

Case No. 1,506.

[2 Blatchf. 411.]¹

BLANCHARD v. BEERS ET AL.

Circuit Court, D. Connecticut.

Sept. 24, 1852.

PATENTS—COMBINATION—INFRINGEMENT—TESTS—IDENTITY OF MACHINES.

1. The claim in Thomas Blanchard's patent of January 20th, 1820, for "a machine for turning and cutting irregular forms," construed and defined.
2. A person who uses the combination claimed by Blanchard, though in a machine which will make only wagon-spokes, infringes the patent.

[Cited in *Thompson v. American Bank-Note Co.*, 35 Fed. 204.]

3. The proper tests for determining the identity of one machine with another, on the question of infringement, defined.

[Cited in *Norton v. Jensen*, 1 C. C. A. 452, 49 Fed. 866.]

At law. This was an action [by Thomas Blanchard against Philo S. Beers and Albert Goodyear] for the infringement of letters patent granted to Thomas Blanchard, January 20th, 1820, for "a machine for turning and cutting irregular forms." The history of the patent and a copy of its specification are set forth in 1 Blatchf. 258, 259, 261-269 [Blanchard's Gun-Stock Turning Factory v. Warner, Case No. 1,521]. This action was brought upon an extension of the patent granted by congress by special act, passed February 15th, 1847 (9 Stat 683), fourteen years from January 20th, 1848.

Charles M. Keller, for plaintiff.

Roger S. Baldwin, for defendants.

NELSON, Circuit Justice, in charging the jury, remarked as follows:

As regards the several renewals of Mr. Blanchard's patent by acts of congress, some reflections have been indulged in by the learned counsel for the defendants, by way of prejudice to the patentee's claim, on account of the length of time for which his invention has been secured to him. It is, therefore, proper to say that, so far as the court and jury are concerned, those acts must be regarded as having been properly passed. Independently of the discretion that congress may exercise in respect to any particular patent, the statute provides, and such is the practice of the patent office under it, that if a patentee, near the expiration of the term of his patent, can satisfy the commissioner of patents that he has not been remunerated by the profits of his invention, over and above the losses and expenses incurred and the time bestowed upon the subject, it is the duty of that officer to extend the term, so as to enable the inventor to derive, from the sale of his invention, a reasonable compensation for his genius and his labor; and it is very probable that, in view of these considerations, founded upon the case presented by Mr. Blanehard, congress became satisfied that it was fit and proper that his patent should be continued. Very likely the great litigation to which the patent has been subjected, and the enormous ex-

penses necessarily attending suits of the description of the one now before you, satisfied that body that 'Mr. Blanchard had not been reasonably compensated for the great benefit his invention had conferred upon the country, and they therefore deemed it their duty to prolong the term.

The patent is for an improvement in a machine for cutting, out of wood or other materials, irregular forms, such as gun-stocks, axe-handles, shoe-lasts and other articles requiring irregular forms in their construction and use. The first thing to inquire into and ascertain and settle in your minds is, the thing invented, so as to enable you to determine, when examining the machine of the defendants, whether or not that machine is an infringement, or, in other words, embodies the same ideas in its arrangement You must first comprehend the discovery made by Blanchard, for, until you comprehend that, you will not be able, upon examining the machine of the defendants, to determine whether or not that machine is substantially the same invention, embodying the same principle which was discovered by Blanchard and embodied in his machine.

I do not intend to take up much of your time in going over the description given by Blanchard in his specification. The subject is not new in this court, as the patent has unfortunately been one of much litigation. The first part of the specification is devoted to a description of the various parts which constitute the organized machine, so as to enable a mechanic of ordinary skill and intelligence to construct a machine. Under the second head in his specification, the patentee

explains the principle embodied in his machine, in other words, the novel characteristics or inventive elements of the machine, by which he claims it to be distinguished from all previous machines then in existence; and, in the conclusion of that head, it is stated that, as to the mechanical powers by which the movements of his machine are obtained, he claims nothing new. These movements, he says, may be effected by the application of various powers which would be furnished by a skilful mechanic when called upon for that purpose. Neither does he claim as new the cutter-wheel, or the friction-wheel, or the guide-wheel, or the model, separately or in the abstract. All these are common property, and anybody may use them. But he claims, as his invention, the method or mode of operation in the abstract, as explained in the second article, whereby an infinite variety of irregular forms may be cut or produced.

The principle or inventive element to be found in this machine is this: It is the cutting or turning of any given article of an irregular form longitudinally and transversely, by one joint operation. This is the novel idea struck out by Blanchard in 1820, and which he embodied in a practical working machine, which, as it has been shown, produces almost every variety of irregular form in the way mentioned. It has been suggested that this was no very great discovery after the existing state of the arts in that branch of knowledge. Yet it is historically true that, although we were in the beginning of the nineteenth century, no person had discovered that idea; or, if it had been discovered, no person, down to that time, had embodied it in a practical machine. There had been machines for cutting irregular figures or forms transversely alone, and there had also been machines for cutting irregular forms laterally or lengthwise. All these had already been discovered and had already been produced; but the idea of cutting such forms both longitudinally and transversely, by a joint operation, had never been discovered. That is the idea which occurred to Blanchard, and which has produced the extraordinary results that have been disclosed in the course of this trial. It is not surprising, therefore, that the government and the country should have been kind to one of whom it may well be proud; because, the very first application of this discovery, the fruits of his genius, was for the benefit of that government, namely, in manufacturing the gun-stock, which, down to that time, had been made by hand, and which has since been made by his machine.

It will be found, on looking at the description of this invention, contained in the patent, as well as by an examination of the organized machine, that this idea, which first occurred to Blanchard, has been embodied in a practical machine, which he has perfected by experiment and practice. The invention consists in the combination of four instruments in the mode pointed out in the patent, by which the machine cuts irregular forms longitudinally or lengthwise, and transversely or crosswise, by a joint operation. The gun-stock, as a product of the machine, strikingly exemplifies this combination. So do the shoe-last, the wagon-spoke and the axe-handle, though the last two do not in so marked and distinct

a manner, because the irregularities, either longitudinally or transversely, in the wagon-spoke and in the axe-handle, are slight compared with those in the others, as is obvious upon a slight examination of the different instruments.

I had intended to call your attention somewhat particularly to the two old machines produced on the part of the defendants, as it was supposed that the originality of Blanchard's discovery was intended to be contested. I was aware that, upon some previous trials, these machines had been used and relied on with that view by the defendants; but, inasmuch as it has been stated that they have not been introduced for the purpose of contesting the originality of Blanchard's invention, I shall not take up your time with them, but shall assume that he is the inventor of this combination, and is entitled not only to the merit of it, but to be protected in the enjoyment of its exclusive use, so long as his patent continues.

The only material question, therefore, involved in the case, for the consideration of either the court or the jury, is, whether or not the machine of the defendants is an infringement of the plaintiff's patent—that is, whether it is substantially the same or substantially different. This question is often one of great difficulty, and is usually the most embarrassing question involved in the trial of these patent cases. It calls, therefore, for patient and attentive examination and great care on the part of the jury, in looking into the evidence in the case, and into the several machines furnished by the parties for our information.

The machine of Blanchard embraces, in its scope and operation, the cutting of almost every species of irregular form, embracing any given extent of irregularity of form, as you have already seen, such as gun-stocks, lasts, &c, by means of the application of the combination or principle which he has discovered; and it is claimed, on the part of the plaintiff, that the defendants have appropriated this combination or principle, in order to obtain the benefit of one of the uses of his machine, namely, for making wagon-spokes. This raises the particular question in the case for your consideration.

As I have already stated, the invention of Blanchard consists in the combination of four instruments, the model, the rough material, the tracer or friction-wheel, and the rotary cutter, in the mode he has particularly described, by means of which the machine cuts irregularities, longitudinally and transversely,

by one joint operation. This combination thus formed may be and is applied successfully to the turning of wagon-spokes; and it is insisted by the plaintiff, that the defendants have embodied this combination in their machine, and are, by means of it, enabled to do the same work. If this be so, they have infringed upon the rights of Blanchard, although their machine has been so constructed as to perform but one of the functions of Blanchard's. For, if they can appropriate the plaintiff's combination for one of the uses or functions of his machine, because it is performed separately, another person may appropriate another function, and so on, until there is nothing embodied in his machine left unappropriated. The question then comes to this: Have or have not the defendants incorporated in their machine, in substance, the combination or principle of Blanchard? If they have, they are guilty of an infringement. If they have not, they are not guilty.

In examining a machine, with the view to ascertain whether or not it is an infringement of a previous one, the similarity or dissimilarity of the mechanical construction is not necessarily conclusive or controlling. Its structure may be apparently very similar in form, and yet its principle and operation and result may be very different. So, on the other hand, its structure and appearance may be very different to the eye and in point of fact, and yet it may, in reality and in principle, be the same as the previous machine. The mere mechanical construction and form of a machine are not therefore, always a test of its identity or want of identity, and it would be unsafe for a court or a jury to act upon the idea that, because two machines are different in their mechanical structure, either in appearance or reality, they are not substantially the same. The principle embodied in a machine, and which gives to it all of its utility, may be put in successful practical operation by different mechanical contrivances, depending more upon the skill of the mechanic than the genius of the inventor. Hence, it is unsafe to rely upon the mere difference in the mechanical construction. The sure test and the one the jury should be guided by in all cases of this kind is, whether or not the defendant's machine, (whatever may be its form or mechanical construction,) has incorporated within it the principle or the combination or the novel ideas which constitute the improvement to be found in the plaintiff's machine. If it does, then, no matter what may be its mechanical construction or its form, it is an infringement—an appropriation of the ideas of another, simply in a different form. You will, therefore, in view of this consideration, examine these machines, and the evidence that has been produced in the course of the trial, as well as the opinions of the experts, given to aid you in determining the character of the machines, and as certain whether or not the combination or principle which I have stated to you as constituting the invention of Blanchard is found incorporated substantially in the machine of the defendants—whether you there find substantially the model, the rough material, the tracer and the cutter, by the means and combination of which a wagon-spoke of irregular form, longitudinally or transversely, is produced by one joint operation. The plaintiff claims that this combina-

tion—this new idea—is incorporated in the defendants' machine and gives to it its useful effect in manufacturing wagon-spokes.

Coming down more closely to the point in controversy between the parties, it will be seen that the question is even more narrow than the one I have already stated. It is, whether or not the defendants' machine embraces the combination or principle by which the irregular form of the spoke is cut longitudinally and transversely by one joint operation. They insist that they do not use the same means as Blanchard, either formally or substantially, for the purpose of producing this irregular form longitudinally; and they deny that there is any such operation as a longitudinal cut upon their spoke, in the operation of the machine. You have before you the products of both machines. That this irregular form lengthwise is impressed upon the spokes which the defendants manufacture, is certain; and the question is, whether or not this form is produced by substantially the same principle or the same combination as that used by Blanchard. The defendants claim that they do not use the same combination, that they do not use a model, and that they have discovered new and different means for accomplishing this purpose, namely, an arrangement of cutters, and the use of cams and a tracer on the-rail upon which the vibratory lathe containing the rough material is moved from one-stage of cutting to the other, so that the rough material may approach to or recede from the cutters from one end to the other. This combination is claimed to be substantially different from the combination used by the plaintiff.

It is material, at this stage of the case, to recall your attention to a principle already stated, namely, that whether or not the one machine is an infringement of the other—does not necessarily depend upon whether their mechanical structures are different. But the question is, whether (whatever may be the mechanical construction) the later-machine contains the means or combination found in the previous machine—whether, taking the structure as you find it, you see the new idea embodied in it. If the combination of Blanchard is found substantially incorporated in the defendants' machine, then, its mechanical construction, whatever-it may be, is, as matter of law, but an equivalent for the mechanical construction,

of Blanchard's machine. No man can appropriate the benefit of the new ideas which another has originated and put into practical use, because he may have been enabled, by superior mechanical skill, to embody them in a form different in appearance or different in reality. For, although he may not have preserved the exterior appearance of the previous machine, he may have appropriated the ideas which give to it all its value.

Undoubtedly, in the construction of a machine for the purpose of producing one of the functions or results of the plaintiff's machine, there may be very great departures from it, and still the new machine may contain his principle of operation. His machine is constructed to cut almost every variety of irregular forms, and hence, from necessity, there must be a single and narrow knife or cutter, to enable him to cut the minuter sinuosities of the article required, such for instance as the shoe-last or the human face. A tool used in Blanchard's machine for the purpose of cutting the last or the human face, or any other exceedingly irregular surface or form, must be small, and, when it is issued for all purposes, as it is in the original machine of Blanchard, of course, in cutting irregular forms where the irregularities are small and few, the cutting must be comparatively slow. But, when the principle of Blanchard's is embodied in a machine constructed for and applied to one of the purposes of his, such as making spokes or axe-handles, it requires no great observation to see that in the case of a Blanchard machine so made, to accomplish but one of its purposes, and where the irregularity is simple and the lines diverge longitudinally but little, it would not be necessary to use the narrow knife that would be necessary to cut the form of the human face or any other very irregular body, but that a wider one might be used, by which the work could be done more readily. Take, for instance, the case in hand—the idea of constructing a machine to be devoted exclusively to the cutting of wagon-spokes. It is clear that the knife might be made broad enough to cut the principal part of the spoke by one operation, because the irregularity is small and the lines are nearly straight; and then a smaller knife might be used for the purpose of finishing the remainder of the article.

I call your attention to this consideration because it is unfair, I think, to take Blanchard's machine constructed for the purpose of cutting any irregular form, however great the irregularity may be, and contrast it with one that has been made for the purpose of performing only one of the functions which is performed by Blanchard's. The machine and the tools to be used, when the object is to cut any irregular form, must be constructed with regard to the minute sinuosities of some of the articles that it may be necessary to make. It is, therefore, unfair, when the question is between Blanchard's machine thus organized and a machine organized for one particular purpose, and to produce one particular result of Blanchard's machine, such as the wagon-spoke, to hold that, because the machine organized for that specific purpose is differently constructed, and dissimilar in appearance, and can produce the particular thing more rapidly, it therefore necessarily fails

to embody the same idea or combination. We know that any machine constructed to accomplish a particular object or purpose may be often materially changed from the original construction, and yet do the work very well. There are mechanical equivalents, by the use of which the whole features may be changed and a great departure made from the apparent principle and combination of the machine, and yet it may operate well. In view of this consideration, it should be particularly noticed in this case, that the defendants' machine has been constructed for one object—for the purpose of turning wagon-spokes of slight irregularity of form, and, therefore, as is obvious, may admit of very material changes from the original machine.

It will be proper, therefore, for you to look into these two machines, and see whether or not the change in the organization of the defendants' machine from the plaintiff's might not have been the production of the skill of a mechanic examining and studying the Blanchard machine, with a view to reorganize it and adapt it to the performance of one of its functions, namely, producing an axe-handle or a wagon-spoke. Because, whenever a defendant sets up that he has substantially departed from the existing machine, so as to avoid the consequence of an infringement, it is necessary that he should satisfy the court and jury that his departure has been such as involves invention and not mere mechanical skill, in order to entitle him to a patent for the discovery. There must be mind and inventive genius involved in it, and not the mere skill of the workman.

It must be admitted, that the machine of the defendants does cut the article in an irregular form longitudinally and transversely, by one joint operation. There is an irregularity both lengthwise and crosswise, as it respects the two first sections of the spoke, and the question is, whether or not the defendants have used, in thus cutting the spoke, substantially the means and combination of ideas used by Blanchard in his machine in producing the same article.

These views present all that I mean to trouble you with upon the main question in the case. As to the fact that the defendants' machine can cut a greater number of spokes in a given time than the plaintiff's, the law is as stated by the counsel on both sides. That fact may be taken into consideration in examining into the question whether or not the principle or combination of the two machines is substantially the same. If it is,

then, without regard to the result, and although a greater number of spokes can be made by the defendant's machine in a given time, that machine would still be an infringement. This superiority is sometimes produced by a superior construction of the machine; or, it may in this case be the result of making one adapted exclusively to the accomplishment of one of the purposes of Blanchard's; or, it may be the result of an improvement on his; but this will not entitle its author to use the principle or combination of Blanchard's.

There has been very little evidence, in the course of the trial, on the question of damages, and I presume that the counsel on both sides regard the main question in the case as the important one.

[NOTE. For other cases involving this patent, see note at end of *Blanchard v. Beeves*, Case No. 1,515, and note at end of *Blanchard Gun-Stock Turning Factory v. Warner*, Id. 1,521.]

¹ [Reported by Samuel Blatchford, Esq., and here reprinted by permission.]