

Case No. 17,256. WATERBURY BRASS CO. v. NEW YORK & B. BRASS CO.  
[3 Fish. Pat. Cas. 43.]<sup>1</sup>

Circuit Court, S. D. New York.

Dec, 1858.

INFRINGEMENT OF PATENT—EVIDENCE—SIMILARITY OF RESULTS—SUBSTITUTION OF PASSIVE AGENCY—TESTIMONY OF EXPERTS.

1. In an action for the infringement of letters patent, the question is: Do the defendants infringe upon any grant of right secured to the plaintiff by the patent?—not whether they have infringed on all the grants of right secured by the patent—but whether they have infringed upon any one of them.
2. Patents are to be liberally construed; they should not be subjected to too rigid an interpretation. This is a rule of law, and if it were not, and were not regarded, but very few patents would be of any avail.

[Cited in *Andrews v. Carman*, Case No. 371.]

3. The grant under letters patent to H. W. Hayden, dated December 16, 1851, was valid and required invention, provided the means used, in the manner specified, to accomplish the result, were new and useful.
4. Where the defendants had a patent in which they referred to the patent of plaintiffs, and disclaimed those parts of their invention which were found in plaintiffs' patent: *Held*, that this was an admission of the validity of plaintiffs' patent.
5. It is a safe source of testimony, which can be relied upon with some degree of certainty, in order to ascertain whether the same means are used, to look at the result produced by the means used. Like means, provided the machine is in perfect order, will, in a measure, produce like results.
6. If the patented means were new, and the defendants have used them, they have infringed although they may have used another device, not patented by the plaintiffs, by which the result is accomplished in a more perfect and satisfactory manner.
7. If the defendants substitute for something in the plaintiffs' machine, a passive agency which performs no useful object, in addition to the agency employed by the plaintiffs, such substitution of a passive agency would not alter the character of the plaintiffs' machine; and, if without the substitute of such passive agency the patent of the plaintiffs would be violated, it would also be violated after such passive agency had been substituted.
8. The testimony of experts is useful to show the operation of devices; but when experts undertake to tell what the patent is for they assume the duty of the court, and when they undertake to say what is or is not a violation of the patent, they not only assume the duty of the court but of the jury.

This was an action on the case, tried before Judge Ingersoll and a jury, to recover damages for the alleged infringement of letters patent [No. 8,589] for "machinery for making kettles and articles of like character, from discs of metal," granted to Hiram W. Hayden, December 16, 1851 [reissued May 24, 1870 (Nos. 3,995, 3,996)], and assigned to plaintiffs.

The disclaimer and claims of the patent were as follows:

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“I do not claim any of the gear-wheels or pinions, nor their arrangement, except as hereinafter set forth, some of these being common in ordinary lathes; but I do claim as new, and desire to secure by letters patent of the United States:

“First. The application of a metallic form or mold, or successive forms or molds in combination with a proper tool or tools, roller or rollers, sustained, moved, and directed in a proper path by mechanical means, for the purpose of operating on a disc, blank, or plate of metal, so as to reduce it gradually from the center to the edge, at the same time forming it with straight sides, by successive stages, into a complete kettle, or into any similar articles, to the forming of which this apparatus can be applied, substantially as described and shown.

“Second. The construction of the mandrel, f, 3, part of which is cylindrical and part fitted with a short screw of the hand-wheel f, 2, so that great pressure may be made at the point desired, while at the same time the mandrel can be easily and quickly moved through a long distance, for the purposes and as described and shown.”

G. W. Parsons, N. J. Buell, and E. W. Stoughton, for plaintiffs.

Charles M. Keller and George Gifford, for defendants.

INGERSOLL, District Judge (charging jury). This is a suit brought by the plaintiffs, as assignees of a patent which was originally granted to Hiram W. Hayden, in which they seek to recover damages of the defendants for infringing upon the rights secured by that patent. Where a patent is valid, the rights secured by that patent are as much secured to the patentee as the right which you have to the houses in which you live, and which are made your property by the deeds you have in your possession; and they are as much to be protected as any other right to any other species of property. If the patent is valid, it secures to the patentee rights which should be protected; and the one right should be no more protected than the other. In a case of this kind, the rule of law is, that he who discovers that a certain useful result will be produced in any art, machine, or manufacture, by the use of certain means, is entitled to a patent for it, provided he specifies the means he uses, in a manner so clear and exact that any one skilled in the science or art to which it appertains, can, by the means he specifies, with out any addition to or subtraction from them, produce precisely the result described. If

this can be done, then the patent granted to him confers on him the exclusive right to the use of the means he describes to produce the result or effect specified.

The plaintiffs claim that Hiram W. Hayden discovered that a certain useful result could be produced, namely: the forming out of a disc, blank, or plate of metal, a complete kettle, or any similar article so that it should be gradually reduced from the center to the edge, at the same time forming it in straight sides by successive stages, and to be produced by the use of means in the specification set forth. The means were: "The application of a rotary metallic form, or mold, or a succession of forms or molds, in combination with a proper tool or tools, roller or rollers, sustained, moved, and directed in a proper path, by competent mechanical means;" and the mechanical means is described by which this combination will produce this useful result. If Hayden did really make this discovery, and if he has in his specification pointed out the means he thus uses, in a manner so clear and exact that any one skilled in the business to which it appertains, can, by the means described, to wit: the application of a rotary metallic form or mold, or a succession of forms or molds, in combination with a proper tool or tools, roller or rollers, sustained, moved, and directed in a proper path, by competent mechanical means, produce the result of a complete kettle or similar articles by operating on a disc, blank, or plate of metal, so as to reduce it gradually from the center to the edge, at the same time forming it with straight sides by successive stages, substantially as described and shown in the specification—he was by the patent which he obtained, entitled to the exclusive right to the use of these means, in the manner stated, to produce such result, and the plaintiffs, as assignees of all the right which Hayden had to the patent, are entitled to the exclusive use of these means, substantially in the manner set forth; and any one who uses the means specified to produce such a result, infringes upon the right secured by the patent, and is subject to pay the damages which the plaintiffs may have sustained by such infringement.

There are four questions, and only four, which are presented for consideration in this case; and it is necessary that these several questions should be kept distinctly in your minds, in order that you may be enabled to arrive at a correct conclusion. These four questions are: First. What does the patent purport to grant? Second. Was the grant a valid grant of right? Third. Do the defendants infringe upon any grant of right secured by the patent of the plaintiffs—not whether they have infringed on all the grants of right secured to the plaintiffs by the patent, but whether they have infringed on any one of them? Fourth. If they have, what damages have the plaintiffs sustained by such infringement of their rights on the part of the defendants?

The first is a question of law, to be determined by the court. The three other questions are to be determined by the jury. They are questions of fact, and in determining them, it should be borne in mind that patents are to be liberally construed—that they should not

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be subjected to too rigid an interpretation. That is a rule of law, and if it were not a rule of law, and not regarded, but very few patents would be of any avail.

The first question, then, gentlemen of the jury, being a question of law, is for the court to determine, and of course the jury will take the law as it is laid down by the court, because it is the peculiar province of the court to determine questions of law, and it is the peculiar province of the jury to determine questions of fact. The patent does not grant the several parts or any part of the machinery by which the combination claimed is called into action, and made to perform the duty it accomplishes; but what has been granted has already been indicated. The patent is for the application of a metallic form or mold, or a succession of forms or molds, in combination with a proper tool or tools, roller or rollers, sustained, moved, and directed in a proper path by competent mechanical means, for the purpose of operating on a disc, blank, or plate of metal, so as to reduce this disc, blank, or plate of metal gradually from the center to the edge, at the same time forming it with straight sides, by successive stages into a complete kettle or any other similar article.

This includes the whole patent or grant of right. There is nothing else in it, and in considering the questions of fact, the jury will bear in mind that this is the whole patent or grant of right.

The second question is—and it is a question of fact for the jury to determine—was this grant a valid grant of right? In other words, was the grant of the combination of the means described “sustained, moved, and directed” in the manner specified, a valid grant of right? It was, gentlemen, and required invention, provided the means used in the manner specified to accomplish the result, were new and useful. It is admitted that the result produced was highly useful, and that the combination of means used in the manner specified does produce this highly useful result. To show its use, it is only necessary to bear in mind that some years before the invention of Hayden, the only mode of making kettles was by the hammering process. Subsequently, another process, that of swedging kettles or the stamping process, was produced, and by these two modes were kettles principally manufactured. But at the present day the kettles formed by these two processes are entirely out of the market, and have been so completely superseded by those formed substantially in the manner specified by these means, that hammered kettles are now almost unknown. The usefulness of the invention is thus admitted.

It is therefore only necessary for you to inquire upon this branch of the case: Was the combination of these means new? The patent when produced in evidence is prima facie evidence that such is the case—that these means producing this result were new. When an application is made for a patent, it is submitted to the commissioner of patents; his skill and judgment are brought to bear upon the subject, and when he grants the patent it is prima facie evidence that the means granted are new, and produce a useful result. That evidence, of itself, is sufficient for a court or a jury to determine the question of novelty and usefulness, unless there be counteracting evidence introduced to rebut that prima facie evidence which the patent thus affords; and this should be borne in mind throughout the trial.

The plaintiffs also insist that there is not only this to show that the patent was new and useful, but they say that the defendants themselves, in the very patent which they submit to prove that they had the right to do what they have done, admit that it was new. That is the patent of Cannon, and in making his claim, he distinctly expresses himself in this manner: “I distinctly disclaim those parts of my invention which are found in Hayden’s patent aforesaid;” thus admitting and consenting that this patent to Hayden was a valid patent. In addition to that, gentlemen, witnesses have been introduced to you who testified that before this invention of Hayden, these means were not used to accomplish this result, so far as their knowledge extended upon the subject. There are various sources of evidence which a party can draw upon in a patent case, to show that an invention was not new at the time it was made. If it can be shown that it was described in any publication prior to the discovery, no matter where that publication is, whether it be in Europe or America, if it is the identical thing described in such publication, then the party owning the patent can not successfully claim any valid right under it. But there is in this case no such evidence as that. No book has been produced to show to you or to the court, that this invention, if it was an invention, has been published in any book either in Europe or America. The testimony relied upon to prove this point is, that this invention is identical with that known as the Bullard invention or machine. It is for you to determine whether such is the fact—whether the means employed in that machine are substantially the same as those described by the plaintiffs, operate in substantially the same manner, and produce substantially the same result.

As I have already remarked, it is admitted that the means used in the plaintiffs’ patent, in the manner stated, were useful; and it must be further admitted that they were new, unless the same combination, producing the same or a similar result, is to be found in the Bullard machine. The plaintiffs’ device is, the tool, in combination with the former, to form and make the shapes of vessels. If I understand the Bullard machine, the tool did not and in making the shape, but in smoothing and finishing the vessel after the shape had been made, without the aid of the tool. The plaintiffs’ device was in reducing a disc,

blank, or plate of metal, by the operation of the tool, in combination with a former, reducing it from the center to the edge, at the same time forming it with straight lines, by successive stages, into a complete kettle, or any similar article. I think, it is admitted, and if it is not, it is a question of fact for you to determine, that in the Bullard machine the operation of the tool in combination with a former, never did reduce the disc, blank, or plate of metal from the center to the edge, or reduce such disc, blank, or plate of metal in any way. If I understand the machine of Bullard, the disc, blank, or plate of metal was held by the clamps, and while thus held in those clamps, by the and of the former, it was made into shape; and while it was thus being formed into shape, the tool was not brought into operation; that after it was thus made into shape, it being, in the first stages of the operation, held by the clamps, so that it could not then be enlarged, the tool went over it for the purpose of performing the office which it did perform, namely, that of smoothing or finishing the basin. It is my impression—and if I am incorrect, it is for you to determine—that the evidence is that it was never designed to do this in combination with a former, and that Bullard had no idea when he was operating the machine, that the tool used by him would, in combination with a former, gradually reduce a disc, blank, or plate of metal from the center to the edge, or in any other way. He reduced, shaped, or formed it, prior to the operation of the tool, by the swedging or stretching operation, and by the instrumentalities which he used with the and of the former, it was turned into shape; and it was after this operation, if I understand it, that the tool was used, the mallet being employed where it was necessary, to remove the wrinkles—to give it a perfect finish. As I apprehend it, it never did, by the and of the tool in combination with the former, reduce a disc, blank, or plate of metal gradually from the center to the edge, so as to make any similar article to a kettle, but it reduced it in other ways, without this combination. Nor am I aware that any witness (and if I am wrong here you will correct me, for you are the exclusive judges of fact), has sworn or pretended that that machine would do this: that is, reduce a disc, blank, or plate of metal by the joint operation of the former and the tool in the way in which it was there used. After you have examined that operation, you are to determine whether that Bullard machine is identical with that of the plaintiffs or not; and it is for you to say whether the devices in the Bullard machine, acting in combination, which never did and never could produce, by the means stated, the useful result produced by the patent, is a combination of the same means which does produce such useful result.

It is a safe source of testimony, which can

be relied upon with some degree of certainty, in order to ascertain whether the same means are used, to look at the result produced by the means used. Like means, provided the machine is in perfect order, will, in a measure, produce like results. And if like results can not be produced by two separate devices, it is good evidence for the jury to consider, in coming to a conclusion as to whether like means were used; because, as a general rule, like results are produced by like means; and if like results are not produced by two separate devices, it is fair for the jury to infer that the means may not be alike in kind or character.

If, therefore, gentlemen, you determine that the combination of means patented to the plaintiffs was new, then you will turn your attention to another question, namely, whether the defendants have infringed upon the rights so secured by the patent. If these means were new, and if the defendants have used the means secured by the plaintiffs' patent, they have infringed, although they may have used another device not patented by the plaintiffs, by which the result is accomplished in a more perfect and satisfactory manner. It is not material, gentlemen, for you to determine how useful this new device of the defendants was. Be it more useful or be it less useful, although they have a patent for it, they can not, by using the means patented, use the means patented to the plaintiffs, provided the plaintiffs' patent was valid. For, gentlemen, it is a well-established rule, that if a patent is granted to one man for any machine or combination, and then a patent is granted to another man for an improvement upon that machine or that combination, that such patent which the second man obtained can not be used, if by its use the first patent is infringed.

Then the plaintiffs, on this part of the case, claim that although these defendants may have used means which may be an improvement, still they, by the use of those means, use the patent of the plaintiffs. The defendants, gentlemen, claim under what is called the Cannon patent; and they say that what they do is by virtue of the means specified in this patent; and, gentlemen, it is for you to determine whether or not the patentee designed, when he took out this patent, to have his machine to be in and of the plaintiffs' machine or independent of it; and that you are to determine from the patent itself. In various parts of it the patentee speaks of the plaintiffs' patent. He says the machinery which he uses "consists of a lathe provided with a series of forms which are screwed one at a time in proper succession to a rotary mandrel, up to the face of which the plate of metal of which the vessel is to be formed is held by a poppet-head, while the tool is brought into operation by means of the mechanism of the sliding-rest to which it is rigidly screwed, so as to be moved and directed entirely by the mechanically produced movement of the sliding-rest." This is the description of the patentee. In practice he says that he found great disadvantages result from the movement and direction of the tool entirely by the mechanically produced movement of the sliding-rest.

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And then, further on: "These improvements," that is, his own improvements, "consist chiefly in controlling the pressure of the tool, and partly directing its movements, by hand, while the balance of it is directed by machinery, while it is sustained and moved by the mechanical means, by attaching it to a lever which is arranged upon a fulcrum or sliding-rest, or its equivalent, having a mechanical movement nearly such as is required for the tool to produce the desired shape, provided the form were infallibly true and all parts of the metal of uniform character, said lever to be operated by a workman," etc.

Then, in another part: "In the process of forming kettles by this machine, the principle of moving and conducting the tool mechanically is applied as far as consistent with the production of good work, and no further."

It is claimed, gentlemen, that it is admitted by Cannon, under whom the defendants claim to act, that in some measure the tool is applied, so far as consistent with the production of good work, mechanically. In determining this question, gentlemen, whether the defendants use the means patented to Hayden, you will bear in mind what I have already said, that if they use these means with something in addition to improve them, they can not use the improvement, although patented to them, provided they use the means patented to the plaintiffs. In determining this question, the jury will bear in mind that in order to establish an infringement, it is unnecessary that the devices used by the defendants should be an exact copy of the devices of the plaintiffs, that the machine of the defendants should be literally and exactly like the plaintiffs'. All that is required is, that the devices of the defendants should be substantially like the devices patented to the plaintiffs, although they may use another device which improves the devices patented to the plaintiffs; and I may say if any other rule were to be adopted than this, that all that is required is that the devices of the defendants should be substantially like the devices patented to the plaintiffs, it would be better in my judgment to repeal the whole of the patent laws of the United States. I have granted many injunctions, during the time I have been upon the bench, to restrain the infringements of patents; but if this rule that I have stated were not the rule to be accepted, I could never, consistently with my duties, again grant an injunction; and I should feel now bound to dissolve all the injunctions I have ever granted, provided this rule were not correct.

There must be a substantial adoption of the devices. As I said before, gentlemen, the plaintiffs claim that in this patent of Cannon there is an admission that the mechanical means do in part direct, and if in part, though it may be in a small measure, directed by hand, the patent would be violated.



The defendants claim, gentlemen, that if in the plaintiffs' machine the pin is taken out, which, after the adjustment, holds the tool so that it will run up in the proper direction, that it ceases to be the plaintiffs' machine, and if for that device, the pin, a hand, or any human agency is substituted, so that the tool will run up precisely as it would if the pin had been in it, that after such substitution it is a different device, and not the invention of the plaintiffs as patented. If I am wrong in that, the counsel will correct me; I understood him so. Perhaps you can discover the difference between the cases I state; it is difficult for me to discover any. It does not depend upon the amount of force which that pin overcomes. It may be large or it may be small; if the pin is in it, it is the plaintiffs' device; but if any human agency keeps it still, it is not substantially the patent of the plaintiffs. In other words, if the pin of metal be taken out and a pin of flesh put in, it changes the device patented to the plaintiffs. As I said before, there must be some substantial difference, and if there is no substantial difference, the two are identical. And as I have previously said, if the plaintiffs' device is involved in that of the defendants, and if the defendants, in the use of what may be an improvement, adopt the device of the plaintiffs, there will be in that case an infringement. If the defendants, gentlemen, substitute, for something in the plaintiffs' machine, a passive agency which performs no useful object, in addition to the agency employed by the plaintiffs, such substitution of a passive agency would not alter the character of the plaintiffs' machine; and if without the substitution of such passive agency, the patent of the plaintiffs would be violated, it would also be violated after such passive agency had been substituted;

And I will state to you, gentlemen, although my impression is that I have given the same idea before, that if the hand-operation only aids the mechanical means of the plaintiffs at times in directing the tool, such aiding at times, the mechanical means in directing, being at the other times in full operation, will not exempt the defendants as infringers upon the rights of the plaintiffs.

Experts, gentlemen, have been introduced before you, who have given their opinion one way or the other. The testimony of experts is useful to show the operation of devices; indeed, very essential; but when experts undertake to tell what the patent is for, they assume the duty of the court; and when they undertake to say what is or is not a violation of the patent, they not only assume the duty of the court, but of the jury.

In conclusion, I will state to you, if the defendants substantially adopt the devices of the plaintiffs' patent to accomplish a certain useful result, the defendants are violators of the rights secured by the patent.

The only other question is a question of damages, which is entirely for the jury to determine. One element in coming to the question of damages is, gentlemen, the difference in cost in manufacture between the manufacture by the hammering process or the stamping process and the process adopted by the plaintiffs. Another element is the difference

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in the value of the article made after it has gone through these processes. If the article made is more valuable when made by the process of the plaintiffs than when made by the process of stamping or hammering, that difference in value is also a proper element, together with the difference of cost, for you to consider in coming to the damages which the plaintiffs have sustained. The amount which has been manufactured by the defendants is admitted to be about forty-three thousand pounds. This is all I have to say to you. You will determine the case as you think the evidence warrants.

Verdict for plaintiffs—damages five cents per pound.

{For another case involving this patent, see *Waterbury Brass Co. v. Miller*, Case No. 17,254.}

<sup>1</sup> {Reported by Samuel S. Fisher, Esq., and here reprinted by permission.}