

ROOTS ET AL. V. HYNDMAN.

{6 Fish. Pat Cas. 439;¹ 4 O. G. 29.}

Circuit Court, S. D. Ohio.

June Term, 1873.²

PATENTS—EQUIVALENTS

ANTICIPATION—PRESUMPTION—INFRINGEMENT—ROTARY
BLOWERS.

1. Patent for rotary blowers, granted P. H. and F. M. Boots, July 27, 1869, construed and sustained.
2. The similar substances, referred to in the patent, are understood to mean those possessing the property of being rendered plastic, for the purpose of application in the prescribed mode, and of hardening or ceasing to be plastic, in such conditions and in such time as accomplishes the purpose desired. It does not refer to the chemical constituents of the material.
3. The description of the modes in which the substance is to harden, "by the evaporation or fixation of its water," does not confine complainants to substances which are hardened in that way only.
4. The adoption of any plastic material which will harden in the conditions described, which may be applied as described, for the precise purposes described, and accomplishing all the results described, held to be an infringement of the patent.
5. The Evans pump, lined with molten metal, does not antedate, the molten metal being incapable of application in the mode described, or of answering the same purpose.
6. When a man is engaged in the department of production where a certain improvement is most important, with the means in his hands to employ it if he knew how, and for years manufactures in a different mode, with less accuracy and at greater expense, this is conclusive that he did not possess the idea.
7. The use of plastic material to true the cylinders and end-plates was not an anticipation of a patent for "a rotary blower-case, the interior of which is rendered true and accurate by means of plaster of Paris or its described equivalent, applied substantially as described."

8. That one process did not suggest the other, is sufficient evidence that it was so unlike in principle as not to be an anticipation of it.
9. The use of a heated substance with a syringe bears little resemblance to the application of plastic material after the manner of the patent.
10. Where the claim is for “a rotary blower-case having concave arcs B, B, in combination with end-plates, I, I, arranged so as to admit of the abutments being introduced or removed, without requiring the case to be taken apart, substantially as set forth:” *Held*, that it does not make it a necessary condition that the arcs shall be cast in one piece. If they are not so constructed, the essential character of the invention is not lost; that the leading idea is that a blower is more efficient when its arcs are but a little more than a quarter of a circle than when made in the mode universally adopted before.
11. The benefits clearly perceived as resulting from the invention, impose upon the court the duty of avoiding, if possible, an interpretation which will hand them all over to an infringer.
12. Defendant’s device is substantially the same as complainants’. The diversity is only formal.

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13. When the claim demands an arrangement which will allow the abutments to be removed, without taking the case apart, it means such a taking apart only as would divide the operative parts of the machine, leaving such a separation as defendant makes, within the meaning of the claim.

Final hearing on pleadings and proofs.

Suit brought upon letters patent for an “improvement in cases for rotary blowers,” granted P. H. and F. M. Roots, July 27, 1869. The claims were as follows: “(1) A rotary blower-case, the interior of which is rendered true and accurate by means of plaster of Paris, or its described equivalent, applied substantially as described. (2) A rotary blower-case, the ends or heads of which are rendered true and accurate by means of plaster of Paris, or its described equivalent, applied substantially as described. (3) A rotary blower-case, the concaves or arcs of circles of which are rendered true and accurate by the use of

plaster of Paris, or its described equivalent, applied substantially as described. (4) A rotary blower-case having concave arcs B, B, in combination with end-plates I, I, arranged so as to admit of the abutments being introduced or removed without requiring the case to be taken apart, substantially as set forth.”

James Moore, for complainants.

Wood & Boyd, for defendant.

Before SWAYNE, Circuit Justice; EMMONS, Circuit Judge; and SWING, District Judge.

EMMONS, Circuit Judge. What is said is much influenced by the course of the argument, and more intended to meet the objections of defendant than as a full consideration of the case. An independent treatment of the patent would assume a more brief and somewhat different form.

The first three claims are for a rotary blower-case, the interior of which is rendered true by means of plaster of Paris, or its described equivalent, applied substantially as described.

The difference between the three need not be noticed. The described equivalent, we think, includes the material used by the defendant. The patent speaks of “plaster of Paris or other similar substance,” and again of “plaster of Paris, hydraulic cement, or other material having the properties above referred to.” These “similar substances,” with “properties above referred to,” are understood to mean the property of being rendered plastic, for the purpose of application in the described mode, and of “hardening” or “ceasing to be plastic” in such conditions and in such time as accomplishes the purpose desired. It does not refer to the chemical constituents of the material. They are indifferent to the objects aimed at, and cannot be supposed to have been in the mind of the patentee.

Nor do we think the description of the mode in which the substance is to harden, “by the evaporation or fixation of its water,” confines complainants to

substances which are hardened in that way only. The words already referred to—"that is, ceases to be plastic"—immediately follow, and enlarge the meaning. And whether there is or not some evaporation or fixation of water in the process of hardening litharge and glycerine, we do not deem it necessary to determine. Little aid is given us for such a judgment in this record. We should say such effect was in some degree involved, if necessary for this judgment. But it is not rested upon such an assumption. The adoption of any plastic material which will harden in the conditions described, which may be applied as described, for the precise purposes described, and accomplishing all the results described, we hold, under our construction of these three claims, will infringe them. An improvement in the material itself, and a patent for that, is a different matter. But the substances; used by the defendant we do not think had even the merit of novelty in this department of the arts. It would seem to have been described as a cement and filling long before-employed by the defendant. This, however, is unimportant, save as slightly influencing such a construction of the claim as would protect it from so obvious a substitute.

A mechanic who could not, so far as this feature is concerned, line defendant's machine, with complainants' models and specifications before him, and the knowledge which familiar publications afforded him of the properties of glycerine and litharge, would hardly be entitled to be called such. We think the case clearly within the familiar rule which makes the use of a readily adopted and well-known substitute an infringement.

The Evans pump, lined with molten metal, does not antedate, for many reasons. In the arts it is not known as a plastic material. It is incapable of application in the mode described, and cannot, by the same or even

analogous instrumentalities, make true the machines in controversy.

The evidence of Overton fails to show the use of a plastic material, applied as described in complainants' patent, in such mode as to avoid the necessity of boring and planing iron cases. It affords only an illustration of how long the mechanical world wilt stand with all the elements of a great improvement in its hands, placing them in almost the conditions demanded for its realization, and yet stop just short of the desired end. Overton manifestly did not know of or in the least approximate the idea of saving the great labor of planing cast-iron head-plates or boring cylinders. He went on doing both. We cannot take time to criticise his somewhat extraordinary testimony. It must, however, be understood, and some of its literalisms limited by the leading fact that he never employed the complainants' discovery 1170 for the purposes or in the manner described, and which are the obvious and best, if not the only ones, an intelligent mechanic would employ the moment the idea was suggested. It might be doubtful whether a man had the complainants' idea if there was no proof on the subject at all; but when you show that he is engaged in the very department of production where it is most important; see him with the means in his hands to employ it if he knew how; and for years manufacturing in a different mode, with less accuracy and at greater expense, then, upon any principle of action, this is conclusive that this one man at least did not possess the idea. Overton placed his fans so near the arcs as to render complainants' process impossible. The most he could do was to use a brush, and he swears he is sure he never in that mode put upon his arcs more than one-eighth of an inch. It is most manifest even such thickness was never in that way applied. Plumbago and varnish in such mixture as to render smoothly from a brush would require many

applications to assume such a thickness. Besides, in cross-answer thirty-one, this witness concedes it was the experimental substances only he put on with a brush. He says the invariable material used upon all marketed machines was plumbago and varnish, and adds: "It was the other substances I applied with a brush." Substantially his knowledge and use of plastic materials was confined to truing the abutments and reaping the accidental benefits by way of lubrication of such portions as flew off from them by centrifugal motion.

The views expressed in reference to the direct use by Overton of plastic material to true the cylinders and end-plates, sufficiently answer the other somewhat closely related position, that its use for the abutments only was so near in principle as to constitute a prior use. That the one did not suggest the other in fact, in the circumstances of the case, is considered sufficient evidence that it was so unlike in principle as not to antedate the three first claims.

The testimony of Williams very properly has been but little pressed. The use of a heated substance with a syringe bears little resemblance to either the mode or the material of complainants.

The fourth claim is more difficult of construction, so as to include defendant's machines. We all agree, however, that an application of that liberality which should be adopted for the protection of what is believed to be a meritorious and useful invention, one never before used and industriously sought to be infringed since, will extend it to include what defendant has done. It would not be difficult to show he uses what complainants really invented—the shortened arcs and all their benefits. The labor is to bring it within the claim which so prominently speaks of an arrangement permitting the removal of the abutments without taking the case apart. The argument submitted turns upon what we shall include in this

word "case." The legal answer to this is that which the patent by its words and necessary implications gives. That tells us the case, the thing which it has discovered, may be cast in one piece; is to have its arcs slightly more than one-fourth of a circle; that these are to be on one side of the axis; and the head-pieces correspondingly shortened and located. This is the device which may be so cast as to enable the abutments to be removed without taking apart these shortened arcs and these shortened end-plates. Just this the defendant has so cast. All which he takes off without separation is described, and no more. This patent does not assert as a necessary condition that the arcs shall be cast in one piece. It enumerates among the benefits this capacity as a result only of the invention. But it also as distinctly asserts that "in our large blowers we do not cast the case in a single piece."

It is not said, nor do we think it implied, that the small ones must be so made. It is not true that if not so constructed the essential character of the invention is omitted. A machine in all respects like the complainants', with the exception of a useless division of the shortened arcs by casting them in two pieces, would be an infringement, without any doubt whatever. The leading idea is the apparently simple, when once pointed out, but wholly novel, and useful, fact, that a blower is more efficient when its arcs are but a little more than a quarter of a circle than when made in the mode universally employed before by carrying them uselessly down far below the axis of the shaft. Material was thus wasted; the manufacture and truing of the interior was more difficult in whatever mode it was done; the machine was far less effective, and produced counter currents at and narrowed the air-feed, and was less readily repaired and more easily got out of order. These benefits are not necessary to the support of the patent, but they illustrate its principle; and when clearly perceived as resulting from

the invention, impose on the court the duty of avoiding, if possible, an interpretation which will hand them all over to an infringer because he has cast the blower-case in one piece, and the frame or standard upon which it rests in another. Substantially, and within the spirit of the claim, these are what the defendant divides. He does so without taking his case apart. That remains intact still, substantially as complainants describe it. The patent declares that to remove them the journal-boxing must come off. Besides this, all that the defendant removes is an inconsiderable portion of the head-piece, so readily and without a particle of invention attached to the standard as not to take it out of the domain of infringement. All the rest of the severed part is as independent of the ease or arcs as are the legs on which it stands. It was conceded 1171 that to take complainants' device, with its shortened arcs and enlarged opening, so as to secure all its benefits, severing only its legs, would be a manifest infringement. They would be no part of the case. If so, a line must be drawn somewhere. That can be intelligently done only by making it include all which perform any function; all which may rightfully be called a part of the arcs and case, as distinguished from standard table or support. Here, what defendant removes performs no office in the operation of blowing. It is added solely to produce a formal diversity. No additional pistons are added. It would be useless to do so, as complainants' discovery shows.

That the slot arrangement cannot be considered as indispensable by the terms of the specification, would seem clear from the fact that it declares the cases are sometimes to be made in two pieces. When so made, then such an arrangement is impossible, or at least it would be so utterly useless as not to be contemplated by the patent. This consideration is quite conclusive, that when the fourth claim demands an arrangement

which will allow the abutments to be removed without taking the case apart, it means such a taking apart only as would divide the operative parts of the machine, leaving such a separation as defendant makes within the meaning of the claim. This reading is necessary in order to save in any degree that part of the patent which refers to making the cases in separate parts. What is meant when all is read together is simply this: When the machines are small, I cast case, table or standard, and legs all together. If large, so as to render this too cumbersome, I cast them in two or more pieces, making the division just as the defendant has made his.

We have carefully read defendant's original and supplemental briefs, and see nothing which modifies these views.

{On appeal to the supreme court the decree of this court was affirmed. 97 U. S. 224.}

¹ {Reported by Samuel S. Fisher, Esq., and here reprinted by permission.}

² {Affirmed in 97 U. S. 224.}

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