

## NEEDHAM V. WASHBURN ET AL.

{1 Ban. & A. 537; 4 Cliff. 254; 7 O. G. 649; Merw.

Pat. Inv. 247.}]<sup>1</sup>

Circuit Court, D. Massachusetts.

Oct., 1874.

PATENTS—PATENTABLE INVENTION—CASTING  
WHEELS—PRIOR STATE OF  
ART—PRACTICE—RESPONDENT CORPORATION  
SUED AS COPARTNERSHIP—AMENDMENT.

1. Whether, in a suit brought against the respondents as copartners, but in which the proofs fail to show a partnership, but do show that the respondents, with others, were, organized into a corporation, with the same name as the alleged copartnership, it would be competent for the court to enter a decree against the corporation, *quaere*.

{Cited in *Brown v. Piper*, 91 U. S. 43.}

2. In such case the court will not delay the hearing of the cause; since the defect, if it be one, may be cured by an amendment. Citing *Goodyear v. Phelps* [Case No. 5,581], and *Poppenhusen v. Falke* [Id. 11,279].
3. Prior to the complainant's patent for an improvement in easting car wheels, steel tires, previously heated to a required degree of heat, were placed in the mould in which the body of the wheel was to be cast, the flask immediately closed, and the molten iron poured into the mould through one or more openings or sprues in its centre, a suitable flux being employed to promote the welding of the two metals, which, when cool formed one solid mass. The evidence showed, that iron and steel had, from time immemorial, been welded, both with and without a flux: *Held*, that it was not a patentable invention, but merely the product of ordinary mechanical skill, in the casting of wheels in this method, to pour the molten iron through openings or sprues made just inside the inner edge of the steel tire instead of at the centre of the mould, for the purpose of preventing particles of foreign matter being carried by the flowing metal to the points of union of the two metals, and, thereby, preventing a perfect weld: *Held*, also, that the state of the art showing that iron and steel had long previously been welded both with and without the medium of a flux, and that mechanics skilled in the art differed in opinion as to the utility of any flux, it was not a patentable

subject to cast car wheels in the manner described, but with the omission of a flux previously used.

[Cited in *Snow v. Taylor*, Case No. 13,148; *Cone v. Morgan Envelope Co.*, Id. 3,096; *Alcott v. Young*, Id. 149.]

{This was a bill by Chandler Needham against Nathan Washburn and others to restrain the alleged infringement of letters patent No. 110,779, granted to the complainant January 3, 1871.}

J. B. Robb, for complainant.

A. K. P. Joy, for defendants.

CLIFFORD, Circuit Justice. Letters patent may be granted for the invention or discovery of any new and useful art, machine, manufacture or composition of matter, or of any new and useful improvement of the same, upon the conditions specified in the patent act. Unless the thing claimed as the invention is new and useful, the claim is wholly without merit, as that is the primary and indispensable condition annexed to the right to claim the protection which the patent act is intended to secure. Application in writing must be made to the commissioner, and the requirement is, that the applicant shall file in the patent office, a written description of the invention or discovery, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same. 16 Stat. 201. Patents granted by the commissioner, in pursuance of those conditions, afford a prima facie presumption, when introduced in evidence, that the patentee is the original and first inventor of what is therein described as his invention or discovery. Such a presumption, however, may be controlled by evidence of a prior knowledge or use by others in this country; or that the invention or discovery had been described in any printed publication, before his invention or discovery

thereof, in this or any foreign country; or, that it had been in public use, or on sale, for more than two years prior to his application for a patent.

Damages are claimed by the complainant for an alleged infringement by the respondents of certain letters patent, granted to him, in which it is represented, that he is the original and first inventor of a certain new and useful improvement in casting car wheels, as more fully described in the specification of the letters patent. Process was served, and the four persons named as respondents in the bill of complaint appeared, and filed separate answers. They are described in the bill of complaint as copartners, under the name of the N. Washburn Steel Tire Works, and the charge is, that the respondents, without consent, and in violation of the complainant's exclusive rights, have made, sold, and used a large number of said patented car wheels, in infringement of the exclusive rights secured to the complainant by said letters patent. Appearance was entered by each of the respondents, and they severally set up the following defences: 1. That they are not and never were, copartners doing business at Worcester, as alleged in the bill of complaint. 2. That the complainant is not the original and first inventor of the improvement. 3. That the alleged improvement was well known and in public use, by various persons, and at various places, before the alleged invention thereof by the complainant.

Proof to show that the respondents are copartners is entirely wanting, but, inasmuch as that defect, if it be one, may be removed by a proper amendment, the court is inclined to examine the merits of the controversy. Before doing so, however, it may be well to examine the proposition of the complainant, 1277 that he is entitled to a decree against the respondents, as individuals, even though he has utterly failed to prove that they are copartners as alleged.

Partnership is certainly not proved. On the contrary, the respondents offer proof, tending to show, that they are a corporation duly established under the laws of the state in which their business is transacted; but the complainant denies that proposition, and insists that, as they were never duly incorporated, he may well maintain the present suit against them as individuals.

Besides the claim for damages, the complainant also prays for an account of gains and profits, and also for an injunction. Having sued the respondents as a partnership, it may be doubtful whether it would be competent for the court to enter a decree against the corporation, but as that defect, if it be one, may be cured by an amendment, the court will proceed to examine the merits of the controversy. *Goodyear v. Phelps* [Case No. 5,581]; *Poppenhusen v. Falke* [Id. 11,279].

Taken as a whole, the proofs in the case show, to the satisfaction of the court, that the persons sued as partners were, with others, organized as a corporation, in November, 1869, under the general statutes of the state, by the corporate name set forth in the pleadings, and it appears that all the incorporators were made directors, and that the business of the corporation was conducted by the directors. Opposed to this, is the uncontradicted proof that no certificate, setting forth the corporate name and purpose of the association, was ever filed with the secretary of state; but the better opinion is, that the statutes of the state, in force at the time the organization was made, did not contain any such requirement, and, consequently, that the organization is not rendered illegal by that omission. Gen. St. 341. Such a requirement was enacted the next year, but this new provision is not retroactive. Supp. Gen. St. 806.

The principal defences upon the merits, are as follows: 1. That the alleged improvement is not new in the sense of the patent law, because the patentee was

not the original and first inventor of it, and because the process was well known and in public use, long before the date of the supposed invention. 2. Because the respondents have never infringed the patent, as alleged. Both of these defences make it necessary to ascertain what the invention is, when the patent, which secures it is properly construed.

Enough may be learned from the description given by the patentee in the specification of the process, which he pursues to manufacture the patented car wheel, when weighed in connection with the claim of the patent, to furnish a satisfactory answer to the inquiry as to the true nature and scope of the alleged improvement. His first step, as pointed out in the specification, is to cast a suitable quantity of steel to form the tire of the wheel, into an annular ingot, about fifteen inches in diameter, with an opening at the center of its diameter, of four inches. He then hammers the ingot upon an anvil, by means of a steam hammer, by which its diameter is extended to eighteen inches; and he gives a description of the anvil which he uses, and of the manner of conducting the hammering. Forming-rolls are then employed, by which the ingot is enlarged to the proper size and shape, to form the tire of the wheel. Having formed the tire, he then places it in a heated furnace, and heats it to a bright cherry red, when it is taken from the furnace, and having removed every foreign substance from its surface, he places it within the mould in which: the body of the car wheel is to be cast, said mould having previously been formed and: prepared for the purpose. Care, it is said, should be taken, that the heated tire should be properly adjusted in the mould; and when that is accomplished, the direction is, that the flask shall be immediately closed, and the molten iron be poured into the mould, which as it comes in contact with the highly heated steel, fuses the surface of the latter, thereby forming a perfect union between the

two, and as the metal cools, the body of the wheel and the tire are welded into one solid mass. Extended remarks upon that part of the described process is unnecessary, as nothing there described is embraced in the claim of the patent, and, if it had been, it would not have benefited the complainant, as every part of the process there described is substantially the same as that set forth in the patent granted to Zadoc Washburn, which was introduced in evidence, and is of prior date.

Two matters are then introduced into the specification of the patent in question, which, it is insisted, distinguish it from the invention of Zadoc Washburn, which, it is admitted, is the older of the two: 1. That the molten iron is introduced into the mould, through a series of openings at the rim of the wheel, just inside the tire, and that it flows from thence to the centre, carrying away from the inner surface of the steel tire all dirt and dust, if any, which might otherwise prevent the welding of the parts. 2. Nothing is expressly set forth, under the second head, as a matter pertaining to the described improvement, but the patentee points out what he represents as a defect in the process of the other patent, which is, that the cast iron, instead of lying still in the mould, and forming a perfect weld, is agitated and caused to bubble, by the gas generated by the molten iron as it comes in contact with the flux used in the process, whereby, as he states, the perfect and desired union of the iron and steel is prevented. Everything described in the patent to Zadoc Washburn, is disclaimed by him in express terms. What he claims is, the described method of introducing the molten cast iron into the mould, through a series of holes, directly upon the inner unfluxed surface of the cast-steel tire, by which a perfect union and weld of the metals are produced.

Car wheels, manufactured by first forming 1278 a rim of cast steel, and then heating and placing it in

a mould previously prepared for the purpose, and by pouring molten cast iron into the mould to complete the manufacture of the wheel, by the union or weld between the two into one solid mass, are certainly old. Nor is that proposition denied. Nothing, therefore, but a new and useful improvement in the method or process of such a manufacture can be regarded as the proper subject of a patent. Doubtless, it may be true, that the molten iron was formerly poured into the mould at the center of the mould, and, it may be, that it is better to construct the openings in the mould for the purpose—whether they are called by that name, or are called “sprues,” or conduits—just inside the inner surface of the heated rim, when placed in the mould; but the court is not satisfied, from an examination of the product, or from any evidence in the case, that such a change, without more, even if new, which is not admitted, is the proper subject of a patent, as it is scarcely possible that it could have required any invention to make it. Changes of the kind are nothing more than common knowledge and experience would suggest, and every workman, whether skilled in the art or not, would know how to apply the suggestion. Nor can it make any difference that the patentee uses a series of such openings or holes in his method, or process, as the proofs are full and satisfactory, that a series of holes had been used in making such castings at a much earlier period than the date of the complainant’s invention, and on several occasions, as appears by the testimony of an unimpeached witness.

Suppose that is so, still, it is insisted by the complainant, that his method or process is new and useful, because he does not use flux in making the described weld, which, as he insists, distinguishes his method or process from the invention described in the Zadoc Washburn patent, and from all others known at the date of his invention. Much reason exists for holding, that the second feature of the claim is invalid,

because not embraced in the description of the method or process used by the complainant, as required by the act of congress; but, inasmuch as the alleged invention consists, merely in omitting an ingredient, often employed in welding steel and iron, or two pieces of iron, the court is not inclined to rest the decision entirely upon that ground.

Nor is it at all necessary to do so, as the court, in view of the facts and circumstances of the case, is of the opinion, that it is matter of common knowledge, that iron, or iron and steel, may be successfully welded with or without the use of flux, and that such knowledge has existed among mechanics accustomed to work at the ordinary forge, for a very long period, whereof the memory of man runneth not to the contrary. Axes, scythes, hoes, and other farming utensils were formerly made on the common anvil; and it is believed, that mechanics, formerly engaged in manufacturing such articles, knew full well that flux was often omitted in effecting a weld of iron, or iron and steel. Horse shoes were made in the same manner, and many larger articles, such as ploughshares and mill cranks. Differences of opinion, it is known, have at times existed among mechanics of that class upon the subject, some maintaining that flux was useful, and even necessary, and others maintaining the opposite opinion, with equal earnestness and confidence. All of these suggestions, it is believed, are supported by common experience and knowledge, but it is not necessary to go out of the record to find convincing proof to the same effect. Even the complainant, in his deposition filed in the patent office, testified in his cross-examination, that he was aware that iron and steel had been so welded; and, when asked if he knew, as a matter of fact, that iron and steel had for a long time been welded with and without flux, stated that it was said to have been so welded for a long time. Support to that view is also derived from one of the



respondents' witnesses, who says, that in making four or five car wheels, they used four sprue holes, and that some of them were made with flux, and some without; which statement is also confirmed by other witnesses.

Having come to the conclusion that the alleged infringement is not new or patentable, it is not necessary to examine the question of infringement. Bill of complaint dismissed, with costs.

<sup>1</sup> [Reported by Hubert A. Banning, Esq., and Henry Arden, Esq., and by William Henry Clifford, Esq.; and here compiled and reprinted by permission. Merw. Pat. Inv. 247, contains only a partial report.]

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