

14FED.CAS.—2

Case No. 7,569.

JUDSON V. MOORE ET AL.

[1. Bond, 285; 1 Fish. Pat. Cas. 544; Merw. Pat Inv. 237, 316.]¹

Circuit Court, S. D. Ohio.

Oct Term, 1859.

PATENTS—DESCRIPTION—“VALVES FOR GOVERNORS.”

1. The description of the invention is required to be full, clear, and exact, that the public may be admonished of the precise claim, that it may not be ignorantly infringed; and that when the exclusive right shall have expired, the public may be at no loss to know what the nature of the invention is, so as to make it valuable and practical.
2. If, with the exercise of ordinary intelligence and skill, the invention could be constructed from the information given in the patent, there would be no doubt that the specification answered the requisites of the statute.
3. Reduced to its simplest elements, the improvement of Judson consists in making an opening or openings, controlled by the governor valves of steam engines, of gradually increasing capacity from the closed to the open position.
4. If A. had a distinct conception of the invention as patented to B., and communicated that knowledge to B., then, in a legal point of view. A. must be considered the first inventor.
5. Mere conversations about the practicability of an improvement, or suggestions as to the manner in which it might be carried out or accomplished, will not, of themselves, defeat the claims to originality of him who perfects the idea and secures a patent. But any information to a patentee, sufficient to enable him to construct the thing itself, would destroy the originality of the invention. But that knowledge must be definite and tangible.

[Cited in Union Paper Bag Machine Co. v. Pultz & Walkley Co., Case No. 14,392.]

6. The evidence of the success and practical results of an invention goes more directly to the question of utility, but the jury may take it into consideration, in deciding on the novelty and originality of the invention.

[This was an action on the case tried before Judge LEAVITT and a jury, to recover damages for the infringement of letters patent [No. 7,755] for “improved valves for governors,” granted to Junius and Alfred Judson, November 5, 1850, and reissued to Junius Judson, January 10, 1854 [No. 255]. A portion of the specifications of the plaintiff’s patent, together with the claims, was as follows: “The object of our invention is to decrease the perturbation of steam-engines caused by any change in the tension of the steam, or in the resistance or load, and the more effectually to check 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 opened 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. When the governor and valve work with effect, the pressure per square inch upon the piston is less than in the boiler, and reducing the load or resistance, reduces the pressure in the cylinder, producing less resistance to the passage of steam from the boiler to the cylinder; and the area of the valve-opening necessary to pass a given amount of power or steam, is much less with the light than with the heavy load, and an increased capacity of opening from the closed to the open position of the valve, more than is due to the opening motion of the valve, is necessary, so that equal amounts of resistance being successively added (as load to the engine), shall cause the valve to open successive and regularly increasing areas, until the valve is fully open, or the load complete. * * * We do not wish to be understood as limiting our claim to the special form of valve-opening above described, as the form may be greatly varied, and yet act upon the principle herein specified as constituting the chief characteristic of our invention. Nor yet to limit ourselves to the form of the aperture or apertures, as the same end may be obtained on the same principle by the joint form of the opening or openings, and the valve governing the same. Nor do we wish to limit our invention to the making of such governor valve with the aperture or opening thereof on the principle herein specified throughout the whole range of motion, as in many instances it may be advantageously employed with the said principle acting only on a part of its range of motion, where engines are employed under such circumstances that they will not be exposed to serious perturbations above or below a certain range. That, we do not wish to be understood as claiming broadly the making of the apertures of governor valves of capacities varying independently of the range of motion of the valve, as the well-known throttle valve, and valves with circular apertures, have not a constant increase or decrease of capacity proportioned to the range of motion. But what we do 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. And we also claim interposing a spring between the valve-cover and the set-screw, or its equivalent, which determines or sets the position of the face of the valve to its seat, so that the tension of the said spring shall resist the pressure of the steam on the valve-cover, and thereby produce an increased flow of steam to the cylinder, substantially as specified. And we also claim the employment of the valve-lever, adjustable to the stem of the valve, in combination with a fixed indicator, substantially as specified, for the purpose of setting the valve in any required position without opening the valve-box, as set forth. Junius Judson, Alfred Judson.” The defendants [William Moore and Charles F. Wilstach] were using a valve constructed by Cope & Hodgson, under letters patent granted to them. In the specification of this patent, the following paragraph occurred: “By providing in the box a cavity on each side of the seat, as shown at DD, Figs. 1 and 3, the valve when open has its openings increased or diminished in a greater degree by a given movement than an ordinary throttle-valve, as the edges of the valve move directly away from the seat instead of parallel with it.” The valves described by Judson and Cope & Hodgson differed greatly in form, and the controversy turned upon the employment of what was called the principle of graduation.]²

G. M. Lee and S. S. Fisher, for plaintiff.

C. B. Collier and J. L. Miner, for defendants.

CHARGE OF THE COURT: A patent was issued to Junius and Alfred Judson, jointly, in November, 1830. That patent, it would appear, has since been surrendered, and on January 10, 1854, was reissued to the plaintiff, Junius Judson, alone. It purports to be a patent for a new and improved valve for governors, and he brings his action for an alleged infringement of the exclusive right granted to him by this instrument. The defendants urge several grounds of defense: First. That the patent is void from the uncertainty of its specification, in not describing the subject with sufficient perspicuity. Second. The want of originality in the invention itself. Third. That there is no utility in the patented improvement. Fourth. That the defendants have not infringed the exclusive rights of the plaintiff, and, therefore, are not liable in this action.

As to the alleged uncertainty and insufficiency of the specification in this case, I have but a remark or two to make. This defense is based upon the ground that the description of the invention is so vague and indefinite that a mechanic could not construct the improvement from the specifications. The statute is very express on this subject. It requires that every inventor shall file, in the patent office, a clear statement of what his invention is, and the mode by which it is to be brought into practical operation. The statement is required to be clear, full, and exact in its terms, so that a mechanic skilled in that department shall be enabled to construct it, or, if it be a composition, to compound it, and that without resort to invention or experiment. The jury will see, by a moment's reflection, what the object and design of this requirement is. It is that the public may be admonished

of precisely what the patentee claims, that it may not be ignoranuy infringed. That is one purpose, and the second is, that when the exclusive right shall have expired, the public may be at no loss to know what the nature of the invention was, so as to make it valuable and practical.

This provision, as I before remarked, is express, and it must appear that it has been complied with, or the patent is rendered a nullity. This, however, is a question of fact for the jury. They are to pass upon the inquiry whether there is a sufficient specification or not. It is a question of evidence; and in the decision the jury have only to look at the evidence adduced. On the part of the plaintiff, several witnesses, termed experts, because supposed to be peculiarly qualified by their knowledge and practice of mechanics to give an opinion on this subject, have been examined. Mr. Knight, Mr. Gilbert, and Mr. Dunlap unite in believing that this specification is sufficiently definite for all practical purposes. On the other hand, there are witnesses who have expressed a contrary opinion. Mr. Whetstone, Mr. Reynolds, Mr. Davis, and Mr. Whitmore swear that the specifications are not sufficiently explicit and clear, that they do not give instructions and data from which a mechanic would know, with certainty, whether the improved valve would be successful under all circumstances. They do not say they could not construct it; but that they would be at a loss for any rule by which to apply the valve to any given sized engine, for any particular purpose, and under any circumstances. I do not propose to make any comments upon this part of the case; it is left to the jury. The statute must have a fair and reasonable construction; and if the jury believe, from the evidence before them, that this invention can be constructed by the exercise of skill and judgment on the part of a mechanic, they will come to the conclusion that these specifications are sufficient in the aspect of the case to which I now refer. It may be remarked, that in carrying out any invention the exercise of some skill and judgment, on the part of the mechanic called to construct it, will always be required. Something must necessarily be left to him. If with the exercise, therefore, of ordinary intelligence and skill, the jury believe that the invention could be constructed from the information given by the patent, there would be

no doubt that the specifications answered the requisites of the statute.

The court has been requested to indicate an opinion upon the question, whether, taking the whole of these specifications, it appears that a patentable subject is set forth and described therein, for it is necessary that the subject-matter of the patent should be one within the contemplation of the patent laws, that is, one embraced within the scope and design of the statute itself. I will remark here, that it had been my purpose to have entered into an extended analysis of this elaborate specification; but, upon reflection, and considering the time occupied in this case, I have concluded to bring my remarks on that point within a narrow compass.

Is this invention set forth so intelligibly as to enable the court to pronounce on the claim, and is there that discrimination which the law requires between what is old and what is new? This specification is of great length, very minute in its statements, and is accompanied with drawings. It is a familiar principle, that in construing it the drawings are to be regarded as part and parcel of it. In fact, the only objection to this specification is its great length and the multiplicity of words used in the statement. It is verbose and argumentative. The patentee, desirous to be understood, and to present his invention thoroughly and fully, has used more words than were really necessary. Still, if the object at which he aims can be clearly made out from what is stated, and it appears the thing itself is the subject of a patent, it will be the duty of the court to sustain the claim. There are three distinct improvements set forth in this specification; but the only one now in controversy, and the only one used by the defendants, is that which refers to a governor valve to be used on a steam engine; the other points may, therefore, be left out of the question, and the attention of the court directed to the form and structure of the valve itself. It may be remarked that the object is an improvement in the valve by which an increase or decrease in the motion of the engine is effected, without any disturbance, or as little as practicable, from the nature of things.

The patentees describe the mode of constructing their improvement, and the principle of its action. They then set forth a limitation to their claim, which is proper in all specifications where a patent is for an improvement on what was known before. This must be done to guard against the claiming of that which was previously known. They say they do not limit their invention to any particular form of valve, and refer 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, they say, "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."

I think there can be no question, from the consideration of the entire specification, in connection with the drawings, that this plaintiff has described an invention that is

patentable under our laws. The invention is obviously an improvement on the structures before known as governor valves, and is not a combination. In such a claim, it is not necessary that the patentee should describe with minuteness what was before known, or the particular subject of which the invention claims to be an improvement. Reduced to its simplest elements, the improvement is making an opening or openings, controlled by the governor valves of steam engines, of gradually increasing capacity, from the closed to the open position. Referring to the previous parts of the specification, the claim contemplates such an action as shall cause the valve to open in regularly increasing areas till it is completely open; but I can not gather that the openings contemplated by him, while they are gradual or regular, are necessarily in geometrical or arithmetical progression.

I shall not detain you with any attempt at an exposition of the character of this invention, as claimed by this plaintiff. I am not sure that, if I were to make the attempt, I should succeed in making it more clear to your minds than it now is. The properties of the invention have been so fully discussed, that you will be at no loss in comprehending what the plaintiff claims. It seems to the court that the improvement covered by patent is sufficiently set forth to enable the court to see that what is claimed is patentable. I see no foundation to support the idea that there is any want of distinctness between what he claims as his, and that which was before known; so that the patent is not objectionable on that ground. With regard to the construction of specifications, I may remark that it is a rule that they shall be construed in a liberal spirit, and that they shall receive an interpretation that will, if practicable, effect the end and object designed. This is fair. A defect should be clear and palpable, to justify the court in saying that the patent was a nullity. It is subject to scrutiny before it passes into the hand of the patentee. The whole claim of the inventor is subjected to an officer, who acts under oath, and who is usually a man well skilled in natural philosophy, and mechanical science generally, and who would not be justified in granting a patent to any person, unless, in his judgment, the specification was sufficiently clear. I am aware that he may make mistakes—that objection may be afterward made, and that it is the right of a party who has been sued, to avail himself of all the advantages that may arise from the failure on the part of the patentee to comply with the requisitions of the law. You

will have the specifications, with the drawings, in your retirement, and may consider them minutely.

I pass to the consideration of the questions that belong exclusively to the jury.

First, as to the originality of this invention. There is no controversy in regard to the principle of law. It must appear, as the basis of the patentee's right, that his invention is new and original, for if not his invention, he never had a right to a patent, and the patent is clearly a nullity. This is the point made by defendants; it is strongly urged, and it is one well worthy of your attentive consideration. Before I call your attention to the evidence upon this point, I may notice another very familiar principle of law, which has been adverted to by counsel. That principle is, that the emanation of a patent in favor of an individual is prima facie evidence that there is some novelty and utility in the invention, for it is upon the strength of the patentee's oath, and the showing that there is something not only new, but useful, in the invention, that the commissioner is authorized to issue the patent. It is, therefore, a reasonable proposition that the granting of a patent affords prima facie evidence of the novelty as well as utility of the invention. Still, the defendant is not concluded by this; it is competent for him to show that the invention is not new, and that therefore the plaintiff had no right to the patent. On this point the statute had placed this guard: Wherever the defense is a want of novelty or originality, it is made the duty of the party sued to notify the plaintiff particularly of the circumstances under which the invention is known or used. He is to give a notice of thirty days prior to the trial, and state by whom and the place where the invention was previously known; and having conformed to the conditions of the statute, it is his right to impeach the novelty and originality of the invention. In the present case, the defendants have given notice of persons and places where it is alleged this improvement was known and used prior to the emanation of this patent.

I will call your attention to the different cases embraced under the notice of the defendants.

The first is the case of the alleged use or knowledge of this invention by H. M. Collier at Binghampton, in the state of New York. I have not had the opportunity of reading the deposition, though I have heard it read in the presence of the jury. It will be for the jury to say what facts are established by it. His statements are, in substance, that in 1847 he used a valve which embraced the principle of a gradual opening. He gives a description of the valve, and accompanies it with a drawing, which, he says, he made himself, some years ago. He also states he used it as a governor valve for four or five years. He states, too, that he had a conversation with the patentee, at a time I do not recollect, in which Judson admitted that this valve was the same as his. There is one fact which, it is alleged, destroys the deposition of Collier. It is that the drawing does not, by admission of the counsel for the defendants, describe a practical and successful governor valve. It will be

for the jury to determine how far that circumstance shall affect the evidence of Collier in regard to the valve to be used.

The next case is that of W. B. Hill, who states that in the year 1848 he put up a governor valve in a saw-mill in Michigan, which had the principle of a gradually increasing opening, like that of the patentee. He exhibits the diagram of the valve and governor which he has fully explained to the jury. He says the forms of the openings were different, but in principle they were the same. Next, J. B. Greeley states that in 1848 he and Judson got up a valve with a similar opening, in the office of Gardner & Co., in Cincinnati. He states that he suggested the valve, and that Judson said he had never seen anything like it before. Greeley says he left Cincinnati, and, returning some time after, the valve was gone, and Judson had left the city. Witness says the opening of the valve was substantially the same, but there might be some difference in the ratio in which it opened. He states, too, that he told Judson that the same result might be obtained by a triangular opening of the valve. Greeley undoubtedly represents himself as the inventor of the valve, and states that Judson told him he was going to Washington, and if the valve was patentable, he would assist him in getting a patent for it; and that if the valve did not succeed, an angular opening could be substituted for it. D. A. Powell has been examined also, and says he saw the valve at Gardner's, and heard a conversation, in which Judson said it was Greeley's invention, and that Greeley had got a good thing. He also says he heard Judson say that the valve worked well. This is the evidence in regard to Greeley's valve. It is asserted that the testimony of Greeley is impeached; that some time before, his deposition was taken in Iowa, and that there is a discrepancy between that deposition and his oral testimony. The jury will refer to that deposition and see how far it affects the credibility of the witness. If my recollection is right, I think he does not state in as strong terms, in his deposition as in his oral testimony, that he was the inventor.

Next comes N. G. Thom. He states that in 1846 or 1847, he built a locomotive, in which he put valves, the model of which he has exhibited to the jury. He states that it had no governor, but was regulated by the hand of the engineer; that it had a graduated opening, and in principle was the same as the Judson valve, and that it was intended to be used only on a railway locomotive.

I shall have occasion to refer to some points

of law involved in this testimony, but I shall now pass on to the remaining evidence.

Next comes Mr. Latta and the Eunison valve. Mr. Latta states that he saw a valve in use at the marble works in Cincinnati, which he believes to be the same valve or similar to the one exhibited to the jury. I do not remember that he positively identified it as the same valve. Speaking of the Eunison valve, he says, it may be made to operate on the principle of a gradually increasing opening; but remarks that Judson has provided more fully for the regulation of the quantity of the steam, and that his valve shuts more closely. He says they both have the same principle of gradually opening, but with some difference in the ratio of increase. Several witnesses have been called, and have testified that, in their opinion, the valve is substantially like the plaintiff's in the principle of graduated openings. It is also claimed that this valve has a circular aperture, the invention of which is expressly disclaimed by Judson. If the jury are satisfied that it was different in structure and application from the valve patented by plaintiff, it does not prove that the invention was not original with this patentee. It is claimed by plaintiff's counsel that, in regard to the Eunison valve, some doubt is thrown upon the question of identity of the valve referred to in the evidence of Mr. Latta. He states the valve exhibited is the Eunison valve; but another valve has been presented, which, it is represented, had just been taken from the works at Coleman's, and which Coleman states is the one put up by Eunison in 1847 or 1848. It remains with the jury to determine who is mistaken in regard to the facts connected with this valve.

I will say here, gentlemen, in connection with all these valves that are embraced in the notice of the defendants, and about which testimony has been given with a view to impeach the originality of the Judson valve, that they are all to be decided upon the question of the identity of these valves (known and in use before the granting of this patent), with the Judson valve; and if the jury believe they are, or any one of them is, substantially the same as Judson's, it of course destroys the originality of his invention, and is an answer to his present claim. I will remark, as to the Greeley valve, that the jury will first inquire whether he or Judson were the Inventors of it; and I will state the law upon this point, as I understand it, in a very few words.

If the jury are satisfied that Greeley had a distinct conception of the improved valve as patented to Judson, and that he communicated that knowledge to Judson, then, in a legal point of view, he must be considered the inventor; or, if they believe he constructed a valve operating like the Judson valve before the date of this patent, it will be, of course, a good defense against the claims of the patentee. I will state the principle that must govern you, in these words. Mere conversations about the practicability of an improvement, or suggestions as to the manner in which it might be carried out or accomplished, will not of themselves defeat the claims to originality of him who perfects the idea and secures a patent Neither will experiments defeat, even if known to the patentee, if it appear

that he prosecuted such I experiments to final success; but any information to a patentee, sufficient to enable him to construct the thing itself, would destroy the originality of the invention. But that, knowledge must be definite and tangible; it should be sufficient of itself to enable the party to whom it was imparted to construct the improvement. This question, as to whether Greeley or Judson was the true and original inventor, is one of great importance in this trial. If the jury are satisfied that it was the invention of Greeley, and not of Judson, there will be no necessity to prosecute their inquiries further. They will scrutinize the evidence of Gilbert in relation to the trials and experiments of Judson, made at Rochester after his leaving Cincinnati; and with regard to the testimony of Powell, it may be regarded as somewhat weakened from the time that has elapsed since the conversation occurred. Such testimony is not of the most reliable character; there is strong danger that what actually did occur, or what was actually said, may fade away from the memory, and that a man may confuse words with thoughts, and yet honestly state his belief as to what actually did occur. If, however, the jury believe there is a substantial difference between the Greeley valve and that which is embraced in Judson's patent—if they believe Greeley's invention did not contemplate an increase of opening through its whole range of motion, it would necessarily follow that there was an essential difference in construction.

As for Thorn's valve, it provided for certain openings, but not throughout the whole range of motion. It was designed to be used on railway locomotives, and it never has been used otherwise, and so far as we know, never has been patented to the inventor. This presents another question of identity between Thorn's and Judson's valves.

The mere use of a mechanical structure for a different purpose is not of itself patentable, and if Judson had merely adopted Thorn's valve and applied it to another purpose, without addition or improvement, he would not be entitled to a patent; that is, if he had merely applied it to other than railway purposes, he could not be entitled to a patent; but, if his valve be a different structure, applicable to all engines, and producing a new and useful result, it is a patentable subject; and if Judson has changed the structure of the Thorn valve, and it has been applied to a new and useful purpose, the knowledge of the prior valve would not affect the originality of Judson's valve.

Thorn's valve was to be regulated by hand,

while that of Judson works with the governor. It will be for the jury to consider whether this does not constitute a sufficient difference between the valves to evidence the want of a substantial identity between them. I may remark that Mr. Knight states that the "Thorn" valve would not be a practical structure in connection with a governor, because the friction caused by the pressure of the steam would be too great. Another point is that Thorn's valve does not contemplate the gradual opening through its whole range of motion.

In passing upon this question, the jury will keep in view precisely what the thing is that is claimed by Judson, according to the specifications and drawings which accompany it. The principle of a gradual opening, through all its range of motion, would seem to be the distinct characteristic of the invention of Judson, and, if the jury believe the valves said to be identical do not embrace this feature, there would seem to be no ground for supposing that Judson's valve was not an original construction. If they think that to accomplish the purpose at which he aimed, and give, in connection with the governor, a steady motion to the engine, was an object of utility, and that it is not proved to have been accomplished before, it will be for the jury to consider whether that fact does not show the originality of this invention. The evidence of the success and practical results of the Judson invention goes more directly to the question of utility, but the jury may take it into consideration, in deciding on the novelty and originality of the invention. Practical results are more to be regarded than theory, and may be taken into consideration in a question of originality. Whatever may be the opinion of experts, if the proof be satisfactory that they are unlike any other known valves, in operation, the conclusion would be clear against their substantial identity.

On the subject of the practical operations of the Judson valve, the jury have a good deal of testimony, which I have no doubt they have kept in memory. It seems, however, that there is testimony that the principal object of Judson, that of preventing perturbations by means of the governor, is fully effected by the improvement, and so far as we have any information, his valves have effectually accomplished the purpose to which I have adverted. I have remarked already upon the question of utility, though I do not understand that feature of this improvement to be seriously controverted by counsel for the defendants. I suppose, that, upon the evidence before the jury, they would have no difficulty in believing the invention to be one of great utility.

The next question, and one of importance, is that of infringement "Have these defendants used the invention patented to plaintiff," is the question for the consideration of the jury. The question to be decided is, whether the "Cope" valve is the same in principle and structure with that patented to the plaintiff. I will remark that it does not depend upon form or proportions so much as upon the principle of action, and the operation of the two things. It will be for the jury to say whether the Cope valve involves the principle of a graduated increase through its whole range of motion, and is substantially the same as

that claimed by plaintiff. Several witnesses have stated that, in their judgment the Cope valve and the Judson valve are the same; that they are substantially alike in their operation. It will be for the jury to say what weight shall be given to the judgment of these experts. They will also determine, by the examination of the models of these valves, and the testimony adduced upon the subject, whether there is that identity between the Judson valve and the valve used by the defendants, which will justify the jury in saying that the right of the plaintiff has been infringed. It is insisted, by counsel for defendants, that their valve acts on the principle of the Eunison valve, and is different from the Judson valve; that, unlike the Judson valve, it does not act on the principle of graduated openings through its whole range of motion; and is therefore essentially different from the plaintiff's improvement. The identity of these valves is an important issue in the case, for, if the jury are satisfied that the Cope valve is different from the Judson valve, there is no infringement.

In regard to the question of damages, I will simply say that the whole subject is within the discretion of the jury. There are no data given in the present case by which damages can be estimated. The plaintiff is entitled to his actual damages, and it is for the jury to say what they shall be, if they believe him entitled to recover.

The jury found a verdict for plaintiff.

{For another case involving this patent, see [Judson v. Cope, Case No. 7,565.](#)}

¹ {Reported by Lewis H. Bond, Esq., and by Samuel S. Fisher, Esq., and here compiled and reprinted by permission. The syllabus and opinion are from 1 Bond, 285, and the statement is from 1 Fish. Pat. Cas. 544.}

² {From 1 Fish. Pat. Cas. 544.}