboy is preferable to the other? Because if that superiority amounts to an improvement, he is entitled to a patent only for an improvement, and not for the whole machine. In the latter case, the patent would be too broad; and therefore void, where the patent is single. If you are of opinion, that the plaintiff is not the original inventor of the hopperboy, he cannot obtain a verdict on that claim, unless his is an excepted case. The 1st 3d and 6th sections of the general patent law [1 Stat. 318], conclusively support this opinion. But the judgment of the supreme court in this case (3 Wheat [16 U. S.] 519) is relied upon by the plaintiff's counsel, to prove, that this is an excepted case; insomuch, that the plaintiff is entitled to a verdict; although you should be satisfied that he is not the original inventor of the hopperboy. That declares, "On consideration whereof, this court is of opinion, that there is error in the proceedings of the said circuit court, in this, that the said court rejected testimony which ought to have been admitted; and also in this, that in the charge delivered to the jury, the opinion is expressed, that the patent on which this suit is instituted, conveyed to Oliver Evans only an exclusive right in his improvement in manufacturing flour and meal, produced by the general combination of all his machinery; and not to his improvement in the several machines applied to that purpose; and also, that the said Oliver Evans was not entitled to recover, if the hopperboy in his declaration mentioned, had been in use previous to his discovery." But we are perfectly satisfied, that the interpretation put upon this clause, by the plaintiff's counsel, is incorrect; and this for the following reasons: (1) The question of priority of invention, was not before the supreme court, and it is therefore incredible, that any opinion, much less a judgment would have been given upon that point. The error in the charge, which this part of the judgment was obviously intended to correct, is stated by the chief justice in the following words:—"This part of the charge seems to be founded on the opinion that if the patent is to be considered as a grant of the exclusive use of distinct improvements, it is a grant of the hopperboy itself, and not for an

improvement on the hopperboy.” (2) It contradicts what is stated in p. 517, where it is said, that the plaintiff’s claim is to the machines which he has invented. Now, if he did not invent the hopperboy, he has no claim to it; and if so, could the court mean to say, that he was nevertheless entitled to recover under that claim? Such a decision was certainly not called for, by the terms of “The act for the relief of Oliver Evans,” but would seem to be in direct violation of it. The act directs a patent to issue to Oliver Evans, not for his hopperboy, elevator, &c., but “for his invention, discovery, and improvements in the art, &c., and on the several machines which he has discovered, invented, and improved.” Now, if the hopperboy was not invented, &c., by Oliver Evans, this act, (without which Oliver Evans could not have obtained a patent,) did not authorize the secretary of state to grant him one for that machine; or if granted, it is clear that it was improvidently done. If, indeed, the supreme court had been of opinion, that the fact of Oliver Evans’s prior invention was decided, and could constitutionally have been decided by congress, there might have been more difficulty in the case; but the argument of counsel, which pressed that point upon the court, was distinctly repudiated. We conceive that the meaning of that part of the opinion is, that this court erred in stating to the jury, that Oliver Evans was not entitled to recover, if the hopperboy, that is, the original hopperboy, had been in use prior to the plaintiff’s alleged discovery of it; because, if the plaintiff was entitled to claim an improvement on the hopperboy, which this court had denied, and which the supreme court affirmed, this court was clearly wrong in saying to the jury, that the plaintiff could not recover for his improvement; which, in effect, was said.

Upon the whole, then, the court is of opinion, that Oliver Evans is not entitled to a verdict in his favour, as the inventor of the hopperboy, if you should be of opinion, that another hopperboy, substantially the same as his in principle, as before explained, up to the point where any alteration or improvement exist in his hopperboy, was invented, and in use prior to the plaintiff’s invention and discovery, however they may differ in mere form, proportions, and utility.

2d. The plaintiff’s next claim is, to an improvement on a hopperboy; which claim, we were of opinion, in another case, has received the sanction of the supreme court. His counsel contend, that his improvement is—(1) On the original method of supplying the bolt by manual labour. (2) On his own hopperboy;—and (3) On some hopperboy invented by some other person. Let this position be analyzed:—(1) It is said to be an improvement on the original method by manual labour.—But it is obvious, that if this be the invention, it is of an original machine; because, wherever the patent law speaks of an improvement, it is on some art, machine, or manufacture, &c.; and not on manual labour, which was applied to the various arts, long before the invention of machinery to supply its place. (2) An improvement on his own discovery. But where is the evidence of such invention? It is true, that Joseph Evans has stated, that the plaintiff constructed, in 1784, a rude model

of a hopperboy; but it was no substitute for manual labour, because, without the cords or leading lines, the arm could not move; and it was, therefore, turned by hand. It was, in fact, in an incomplete state,—in progress to its completion, but not given out, or prepared to be given out, to the world, as a machine, before 1785, when the cords to turn the arm were added. (3) An improvement on a former machine. This is a fair subject for a patent; and the plaintiff has laid before you strong evidence, to prove that his hopperboy is a more useful machine than the one which is alleged to have been previously discovered and in use. If, then, you are satisfied of this fact, the point of law, which has been raised by the defendant's counsel, remains to be considered; which is, that the plaintiff's patent for an improvement is void, because the nature and extent of his improvement are not stated in his specification. The patent is for an improved hopperboy, as described in the specification which is referred to and made part of the patent. Now, does the specification express in what his improvement consists? It states all and each of the parts of the entire machine—its use, and mode of operating; and claims, as his invention, the machine,—the peculiar properties or principles of it, viz. the spreading, turning and gathering the meal; and the raising and lowering of its arm, by its motion, to accommodate itself to the meal under it.—But does this description designate the improvement, or in what it consists? where shall we find the original hopperboy described, either as to its construction, operation, or use; or by reference to any thing by which a knowledge of it may be obtained?—where are the improvements on such original stated? The undoubted truth is, that the specification communicates no information whatever, upon any of these points. This being so, the law, as to ordinary cases, is clear, that the plaintiff cannot recover for an improvement. The 1st section of the general patent law speaks of an improvement as an invention; and directs the patent to issue for his said invention. The 3d section requires the applicant to swear, or affirm, that he believes himself to be the true inventor of the art, machine, or improvement, for which he asks a patent; and further that he shall deliver a written description of his invention, in such full, clear, and exact terms, that any person, acquainted with the art, may know how to construct and use the

same, &c. That it is necessary to the validity of a patent, that the specification should describe in what the improvement consists, is decided by Mr. Justice Story, in the cases referred to in the appendix to 3 Wheat [16 U. S.], and in the English cases of *Boulton v. Bull* [2 H. Bl. 463]; *Bovill v. Moore* [2 Marsh. 211]; *Macfarlane v. Price* [1 Starkie, 199]; *Harmar v. Playne* [11 East, 101, 14 Ves. 130]; and perhaps some others. What are the reasons, upon which this doctrine is founded? They are to guard the public against unintentional infringements of the patent, during its continuance, and to enable an artist to make the improvement, by a reference to some known and certain authority, to be found amongst the records in the office of the secretary of state, after the patent has run out. But it is contended, by the plaintiff's counsel, that the law would be unreasonable, to require, and, therefore, that it does not require, this to be done, unless the improvement is upon a patented machine, a description of which can be obtained by a reference to the records of the office of the secretary of state;—that it might often be impossible for the patentee to discover, and consequently to describe, the parts of a machine, in use, perhaps, only in some obscure part of the world. The answer to this is, that an improvement necessarily implies an original; and unless the patentee is acquainted with the original, which he supposes he has improved, he must talk idly, when he calls his invention an improvement. If he knows nothing of an original, then his invention is an original, or nothing; and the subsequent appearance of an original, to defeat his patent, is one of the risks which every patentee is exposed to under our law. As to the supposed distinction between an improvement on a machine patented, and one not so, there is nothing in it. In both cases, the improvement must be described; but with this difference—that, in the former case, it may be sufficient to refer to the patent, and specification, for a description of the original machine; and then to state in what the improvement on such original machine consists;—whereas, in the latter case, it would be necessary to describe the original machine, and also the improvement. The reason for this distinction is too obvious to require explanation.

If the general law upon this subject, has been correctly stated, the next question is, is this an excepted case? It is contended by the plaintiff to be so; 1st, in virtue of the act for the relief of Oliver Evans; and, 2d, by the decision of the supreme court. (1) Under the private act; that declares, that the patent is to be granted, in the manner and form prescribed by the general patent law. What constitutes the manner and form, in which a patent is granted by this law? The obvious answer is, the petition, the patent, with the signature of the president, and the seal of the United States affixed to it—the oath, or affirmation—the specification, or description of the invention, as required by the 3d section—the drawings and model, if required. Will it be contended, that a patent would be granted in the manner and form prescribed by this law, if there were no description whatever of the invention? And if it would not which is taken for granted, where is the

EVANS v. EATON.

difference between the total absence of a specification, and one which has no reference at all to the invention for which the patent is granted? This is not the case of an imperfect or obscure description, but of one which relates exclusively to the whole machine; whereas the invention, for which the patent is granted, is for an improvement only. (2) The opinion of the supreme court, which states, “that it will be incumbent on the plaintiff, where he claims for an improvement, to show the extent of this improvement” 3 Wheat. [16 U. S.] 518. But how is it to be shown? The court has not pointed out the manner; and we therefore think, the only fair implication is, that it must be shown as the statute of the United States, and the general principles of law require,—by the patent and specification. If it may be shown by parol evidence to the jury, as the plaintiff’s counsel contend it may, then it may be fairly asked, *cui bono*? What sort of a showing would this be, so far as it could be productive of any useful purpose? As to this defendant, the evidence comes too late, to save him from the consequences of an error, however innocently committed. As to the public at large, with a view to caution during the continuance of the patent, and to information of the nature of the improvement, after its termination, the evidence given in this cause, must be evanescent, and totally useless. We feel perfectly convinced, that the meaning of the supreme court, as to this subject, is again misunderstood by the plaintiff’s counsel; not only for the reasons above mentioned, but because the extent and construction of the plaintiff’s patent, and not the validity of it, in relation to any one of the machines, were the questions before that court; and none others, (in reference to the charge,) were argued at the bar, or reasoned upon, by the chief justice, in delivering the opinion.

Upon the whole, we are of opinion, that the plaintiff is not entitled to a verdict, for the alleged infringement of his patent, for an improvement on the hopperboy.

Verdict for defendant.

[NOTE. For other cases involving this patent see note to [Evans v. Hettick, Case No. 4,562.](#)

[This decision was reviewed by the supreme court on writ of error, and the judgment was duly affirmed. In reference to the testimony of Frederick, the court held (Mr. Justice Story delivering the opinion) that it did not appear whether the hopperboy used by Frederick was that improved by the plaintiff, but, assuming

it was, his testimony was rightfully admitted, it being perfectly clear that a person having an interest only in the question, and not in the event of the suit, is a competent witness. In respect to the question as to whether the patent covered the whole machine, or only certain improvements, the court referred to the plaintiff's specification, in which he sums up his invention without qualification, and in just such a manner as would be made use of if the whole machine was substantially new in its structure and combination. As the plaintiff could not claim a patent for more than his own invention, and as this patent was for the whole machine, it was proper for the jury to decide whether the patented machine was not in point of fact the same in principle as other machines theretofore used. The verdict of the jury negatived the right of the plaintiff as the inventor of the whole machine. Mr. Justice Story held that there was no specification of any distinct improvement set forth in the patent, as required by the patent act. Mr. Justice Livingston dissented. *Evans v. Eaton*, 7 Wheat. (20 U. S.) 356.]

¹ [Originally published from the MSS. of Hon. Bushrod Washington, Associate Justice of the Supreme Court of the United States, under the supervision of Richard Peters, Jr., Esq.]

² Affirmed in 7 Wheat. (20 U. S.) 356.]