

30FED.CAS.—24

Case No. 17,896.

WINTERMUTE v. REDINGTON.

{1 Fish. Pat. Cas. 239.}<sup>1</sup>

Circuit Court, N. D. Ohio.

Dec, 1856.

PATENT FOR INVENTION—IMPROVEMENT IN APPLICATION FOR HYDRAULIC POWER—SPECIFICATIONS—INFRINGEMENT.

1. The principle so embodied and applied, and the principle of such embodiment and application are essentially different; the former being a truth of exact science, or a law of natural science, or a rule of practice; the latter, a practice founded upon such truth, law, or rule. A new and improved method of producing a useful result or effect is as much the subject of a patent as an entire new machine.

{Cited in Johnson v. McCabe, 37 Ind. 538.}

2. The word “machine” in the statute includes new combinations as well as new organizations of mechanism, and hence there may be a patent for new combinations of machinery to produce certain effects, whether the machines constituting the combination be new or old. In such a case, the patent is not for an abstract principle, but for the particular application of the principle which the patentee professes to have made.

3. Parker’s patent is not for the vertical or horizontal arrangement of the wheels upon the shaft, or the putting them in pairs; neither does it embrace, as a distinct discovery, the concentric cylinder inclosing the shaft, nor the spout,

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the gate, the outer cylinder, or the buckets on the wheel.

4. The purpose or aim was to obtain an increase of power with a given quantity of water; and the secret of the invention of the wheel is the vortical motion of the water on the wheel, which operates as a coefficient to the reactive power of the water in the buckets.
5. The identity that is to be looked to, in an action of infringement, respects that which constitutes the essence of the invention, namely, the application of the principle. If the mode adopted by the defendant shows that the principle admits of the same application in a variety of forms, on by a variety of apparatus, such mode is a piracy of the invention.
6. But if the defendant has adopted variations which show that some other law, or rule of practice or science, is made to take the place of that which the patentee claims as the essence of his invention, then there is no infringement.
7. In estimating the actual damages the rule is to give the value of the use of the patented thing during the illegal user, or in other words, the amount of profits.
8. An assignment of a patent by one of two or more administrators is good, and passes the entire interest.
9. The patentee may be regarded as a purchaser from the public, being bound to so communicate his secret, by specification, drawings, and models, that it shall be successfully available to the whole community at the expiration of his patent.
10. The right to an invention dates from the time of discovery, and the patentee is secure in his patent if his machine or manufacture was not in public use when he made his application.
11. The word "useful." in section six of the act of 1836 [5 Stat. 119], and in section one of the act of 1793, does not prescribe general utility as the test of the sufficiency of an invention to support a patent. It is used merely in contradistinction to what is frivolous, or mischievous to the public. It is sufficient if the invention has any utility.

[Cited in *Cook v. Ernest*, Case No. 3,155.]

12. When the exact nature and extent, or essence of the claim can be perceived, the court is bound to adopt that interpretation of the patent, and give it full effect.
13. In describing an improvement in a machine, it may be necessary, and when so, it is proper to describe the whole machine, as it operates with the improvement in order to make the description understood by a person of the trade to which it belongs; and if this is not done, the patent fails for obscurity.
14. Where a patent is for an improvement on an old machine, if the whole of it, the old and the new, is described in the specification, the patentee must distinguish what part he claims, or the patent will be void for ambiguity.
15. A patent can not be sustained for a mere principle; but a principle may be embodied and applied, so as to afford some result of practical utility in the arts and manufactures, and under such circumstances a principle may be the subject of a patent
16. It is, however, the embodiment and application of the principle which constitutes the grant of the patent.

This was an action on the case [by John Wintermute against Alexander H. Redington], tried before Judge Willson and a jury, for the infringement of letters patent granted to Zebulon and Austin Parker, October 9, 1829, and assigned to plaintiff. The nature of the patent is sufficiently stated in the report of the case of *Parker v. Hulme* [Case No. 10,740].

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

Herrick & Barlow, S. F. Andrews, and K. Hitchcock, for defendant.

WILLSON, District Judge (charging jury). The plaintiff has brought his action on the case to recover for an alleged infringement of a patent, for which letters patent were granted in October, 1829. The patent issued originally to Zebulon Parker and Austin Parker, and on the 19th day of October, 1843, was renewed by Zebulon Parker, for seven years, extending its duration thereby to October 1850. Austin Parker before that time having deceased, the renewal was for the joint benefit of Zebulon Parker and the estate of Austin Parker.

A transcript of the record of the court of common pleas of Trumbull county, Ohio, is in evidence showing, that at the November term. 1834, Robert McKelvy and Eliza Parker were appointed administrators upon the estate of Austin Parker; also an assignment, dated July 31, 1841, from McKelvy, administrator, etc., to Z. Parker, of all the interest of said estate in the patent. There is also in evidence, an assignment of the entire interest in the patent from Z. Parker to the plaintiff, dated May 17. 1847.

To this paper evidence of title, no exceptions have been taken by the defendant, except to the assignment of McKelvy (the administrator) to Zebulon Parker. It is claimed that inasmuch as both administrators did not join in the assignment, a part only of the interest in the patent passed to the assignee.

This exception is not well taken. Administrators of an estate are not, properly speaking, trustees in whom is vested the legal title. The law clothes them with certain powers, by which they are enabled to transmit the legal title of property. They are mere instruments of the law, and the effect is given to their acts upon the same principle that title to property is transferred by the official act of a sheriff or marshal; and it is well settled, that if a man appoint several executors, they are esteemed in law but as one person representing the testator. Acts done by one of them, which relate to the delivery, gift, sale, or release of the testator's goods or personal property, are deemed the acts of all. The same rule obtains with reference to the acts of administrators. *Wheeler v. Wheeler*, 9 Cow. 35. I am unable to see any force in the objection made to the assignment of McKelvy.

Such is the position of the plaintiff upon the record, as to title. The defendant has pleaded the general issue, and given notice of the want of novelty in the invention. As the validity of this patent has been drawn in question, it becomes the duty of the court to examine it and determine its character. The general character of the patentee's invention, as declared

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in the patent itself, is, “a new and useful improvement in the application of hydraulic power.” To obtain a right understanding of the invention, however, we must resort to the specifications, which by law are required to accompany the patent.

In the introductory part of the specifications, the invention of the patentees is claimed to consist of “a new and useful improvement in the application of hydraulic power, by a method of combining percussion and reaction, applied and exemplified in: 1st A compound vertical percussion and reaction waterwheel, for saw mills and other purposes, with the method of applying the water on the same. 2d. An improved horizontal reaction water wheel, with the method of combining percussion with reaction on it. 3d. A method of combining percussion with reaction on common reaction wheels, or those already in use.” Then follows the statement that “the principle upon which this improvement is founded, is that of producing a vortex within reaction wheels, which, by its centrifugal force, powerfully accelerates the velocity of the wheel, and adds proportionately to its momentum.”

Taking the definition of percussion, as given by Mr. Morton, an expert, it is safe to say, its legitimate meaning, as used by the patentees here, is a power over and above reaction, derived from the impingement of the water, with a momentum due to its velocity, upon the buckets placed obliquely in its line of motion. The term being thus understood, we have clearly and satisfactorily exhibited in this part of the specifications, the purpose of the invention; which is the application of hydraulic power to the propulsion of water-wheels, by a new and improved method.

In pursuing the specifications further, we find the minute details, the modus operandi, of producing a wheel or machine for this new and improved method. Before construing the patent and specifications, in order to ascertain what the patentees claim to be their invention, it is proper for us to recur to some well-settled principles of law which will govern the court and direct the jury in applying the testimony in the case.

As the patent law of the United States grants the patentee a monopoly, and not only awards damages, but inflicts a penalty for a violation of the exclusive privilege, it requires that the invention shall be so described, in the specifications, that one acquainted with the art or manufacture to which it relates, may not only understand the invention, but be able by following the specifications, with the aid of the drawings, to construct the machine, or make the combination, which is the subject of the patent. And this rule of law is founded on the equitable principle, that a monopoly or exclusive privilege should not be given to an individual without a just equivalent to the public. While the statute holds out encouragements to stimulate invention and improvement in the arts and manufactures by securing to the inventor a remuneration for his outlay and a reward for his ingenuity, nevertheless, the consideration for which the patent issues to him, is the benefit he confers on the community, by his discovery eventually becoming public property. The patentee may be regarded as a purchaser from the public, being bound to so communicate his

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secret by specification, drawings, and models, that it shall be successfully available to the whole community at the expiration of the patent. I state this principle of law thus fully, for the reason that in the experiments made before you by Paul C. Parker, a millwright, on his machine, the scroll seemed to be a detriment to the wheel. That scroll, the plaintiff's counsel say, was too large, and not constructed in accordance with the specifications of the plaintiff's patent. If so, the experiment goes for nothing. Then, any witnesses, who have condemned the use of the scroll, should prompt you to a careful examination of the specifications, models, and drawings, that you may determine whether they furnish the instructions and data sufficient to enable a good and skillful millwright to construct the scroll, and all other parts of the machinery, so as to produce the effect claimed by the patentees, and in doing this you will recur to all the testimony given in the ease, as to the sufficiency of the patentee's specifications, models, and drawings in that regard.

In the second place, is this alleged invention new and useful? By section 1 of the act of 1793 [1 Stat. 318S], re-enacted by section 6 of the act of congress of July, 1836, it is provided that any person or persons having discovered or invented any new or useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter, not known or used by others before his or their discovery or invention thereof, and not at the time of his application for a patent, in public use or on sale with his consent or allowance as the inventor or discoverer, and shall desire to obtain an exclusive property therein, may make application in writing, etc.

It is an essential requisite of this law, that the invention be new; and in relation to the time in reference to which the invention must be new, our statute differs materially from the English statute, enacted in 1623. By that act of the British parliament, the invention was required to be new at the time of the issuing of the letters patent; a long time thus intervened after application made and before the grant of the patent, in which the discovery was made public, and the patentee suffered by piracy upon his discovery. The consequence was, that for more than two hundred years it was almost impossible for a patentee to sustain his patent in the English courts, in a suit for infringement, for the reason that his invention was in use, and, therefore, not new at the date of issuing the patent.

Our statute is more just and liberal to the

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patentee. The right to the invention dates from the time of discovery, and he is secure in his patent if his machine or manufacture was not in public use at the time he made his application. The question of novelty in this invention, therefore, must be considered with reference to the time of discovery in 188. Again: The patent itself is prima facie evidence of novelty, and this prima facie evidence is strengthened by the fact of the renewal of the patent. It can only be overcome by proof made under the defendant's notice, and your inquiries in that particular are restrained by the notice.

The questions of the sufficiency of that notice, and the admissibility of proof under it, have been fully argued by counsel and decided by the court. They are questions with which you had nothing to do. Such proof as was permitted to go to you under the ruling of the court, you are to receive as evidence of previous invention, knowledge, or use, and none other. You will refer to your minutes of the testimony to refresh your recollection of what was sworn to by Urbane Kelsey, Jesse Stow, Jabez W. Phillips, Wm. H. Thurston, Perley Blakeslee, Elisha Garrett, and Henry Wetmore. The testimony of these witnesses, coupled with the exhibition of models of the "Kelsey wheel," "Humiston wheel," "Foster's Crossing wheel," and the "McComb wheel," is all, and I believe the only, evidence proper for you to consider in ascertaining the want of novelty in the Parker patent. It is for you to determine its effect under the rules of law that will be given to you by the court.

There are certain legal rules which will govern you in testing the novelty and utility of this invention. And I may here remark, that the word "useful," in the section of the statute which I have quoted, is not used for the purpose of establishing general utility at the test of a sufficiency of invention to support the patent. It is used merely in contradistinction to what is frivolous or mischievous to the public. Mr. Justice Story has illustrated this rule by saying that "a new invention to poison people, or to promote debauchery, or to facilitate private assassination, are not patentable inventions. But if the invention steers wide of these objections, whether it be more or less useful, is a circumstance very material to the patentee, but of no importance to the community." It is quite sufficient if it has any utility. The plaintiff, then, has answered the requirements of the law, if his invention in usefulness is but a slight improvement on former wheels, even though it be for an improvement upon what is old.

In testing the novelty of the invention, the task is more difficult. Where the patent is for an improvement on an old machine, if the whole of it as well the old as the new part, is described in the specifications, it is essential that the patentee distinguish what part he claims, since, if this does not satisfactorily appear, the patent will be void for ambiguity. Or, if the clear construction of the patent and specification taken together, is, that he claims the whole machine in its improved state, the patent will be void by his claiming too much. And if the specifications contain a description of what is old and known, as well as what is new, what is claimed as new must be distinguished. In specifying an improve-



ment in a machine, however, it may be necessary, and when so, it is proper to describe the whole machine as it operates with the improvement, in order to make the description understood by a person of the trade to which it belongs; and if the patentee fails to do this, his patent fails for obscurity. The simple purpose of the law, in requiring the patentee to distinguish new from old, is, that it may distinctly appear what his invention is. It is sufficient if what is claimed as new appears with reasonable certainty on the face of the patent and specifications, or by necessary implication. These are governing rules of law, where the claim of the patent is for parts of a machine, those parts being essentially what is claimed as the improvement on the whole machine.

There is, however, a class of cases to which these stringent rules do not apply, although the discovery is in the nature of an improvement on what is old. Where any new contrivances, combinations, or arrangements are made use of in machinery, although the chief agents are well known, those contrivances, combinations, or arrangements may constitute a new principle, and then the application or practice will necessarily be new also. And in such a case, the new and improved method of producing a useful result or effect, is as much the subject of a patent as an entire new machine.

The word "machine" in the statute includes new combinations as well as new organizations of mechanism, and hence there may be a patent for new combinations of machinery to produce certain effects, whether the machines constituting the combination be new or old. In such a case, the patent is not for an abstract principle, but for the particular application of the principle which the patentee professes to have made. And I have no hesitation in saying, that the invention or discovery claimed by the plaintiff's patent is substantially of this class. With this view of the case, I know it is objected that the patentees here claim the discovery of abstract principles, and it is urged, that in contemplation of law, principles of science are never new, or the subject-matter of a patent.

It is true that a patent can not be sustained for a mere principle. For instance, Sir Isaac Newton's discovery of the principle of gravitation could not be the subject of a patent. But it is equally true, that a principle may be embodied and applied, so as to afford, some result of practical utility in the arts and manufactures, and that under such

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circumstances a principle may be the subject of a patent. It is, however, the embodiment and the application of the principle which constitute the grant of the patent. And it has been justly said "that the principle so embodied and applied, and the principle of such embodiment and application, are essentially distinct; the former being a truth of exact science, or a law of natural science, or a rule of practice; the latter a practice founded upon such truth, law, or rule."

Now, percussion, reaction, and centrifugal force are, in the abstract, neither new principles nor subjects of a patent. But their embodiment and application to machinery may be both new and useful, and entitle the discoverer to the exclusive use of his invention. The patentees in this case claim the discovery of embodying these principles in a water-wheel, and their application in a new and improved method of propulsion. And this it is competent for them to do.

Having stated these rules of law for your government, let us examine more minutely the patentee's claim. It is the business and duty of the court to construe the patent and specification for the purpose of determining what the claim of the discovery or invention is; whether it is for the invention of a new water-wheel, or for the discovery of an improved water-wheel merely, or whether it is for an improved method of applying hydraulic power for the propulsion of water-wheels. And it is the province of the jury, under the instruction of the court, as to what the invention is, to determine whether such invention is new and useful.

In construing this patent and specifications, we recognize the force of the rule laid down in *Curtis on Patents* (section 391): "That the patentee is to be presumed not to intend to claim things which he must know to be in use; and that the specifications should be so read as will make the claim coextensive with the actual discovery or invention."

What, then, is embraced in the claim of this patent? It is not the vertical or horizontal arrangement of the wheels upon the shaft, or the putting them in pairs. It is absurd, said my brother Leavitt, to suppose that a man of ordinary intelligence would claim as his invention the self-evident truth in mechanics, that a wheel on a horizontal shaft should be vertical. Neither does it embrace, as a distinct discovery, the concentric cylinder inclosing the shaft; nor the spout, the gate, the outer cylinder, nor the buckets on the wheel. These and many other things are mentioned in the specifications as necessary fixtures and adjustments in the patentee's combination and arrangement. This combination and arrangement is for the application of hydraulic power to the propulsion of water-wheels by a new and improved method.

The purpose or aim of the patentees evidently was to obtain an increase of power with a given quantity of water. They claim that by the arrangement of the concentric cylinder and the spout of spiral termination, a greater leverage is obtained by applying the water on the wheel in the line of motion, and at as great a distance as possible from the center.



The outer cylinder gives it a vortical motion and the inner cylinder gives it greater force by directing it from the center. By the adjustment of the scroll (when properly made), the water passes around and between the cylinders, so that it is directed to the wheel in such proportion that as the volume of water diminishes by passing through the issues, the remainder is kept up to the work and is thus caused to press equally upon the entire circumference of the buckets.

In these arrangements of machinery, the patentees claim a combination of pressure or percussion, reaction, and centrifugal force that produces a combined power of propulsion. And here lies the secret of the invention of this "Parker Wheel." It is the vortical motion of the water on the wheel, which operates as a coefficient to the reactive power of the water on the buckets. It is what the patentees claim it to be, to wit: "An improvement in the application of hydraulic power, by a method of combining percussion with reaction." This is evidently what is claimed by the inventors; and when the exact nature and extent, or essence of the claim of the inventors can be perceived, the court is bound to adopt that interpretation of the patent, and to give it full effect.

This conclusion is drawn from the hypothesis that the terms "reaction wheels" and "common reaction wheels," as used in the specifications, were understood and employed by the patentees in the technical sense of those words, and as understood and defined in books of accredited authors. Since the invention of the "Parker Wheel" one hundred years ago, the term "reaction," as applied to water wheels, has been well understood as contradistinguished from "impact" or "percussion."

That the patentees use the term "reaction" in its technical sense, is evident from the language employed in the specifications in relation to the size of the issues and the quantity of water admitted upon the wheel, as compared with that leaving it at the issues.

That they understood what a common reaction wheel was, is further evident from their description of it in the specifications, in which they say, "It runs under the penstock. Through the floor, a circular hole is made, nearly equal in diameter to the internal diameter or the rim, and concentric with the wheel. The hole through the floor is lined with staves in cylindrical shape," etc., and then the buckets and issues are described. This description answers to that of the "McComb Wheel" which has been testified to by witnesses, and illustrated by

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an exhibited model of reaction wheel in common use at the date of issuing the Parker patent. Now, it is claimed that this old reaction wheel was propelled by the water (when full in the forebay) pressing or acting first on the disc of the wheel, and then in the lines of its radii upon the buckets, and spouting out at the issues, thus preventing by its course the possibility of a vortical motion on the wheel.

From a careful examination of the specifications, I am fully satisfied that the essence of the invention is, the producing a vortical motion on a reaction wheel in the line of its motion, and that the invention of producing a vortical motion upon a percussion or impact water-wheel is not within the claim of the patent.

This construction of the patent and specifications by the court, will be regarded by you in your inquiries upon the questions of novelty and utility. In declaring what the patentee's claim is, I have sufficiently indicated the opinion that the invention is not frivolous, and that it is the proper subject of a patent.

Thus far in the case, there are presented to you three inquiries: 1st. Do the specifications and drawings furnish such full directions that a skillful millwright can construct a waterwheel containing the combination claimed by the patent. 2d. Is the invention useful? 3d. Is it new?

If you find affirmatively on these three propositions, you will then recur to the testimony, and inquire whether the defendant has infringed upon the plaintiff's right. In this branch of the case, the duty and labor of examining and weighing the testimony, the law, for wise and sound reasons, has imposed upon you. It is made the duty of the court, however, to declare the rules of law by which you are to be governed in applying the evidence.

We have already stated that when a person has invented some mode of carrying into effect a law of natural science, or a rule of practice, which constitutes the peculiar feature of his invention, such discovery may be secured to him by a patent. Hence it follows that he is entitled to protect himself from all other modes of making the same application. The substantial identity, therefore, that is to be looked to, respects that which constitutes the essence of the invention, namely, the application of the principle. If the mode of carrying the same principle into effect, adopted by the defendant, still shows that the principle admits of the same application in a variety of forms, or by a variety of apparatus, the jury will be authorized to treat such mode as a piracy of the invention. But if the defendant has adopted variations which show that the application of the principle is varied, that some other law, or rule of practice or science, is made to take the place of that which the patentee claims as the essence of his invention, then there is no infringement. Curt. Pat. 338.

If the defendant, in the use of a reaction water-wheel, whether on a vertical or horizontal shaft, whether single or in pairs, has run it, or caused it to be run, by the aid of

the vortical motion of the water upon the wheel in its line of motion, he has violated this patent; provided he has used, in so doing, any or all of the patentee's mechanical contrivances for producing that vortical motion or mechanical equivalents for any or all of them to produce it. This contains, in a nut-shell, the whole law of the case upon the question of infringement. A different rule of law would obtain, if the shute, cylinders, scroll, and other contrivances were embraced in the claim of the patent. This view of the ease renders it unnecessary for me to notice in detail the great number and variety of points made by counsel, upon which they have desired the court to instruct you.

If you find, from the testimony, explained and illustrated as it has been by the models which are in evidence, that the defendant has infringed upon the plaintiff's right, then the only question remaining for your consideration, is that of damages.

If you find for the plaintiff, you will assess and return as your verdict, the actual damages he has sustained by the infringement, whether such infringement was an intentional violation of the patent or not: and in estimating the actual damages, the rule is, to give the value of such use during the term of the illegal user, or in other words, the amount of profits actually received by the defendant between the 17th of May, 1847, and the 19th of October, 1850. This rule is fully stated in the case of *Parker v. Bamker* [Case No. 10,725].

The case, gentlemen, is now committed to your hands. I have cautiously abstained from all comments upon the testimony. It has been so thoroughly examined and canvassed by counsel on both sides, that even an allusion to it by the court would be a work of supererogation. The patient and careful attention which, for more than two weeks, you have given to the evidence and arguments of counsel, is a sufficient guarantee that your verdict will accord with the law and the testimony. Although the long time occupied in the trial has challenged your patience, you have, nevertheless, been amply compensated in the elucidation of important principles of philosophy and law, and by the exhibition of profound erudition of scientific witnesses, which has been surpassed only by the ability and learned disquisition of counsel in the trial and argument of the cause.

The jury found a verdict for the defendant.

[For other cases involving this patent, see note to *Parker v. Hatfield*, Case No. 10,736.]

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