

Case No. 8,568.

LOWELL v. LEWIS.

[1 Mason. 182;¹ 1 Robb, Pat. Cas. 131.]

Circuit Court, D. Massachusetts.

May Term, 1817.

PATENTS—USEFULLNESS—AMBIGUITY—IMPROVEMENT ON OLD MACHINE—CLEARNESS OF SPECIFICATIONS—FIRST IN TIME.

1. The law entitles a party to a patent for a new and useful invention: and by “useful” is meant, not an invention in all cases superior to the modes now in use for the same purpose, but “useful” in contradistinction to frivolous and mischievous inventions.

[Cited in *Kneass v. Schuylkill Bank*, Case No. 7,875; *Whitney v. Emmett*, Id. 17,585; *Blake v. Smith*, Id. 1,502; *Hotchkiss v. Greenwood*, 11 How. (52 U. S.) 269; *Stimpson v. Woodman*, 10 Wall. (77 U. S.) 125; *Seymour v. Osborne*, 11 Wall. (78 U. S.) 549; *Doherty v. Haynes*. Case No. 3,963; *Gibbs v. Hoefner*, 19 Fed. 324.]

[Cited in brief in *Dickinson v. Hall*, 14 Pick. 219, 220. Cited in *Dunbar v. Marden*, 13 N. H. 318, 319; *Robertson v. Thompson*, 3 Ind. 190; *Rowe v. Blanchard*, 18 Wis. 442; *Nash v. Lull*. 102 Mass. 60; *First Nat. Bank of Sturgis v. Peck*, 8 Kan. 667; *Wilson v. Hentges*. 26 Minn. 291, 3 N. W. 340; *Tod v. Wick*, 36 Ohio St. 393.]

2. The patentee must describe in his patent, in what his invention consists, with reasonable certainty, otherwise it is void for ambiguity. If it be for an improvement in an existing machine, he must, in his patent, distinguish the new from the old, and confine, his patent to such parts only as are new; for if both are mixed up together, and a patent is taken for the whole, it is void.

[Cited in *Goodyear v. Mathews*, Case No. 5,576; *Evans v. Hettick*, Id. 4,562; *Whitney v. Emmett*, Id. 17,585; *Davoll v. Brown*, Id. 3,662; *Hovey v. Stevens*, Id. 6,745; *Hovey v. Stevens*, Id. 6,746; *Hogg v. Emerson*, 6 How. (47 U. S.) 484; *Blake v. Stafford*, Case No. 1,504.]

[Cited in *Davis v. Bell*, 8 N. H. 503; *Holliday v. Rheem*. 18 Pa. St. 467; *Tillotson v. Ramsay*. 51 Vt 314.]

3. But if the invention be definitely described in the patent, so as to distinguish it from what is before known, the patent is good, although the specification does not describe the invention in such full, exact, and clear terms, that a person skilled in the art or science, of which it is a branch, could construct or make the thing invented; unless such defective description or concealment were with intent to deceive the public.

[Cited in *Whitney v. Emmett*. Case No. 17,585; *Gray v. James*, Id. 5,718; *Webster Loom Co. v. Higgins*, 105 U. S. 588.]

4. As among inventors, he who is first in time, has a prior exclusive right to the patent for the invention.

[5. Cited in *Hogg v. Emerson*. 11 How. (52 U. S.) 608, on the question of damages in infringement cases.]

This was an action on the case for the infringement of a patent-right. March 23, 1813. Mr. Jacob Perkins obtained a patent for a new and useful invention in the construction of pumps, and afterwards assigned his interest therein to the plaintiff [Francis C. Lowell]. The defendant [Winslow Lewis], became the assignee of a similar patent, taken out in 1817, by a Mr. James Baker; and it was for the constructing and vending pumps under

LOWELL v. LEWIS.

this second patent, that the action was brought. The principal object of both the inventions, was, by dispensing with the box used in the common pumps, to obtain a larger water way. To effect this, Perkin so constructed the valves of his pump, that they completely filled the area of the shaft, and fell upon its sides in the same manner, as by the old construction they did upon the box; thus leaving the whole of the area, excepting that occupied by the valves themselves, for a water-way. The valves were of a triangular shape, and adapted only to a pump of a square form. This pump seemed to be principally useful, when it was desirable to throw up large quantities of water in a short space of time, and a number of hands could be put to the working of it. The valves of Baker's pump were fitted to a round shaft, and occupied, like the other, the whole of its area; but instead of resting upon the sides of the shaft, were supported by a brass rim, which prevented the friction against the sides of the shaft consequent upon the other construction, and to obviate which, Perkins, since obtaining his patent, had adopted a check-bolt. It appeared, that Baker's invention required fewer bands to work it, and could be applied to the common house-pump.

Mr. Webster and G. Sullivan, for defendant, contended, that the invention of Perkins was neither new nor useful, and therefore, not entitled to a patent. That the specification was so loose and insufficient, as not to answer the requisites of the law in this particular, and the patent, therefore, void on that account; and further, that the invention of the defendant was substantially different from that of the plaintiff.

Mr. Gorham, for plaintiff, endeavored to show that the improvement invented by Perkins

was entirely new and highly useful; and the specification sufficient to answer the requisites of the law which only required, that it should be so particular, as that persons, acquainted with the construction of the same kind of machines, might be able to follow the description of it. And that, although differing in shape and some other unimportant particulars, it was, in principle, the same as that made and recorded by the defendant, under the patent of Baker.

A great number of witnesses were produced on both sides to sustain these positions.

STORY, Circuit Justice (charging jury). The present action is brought by the plaintiff for a supposed infringement of a patent-right, granted, in 1813, to Mr. Jacob Perkins (from whom the plaintiff claims by assignment) for a new and useful improvement in the construction of pumps. The defendant asserts, in the first place, that the invention is neither new nor useful; and, in the next place, that the pumps used by him are not of the same construction as those of Mr. Perkins, but are of a new invention of a Mr. Baker, under whom the defendant claims by assignment. If the plaintiff is entitled to recover, the patent act gives him treble the actual damages sustained by him; and the rule for damages is, in this case, to allow the plaintiff treble the amount of the profits actually received by the defendant, in consequence of his using the plaintiff's invention. The jury are to find the single damages, and it is the proper duty of the court to treble them in awarding judgment. And let the damages be estimated as high, as they can be, consistently with the rule of law on this subject, if the plaintiff's patent has been violated; that wrong doers may not reap the fruits of the labor and genius of other men.

To entitle the plaintiff to a verdict, he must establish, that his machine is a new and useful invention; and of these facts his patent is to be considered merely prima facie evidence of a very slight nature. He must, in the first place, establish it to be a useful invention; for the law will not allow the plaintiff to recover, if the invention be of a mischievous or injurious tendency. The defendant, however, has asserted a much more broad and sweeping doctrine; and one, which I feel myself called upon to negative in the most explicit manner. He contends, that it is necessary for the plaintiff to prove, that his invention is of general utility; so that in fact, for the ordinary purposes of life, it must supersede the pumps in common use. In short, that it must be, for the public, a better pump than the common pump; and that unless the plaintiff can establish this position, the law will not give him the benefit of a patent, even though in some peculiar cases his invention might be applied with advantage. I do not so understand the law. The patent act (Act Feb. 21, 1793, c. 11 [1 Stat. 318]) uses the phrase "useful invention" mere incidentally; it occurs only in the first section, and there it seems merely descriptive of the subject matter of the application, or of the conviction of the applicant. The language is, "when any person or persons shall allege, that he or they have invented any new and useful art, machine," &c., he or they may, on pursuing the directions of the act, obtain a patent Neither the

LOWELL v. LEWIS.

oath required by the second section, nor the special matter of defence allowed to be given in evidence by the sixth section of the act, contains any such qualification or reference to general utility, to establish the validity of the patent. Nor is it alluded to in the tenth section as a cause, for which the patent may be vacated. To be sure, all the matters of defence or of objection to the patent are not enumerated in these sections. *Whitemore v. Cutter* [Case No. 17,600]. [1 Robb. Pat. Cas. 28–33.]² But if such an one as that now contended for, had been intended, it is scarcely possible to account for its omission. In my judgment the argument is utterly without foundation. All that the law requires is, that the invention should not be frivolous or injurious to the well-being, good policy, or sound morals of society. The word “useful,” therefore, is incorporated into the act in contradistinction to mischievous or immoral. For instance, a new invention to poison people, or to promote debauchery, or to facilitate private assassination, is not a patentable invention. But if the invention steers wide of these objections, whether it be more or less useful is a circumstance very material to the interests of the patentee, but of no importance to the public. If it be not extensively useful, it will silently sink into contempt and disregard. There is no pretence, that Mr. Perkins pump is a mischievous invention; and if it has been used injuriously to the patentee by the defendant, it certainly does not lie in his mouth to contest its general utility, indeed the defendant asserts, that Baker’s pump is useful in a very eminent degree, and, if it be substantially the same as Perkins’s, there is an end of the objection; if it be not substantially the same, then the plaintiff must fail in his action. So that, in either view the abstract question seems hardly of any importance in this cause.

The next question is, whether Mr. Perkins’s pump be a new invention. In the present improved state of mechanics, this is often a point of intrinsic difficulty. It has been often decided, that a patent cannot be legally obtained for a mere philosophical or abstract theory; it can only be for such a theory reduced to practice in a particular structure or combination of parts. In short, the patent must be for a specific machine, substantially new in its structure and mode of operation,

and not merely changed in form, or in the proportion of its parts. Mr. Perkins's pump is square, and it is agreed, that a piston exactly fitted, and used as in his pump, cannot be found described in any scientific treatise, and has never been seen in operation. The butterfly valve, which approaches very near to it, has certainly been in use, and a triangular shape was well known in the perimeter valves. But the exact structure and position of a valve in a square pump, uniting the triangular and butterfly forms, is not known to have been used at any time previous to his invention, in the precise manner, in which Mr. Perkins uses them. In short, the combination of structure, which he uses, is alleged by the plaintiff's witnesses to be new; and if the jury are satisfied, that it is substantially different from any thing before known in its mode of operation, then the plaintiff has surmounted this objection to his title to a recovery.

An objection of a more general cast (and which might more properly have been considered at the outset of the cause, as it is levelled against the sufficiency of the patent itself) is, that the specification is expressed in such obscure and inaccurate terms, that it does not either definitely state, in what the invention consists, or describe the mode of constructing the machine so, as to enable skilful persons to make one. I accede at once to the doctrine of the authority, which has been cited (*MaFarlane v. Price*, 1 Starkie, 199), that the patentee is bound to describe, in full and exact terms, in what his invention consists; and, if it be an improvement only upon an existing machine, he should distinguish, what is new and what is old in his specification, so that it may clearly appear, for what the patent is granted. The reason of this principle of law will be manifest upon the slightest examination. A patent is grantable only for a new and useful invention; and, unless it be distinctly stated, in what that invention specifically consists, it is impossible to say, whether it ought to be patented or not; and it is equally difficult to know whether the public infringe upon or violate the exclusive right secured by the patent. The patentee is clearly not entitled to include in his patent the exclusive use of any machinery already known; and if he does, his patent will be broader than his invention, and consequently void. If, therefore, the description in the patent mixes up the old and the new and does not distinctly ascertain for which, in particular, the patent is claimed, it must be void; since if it covers the whole, it covers too much, and if not intended to cover the whole, it is impossible for the court to say, what, in particular, is covered as a new invention. The language of the patent act itself is decisive on this point. It requires (section 3) that the inventor shall deliver a written description of his invention "in such full, clear, and exact terms, as to distinguish the same from all other things before known; and in the case of any machine, he shall fully explain the principle, and the several modes, in which he has contemplated the application of that principle, or character, by which it may be distinguished from other inventions." It is, however, sufficient, if what is claimed as new appear with reasonable certainty on the face of the patent, either expressly or by necessary implication. But

LOWELL v. LEWIS.

it ought to appear with reasonable certainty; for it is not to be left to minute inferences and conjectures, from what was previously known or unknown; since the question is not, what was before known, but what the patentee claims as new; and he may, in fact, claim as new and patentable, what has been long used by the public. Whether the invention itself be thus specifically described with reasonable certainty, is a question of law upon the construction of the terms of the patent, of which the specification is a part; and on examining this patent, I at present incline to the opinion, that it is sufficiently described, in what the patented invention consists.

A question nearly allied to the foregoing, is, whether (supposing the invention itself be truly and definitely described in the patent) the specification is in such full, clear, and exact terms, as not only to distinguish the same from all things before known; but “to enable any person skilled in the art or science, of which it is a branch, or with which it is most nearly connected, to make, compound, and use the same.” This is another requisite of the statute (section 3), and it is founded upon the best reasons. The law confers an exclusive patent-right on the inventor of any thing new and useful, as an encouragement and reward for his ingenuity, and for the expense and labor attending the invention. But this monopoly is granted for a limited term only, at the expiration of which the invention becomes the property of the public. Unless, therefore, such a specification was made, as would at all events enable other persons of competent skill to construct similar machines, the advantage to the public, which the act contemplates, would be entirely lost, and its principal object would be defeated. It is not necessary, however, that the specification should contain an explanation, level with the capacities of every person (which would, perhaps, be impossible); but, in the language of the act, it should be expressed in such full, clear, and exact terms, that a person skilled in the art or science, of which it is a branch, would be enabled to construct the patented invention. By the common law if any thing material to the construction of the thing invented be omitted or concealed in the specification, or more be inserted or added, than is necessary to produce the required effect, the patent is void. This doctrine of the common law our patent act has (whether wisely, admits of

very serious doubts) materially altered; for it does not avoid the patent in such case, unless the “concealment or addition shall fully appear to have been made for the purpose of deceiving the public.” Section 6. Yet certainly the public may be as seriously injured by a materially defective specification resulting from mere accident, as if it resulted from a fraudulent design. Our law, however, is as I have stated; and the question here is, and it is a question of fact, whether the specification be so clear and full, that a pump-maker of ordinary skill could, from the terms of the specification, be able to construct one upon the plan of Mr. Perkins. The principal objection to the specification in this case is, that it does not describe the check-bolt, or the form, or use, or size of the leather, or the mode of forming its edge and fixing it upon the valve, or the exact position and elevation of the valve. (Here the judge read the specification, and commented on the evidence applicable to these objections; and left it to the jury to say, upon the facts, whether the specification was materially defective, and, if so, whether it was by design to deceive the public.)

Another (and under the circumstances of this case, probably the most material) inquiry is, whether the defendant has violated the patent-right of the plaintiff; and that depends upon the fact, whether the pumps of Mr. Perkins and of Mr. Baker are substantially the same invention. I say substantially the same invention, because a mere change of the form or proportions of any machine cannot, per se, be deemed a new invention. If they are the same invention, then Mr. Perkins, being clearly the first inventor, is entitled exclusively to the patent right, although Mr. Baker may have been also an original inventor; for the law gives the right, as among inventors, to him, who is first in time.

The manner, in which Mr. Perkins’s invention is, in his specification, proposed to be used, is in a square pump, with triangular valves, connected in the centre, and resting without any box on the sides of the pump, at such an angle as exactly to fit the four sides. The pump of Mr. Baker, on the other hand, is fitted only for a circular tube, with butterfly valves of an oval shape, connected in the centre, and resting, not on the sides of the pump, but on a metal rim, at a given angle, so that the rim may not be exactly in contact with the sides, but the valve may be. If from the whole evidence the jury is satisfied, that these differences are mere changes of form, without any material alteration in real structure, then the plaintiff is entitled to recover; if they are substantially different combinations of mechanical parts to effect the same purposes, then the defendant is entitled to a verdict. This is a question of fact, which I leave entirely to the sound judgment of the jury.

Verdict for the defendant.

¹ [Reported by William P. Mason, Esq.]

² [From 1 Robb. Pat. Cas. 131.]