Case No. 7,565.

JUDSON V. COPE ET AL.

[1 Fish. Pat. Cas. 615; 1 Bond, 327; Merw. Pat. Inv. 238.]¹

Circuit Court, S. D. Ohio.

May, 1860.

PATENTS—INFRINGEMENT—TRIAL—NOTICE OF SPECIAL MATTER—USE—COMPARISON—NOVELTY—EVIDENCE—PRIOR PUBLICATION.

- 1. Upon the issue of novelty, testimony will not be received to show what might have been done with prior machines. This is mere speculation, and not fact.
- 2. The notice of special matter, required under section 15 of the act of 1836 [5 Stat. 123], must give the name of some person who had knowledge of the prior use at the place indicated. It is not enough to name the parties using the thing—the notice must state the name of some witness.
- 3. It is not competent for a defendant to show use in a foreign country. All that the statute contemplates is proof of the invention as set forth in a patent or printed publication.

[Cited in Illingworth v. Spaulding, 9 Fed. 612.]

- 4. In a trial at law, it is not competent to compare prior machines with that used by the defendant. The issues of novelty and infringement are distinct, and the testimony upon the issue of novelty must be confined to a comparison of the prior machines with that of the patentee.
- 5. Whether a mere drawing, unaccompanied by any description whatever, can be received as a printed public work, quaere.

[Cited in New Process Fermentation Co. v. Koch, 21 Fed. 587.]

- 6. The superior working of the patented machine, as distinguished from all prior machines, may be evidence of a difference in principle, and is competent testimony upon the issue of novelty.
- 7. To make the defense of prior publication in a foreign country available, it must appear that the improvement has been so clearly and intelligibly described, in the prior publication, as that the invention could be made or constructed by a competent mechanic.

[Cited in Goff v. Stafford, Case No. 5,504.]

- 8. Such proof of prior knowledge must be anterior not merely to the date of the patent, but to the time when the invention was actually made.
- 9. Upon the issue of infringement, the jury are not to inquire whether the two things are identical in structure, form, or dimensions, but whether they involve substantially the same mechanical principles.

[Cited in Hamilton v. Ives, Case No. 5,982.]

This was an action on the case tried before Judge Leavitt and a jury. The suit was brought upon the patent for "improved valves for governors," granted to Junius and Alfred Judson, and more fully set forth in the report of the case of Judson [v. Moore, Case No. 7,569]. In the present action, the manufacturers and patentees of the infringing valve were sued. The defendants [Nathan Cope and William R. Hodgson] plead the general issue, and gave a long notice of special matter, embracing over forty prior valves, and upon the trial, the testimony of one hundred and sixteen witnesses was given to the jury. Certain rulings in the progress of the trial are believed to be of value.

A witness having testified to the use of a certain prior valve, upon locomotives, where it was actuated solely by hand, was asked by defendants counsel: "Ques.—What change would have to be made in order to permit this valve to be actuated by a governor?" Question objected to.

LEAVITT, District Judge. This witness has testified that in 1834 a valve was applied to railroad locomotives; and the question is asked whether, in his judgment, it could be used in connection with a governor, so as to regulate the steam engine. It seems to me this is going rather into the region of speculation than of fact, and, though the witness, it is

true, is produced as an expert, still his opinion is for a different purpose. What this valve might have been applied to, is a mere matter of speculation, and the question is objectionable in this point of view. I suppose it is going too far to ask what might have been accomplished. It is, perhaps, a matter of argument for the jury, but the question is whether you can give evidence of the speculative opinions of the witness. The question is overruled.

One George French was called, who examined a valve described and shown in "Lardner on the Steam Engine," a work published in London. He was then asked, by defendants' counsel: "Ques.—Have you any knowledge of such valve being known and used prior to 1850, by James Watt, at his manufactory in Birmingham, called 'Soho'?" Question objected to. 1. Because of the want of sufficient notice, inasmuch as the notice does not state "who had knowledge" of the use of the said valve by James Watt; and 2. Because no proof of foreign use can avoid an American patent: the proof must be confined to the publication. The notice averred that the patented valves "were in use in foreign countries, and described in certain printed publications anterior, etc., and used by James Watt, and Mr. Matthew Boulton, at the city of Birmingham, at the manufactory of Boulton, known as 'Soho,' England, and elsewhere in England and Scotland." The witness, French, was named in another part of the notice, as possessing knowledge of the use of valves in America, but not at 'Soho,'" in England.

LEAVITT, District Judge. I think this question never has been raised here before. The notice under which the evidence purports to be produced sets forth that the invention patented by Judson was known in foreign countries prior to the date of this patent, and was described in certain printed publications before the date of his discovery and then goes on to affirm that it was used by James Watt and Matthew Boulton, at the city of Birmingham, at the manufactory of Boulton, known as "Soho," in England. It does not set forth the name of the person by whom the fact is to be proved, but simply that it was used by James Watt at a certain place in Birmingham. Now, I think the statute is clear in requiring the name of the person who had knowledge of the use, and the place where it was used. As in this case, if the averment had been that the witness French, residing at a certain place described, had knowledge of the fact that James Watt had known and used this invention in England, perhaps the proof would be competent If the notice had averred that this witness had knowledge of the use of this invention, at Birmingham, at the time stated, the question perhaps might be admissible. I must say that I entertain very serious doubts whether you can go beyond the publication itself. The statute is express in declaring that the prior use and knowledge of the invention, and use in foreign countries, does not affect the validity of the patent in this country, unless that invention had been described in a printed publication, or had been patented in the foreign country. It seems to me where the invention has been described, or has been patented, it is not competent

for the defendant to show the use in a foreign country. All that the statute contemplates is the proof of the existence of the invention as set forth in a patent or publication. If the identity of the two things can be established to the satisfaction of the jury, the fact of the publication in a foreign country is just as fatal as if there were positive proof that the thing had been known and used at a specified place.

A witness having explained a valve described in "Tredgold on the Steam Engine," was asked by defendants' counsel: "Ques.—How does the valve described by Tredgold resemble the Cope & Hodgson (defendants') valve?" Objected to; because the issues of novelty and infringement are distinct. Prior valves can only be compared with the patented valve upon the issue of novelty: the defendants' valve can only be compared with the plaintiff's upon the issue of infringement.

LEAVITT, District Judge. You may ask how it resembles the plaintiff's valve, but when you ask how it resembles defendants' valve, you might just as well ask how it resembles anything else. Of course it is competent for defendants to show prior knowledge and use of any valve that is substantially like that patented by this plaintiff. To show prior knowledge and use of a valve substantially like that patented by the plaintiff, is one of the issues in this case. All evidence tending to that point is, undoubtedly, admissible. But I can not see how any comparison is to be instituted between the Cope & Hodgson valve and the one described in that book. I do not see how it tends to enlighten the jury upon either of the issues.

The defendants had given notice that the patented valves were described in certain printed publications, anterior, etc., and that "the descriptions in said printed publications, and in which reference is made to such valves, are as follows, viz:" In the list which followed was named, among others, a certain German work, which, when offered in evidence, consisted of plates or drawings only, without any printed description. This proof was objected to.

LEAVITT, District Judge. I suppose it is not a matter of great importance in this case, but I should hesitate very much to accept a mere drawing, unaccompanied by any description whatever. I think it is not admissible under the present notice.

The defendants having rested, without attacking the utility of the patent, but having offered much proof to show want of novelty, the plaintiffs offered to read a deposition to show the superior working of the Judson valve,

to the prior valves that had been offered in evidence. To this proof the defendants objected as follows: "We object to the deposition, and all other proof of this nature, because it only proves utility, which we do not deny. The superior workings of Judson's valve can not prove its novelty, or the inferior workings of the old valves prove that they differ from Judson's."

LEAVITT, District Judge. If the evidence were not offered on the question of utility, I should hesitate to admit it. It is true, as the case now stands, that the utility of the plaintiff's invention has not been directly impeached, and is not controverted. The plaintiff having rested upon the presumption arising from the patent itself, it would not be admissible to show it was of utility. The only question, as I suppose, is whether it may not be received upon the question of novelty. It has been the object of the defendants, to show that the plaintiff's invention was not original with him—not new—and that therefore his patent was not a valid one; and in support of that proposition, they have introduced evidence of valves in use at different places before the date of this patent, which, they claim, embodied the same principle as the plaintiff's valve in regard to the nature of the openings and principles of graduation. It is very evident, from the aspect of the case, that there may be a question, not free from difficulty, as to the identity of the plaintiff's invention with the valves, in regard to which evidence has been offered. Now the only question is, whether it is competent for the plaintiff to offer evidence of the utility of his invention—that in its practical operation it produces results which have never been produced by any valves used before, and would this assist the jury in coming to a conclusion. I do not suppose it would be competent for one claiming under a patent, to rest the novelty of the invention solely upon the fact that it may be superior; but it does seem to me, as the case now stands before this jury, it will be a matter that will tend to lead them to a just conclusion upon the question of novelty, if the plaintiff can show upon testimony, that the working of this invention is different, and decidedly superior in its results. I think this point was ruled very distinctly by Judge Nelson, in the case referred to, and we admitted such evidence in a former case here, and it strikes me as being based upon very good sense, and I have no doubt it is very sound law. There may be cases in which the mind of the jury will be much aided by evidence of the practical workings of the invention; and if the superiority is marked and decided, it is possible it might determine the question. Of course, in whatever testimony is offered, it must appear to the jury that it was the thing patented to which the testimony refers. I shall therefore admit the evidence.

The charge of the court In Judson v. Moore [supra] having been given in full, certain portions only of the charge in the present case are reported.

- G. M. Lee and S. S. Fisher, for plaintiff.
- C. B. Collier, J. L. Miner, E. W. Kittredge, and M. W. Oliver, for defendants.

LEAVITT, District Judge (charging jury). There are three questions in the case. The first is a question of law. Its decision devolves entirely upon the court, and upon that point I shall present my views very briefly. It is objected to this patent, in the first place, that it is void upon its face; that it does not appear with reasonable certainty, what the patentee claims as new, or as his invention, and that he does not sufficiently describe in his specification or claim in what that invention consists. This objection is, in substance, that the specification or claim does not disclose, legally, a patentable subject, and that the patent is therefore invalid on its face. The invention itself, the patentee has called "improved valves for governors." That is the designation or title contained in the patent. In the preliminary part of his specification he refers to the fact that valves for governors, to regulate the admission of steam into the proper passages of an engine, had been known before; that fact is clearly and distinctly admitted, but it is claimed that they had failed to effect perfect and entire uniformity in the action of the engine, that the engine was subject to vibrations and perturbations that detracted seriously from its efficiency and utility, and, to remedy this defect, the patentee proposes the invention for which this patent was granted. This object he sets forth in these words in his specification: "The object of our invention is to decrease the perturbation of steam engines, caused by the tension of the steam, or the resistance or load, and the more effectually to cheek any undue increase or decrease in the motion of the engine, than can be effected by any plan known prior to our invention; and, to this end, the nature of our invention consists in making the steam passage or passages controlled by the governor valve or valves, so that the area, or sum of the areas, of the passage or passages shall gradually increase in capacity not only by the amount of motion which uncovers it, but so that the amount of area opened by any given amount of motion shall be gradually greater toward the fully open end, by means of which any tendency to increase the motion of the engine shall be checked, by reducing the area of the steam passage to a greater extent than would be due to the amount of motion given to the valve, and the tendency to decrease the motion of the engine, shall be checked by increasing the area of the steam passage to a greater extent than would be due to the motion of the valve alone, imparted by the governor, under the change of speed of the engine."

I will read to you, here, a passage from the charge of the court to the jury, in the former

case, as being the opinion of the court at this time: "The patentee then describes the mode of constructing his improvement, and the principle of its action, and then sets forth the limitation of his claim, which it is proper to do in all specifications where a patent is for an improvement on what was known before, and which is done to guard against claiming what was previously known. He says, he does not limit his invention to any particular form of valve, and refers to valves with circular apertures, as not having an increase or decrease of capacity proportioned to the range of, motion." Finally, in the summing-up, he says: "What we claim as our invention, and desire to secure by letters patent, is making the opening or openings, controlled by the governor valves of steam engines, of gradually increasing capacity from the closed toward the open position, substantially in the manner, and for the purpose specified."

There is no question but that the claim is for a distinct and independent improvement, and not for a combination. The claim is for an improved valve, and that valve to operate in connection with a governor. There is no claim of an invention disconnected from the governor; it is simply a claim to an invention of an improved valve, to be operated upon in connection with and by the aid of the governor. In deciding whether the subject of this invention is set forth in a clear and intelligible manner, so that we can understand its precise character, it is necessary to take the whole specification together, not simply the summary, at the conclusion, but the entire paper; and the single point is whether, taking the whole specification together, there is a subject set forth and described which in itself is patentable, and whether it is so clearly described that it can be understood, and the precise character of the invention known.

I see no reason for the conclusion that his description of the invention is so uncertain and ambiguous that it can not be sustained as a patentable subject. I will not go more fully into an analysis of these specifications. They appear to my mind to be sufficiently clear.

The second point is the alleged want of novelty in this invention. It is, of course, the right of the defendant sued for an infringement of a patent, to contest the novelty of the invention, and to prove, if he can, that the invention or improvement was known before, and the patentee was not in fact the first inventor. The only limitation to this right of defense, on the part of one sued for an infringement, to prevent the plaintiff's being taken by surprise, is, that the defendant should give notice thirty days prior to the trial, of the place where the improvement has been used, and the name and residence of the person to whom such prior use was known. Notice has been given to the plaintiff that this invention had previously been known, and was in use in various places in this country, and also in foreign countries.

However, it is not proof of the want of originality or novelty in the invention for which an American citizen has procured a patent, that it may have been known or used in a

foreign country, unless it appears that the invention or improvement was patented in such foreign country, or there described in some public work. But, if it is proved that the invention, or something substantially like it, has been described in a book, or has been the subject of a patent in the foreign country, it is a good defense to an action for infringement in this country. Still to make this defense available, it must also appear that the improvement, which has been known in a foreign country, has been so clearly and intelligibly described, as that the invention could be made or constructed by a competent mechanic. I mean that a mere suggestion or imperfect description of an invention would not be sufficient to defeat the American patentee.

This proof of prior use and knowledge must, of course, be anterior not merely to the date of the patent, but to the time when the invention was actually made. The jury will remember, from the evidence, that the plaintiff had substantially perfected his invention, probably in the month of February, 1849, so that all the proof of prior use and knowledge must go back of that period. Proof of knowledge and use since then would not avail the defense.

There is one consideration that may be useful to the jury in determining the question of the novelty of this invention. You will have noticed, gentlemen, that the court in the present case, permitted evidence to go to you of the practical operation of plaintiff's valve, with a view to show that it was different and superior in its operation to any one that had been previously known. The court held, and I still think, correctly, that if the evidence as to novelty and originality, involved the question in any serious doubt, proof of the actual performance of the valve itself, was competent to go to the jury upon the question of the novelty of the invention. It will be obvious that, where there is doubt upon the question of novelty, and where the evidence of the witnesses leaves it uncertain, whether the principle of the valves was identical, that evidence of the superior performance and utility of the patented improvement, would have a direct bearing upon the question of novelty. In other words, if the jury are satisfied that the invention patented produces a result decidedly and clearly different from any which had been produced by the action of any prior valve, and that it was decidedly superior to any other in its operation, it would certainly afford a ground for the presumption that the thing itself had not been known before. It is, therefore, in the present case, proper for the jury to take into consideration the evidence that has been adduced upon that point. There has been a considerable amount of evidence to show the entire success and efficiency of the Judson valve in

controlling the action of the engine; in so permitting the passage of the steam from the boiler as to produce a uniform and steady action of the engine, and to prevent perturbations and vibrations; and, as was remarked by the court upon the late trial, I still retain the opinion that it will often happen in questions of this nature, that experiment is much more satisfactory than mere theory. It will be often the most satisfactory proof of real character and efficiency. It is true there is some conflict of testimony on this point; there has been some evidence adduced (upon the part of the defendants) to the effect that the Judson valve was not more complete, or successful, or efficient in its operation in controlling the action of the engine than the old butterfly valve previously known. It will be, of course, for the jury to determine the weight to be given to the testimony on either side of this question. The number of witnesses undoubtedly preponderates very much in favor of the superiority and complete success of the Judson valve in controlling the motions of the engine. If the jury are satisfied that any of the old valves, concerning which testimony has been given, have this principle of graduation throughout all their range of opening, of course it will lead them to the conclusion that the invention is not new and original. If they should find that this principle had been previously known and in use, though not carried into entire perfection, and yet be satisfied that the principle was clearly and perfectly known and understood beforehand, such proof, I apprehend, would go directly to the question of the novelty of this invention. If, on the other hand, they believe it is a new discovery and application of a new and important principle to the control of steam engines, first invented and carried to perfection by this patentee, although there may have been imperfect contrivances before which did not accomplish the purpose, the claim of novelty on the part of the patentee is sustained.

The third question is, whether these defendants have infringed. This is exclusively a question for the jury. It is incumbent upon the plaintiff to make out affirmatively, by proof, to your satisfaction, that his invention has been infringed, before he would be entitled to your verdict And in determining this question of identity, I state what is familiar law, that the jury are not to inquire whether the two things are identical in structure, form, or dimensions, but whether they involve substantially the same mechanical principles. It will be palpable to the jury that ft would be a reproach to the patent system to say that the rights of the patentee may be violated or infringed by a mere colorable pretense, or by the use of a thing, which, having a different appearance, or a different form, nevertheless involves essentially the principles of the patented invention.

The true inquiry is, whether the thing, which is claimed to be an infringement, does substantially involve the principles of that patented. It has been often said, in trials of this kind, that the principle of a machine has reference to its mode of operation, not to any abstract principles involved in its proportions or motion, but whether, as operating machines, the principles of the two are essentially and substantially alike. Where this sub-

stantial identity exists, the party sued for infringement can not be protected, in the use of what is substantially the invention of the patentee. Whatever, therefore, may be the form of the valve of these defendants, Cope and Hodgson, if it embraces the principle of the graduated increase of opening throughout its entire range of action, there is substantial identity.

There is no claim to any specific amount of damages on the part of the plaintiff; and, I understand from the statement of counsel, that this action is not prosecuted with a view to the recovery of damages. But if the jury believe that the invention is new on the part of Judson, and the defendants have infringed upon his patent, they will give a verdict for nominal damages. There is nothing claimed beyond mere nominal damages.

The jury found a verdict for the plaintiff.

[For another case involving this patent see Judson v. Moore, Case No. 7,569.]

¹ [Reported by Samuel S. Fisher, Esq., reprinted in 1 Bond, 327, and here republished by permission.]

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