v.41F, no.5-23 EAGLE MANUFG CO. V. MILLER ET AL.

Circuit Court, S. D. Iowa, E. D.

February 21, 1890.

PATENTS FOR INVENTIONS—INFRINGEMENT—EVIDENCE—IMPROVEMENT IN PLOWS.

On a bill to restrain the infringement of patents for the raising of plow-beams issued December 16, 1879, and Jane 7, 1881, to Edgar A. Wright, it appeared that, prior to the issue of those patents, methods had been devised for the same purpose. In one device the spring used to raise the plow-beam exerted its greatest effect when the plows were in the soil, and had a tendency to raise the plows when in operation. In another device the spring was combined with an adjustable draft attachment, so arranged that when in one position the draft tended to raise the plow when the same was in motion, and in another position tended to force the plow downwards, and the adjustment could not be changed when the plow was in operation. In the Wright patent, there is a combination of a double-acting spring in such way that in one position of the spring it aided in keeping the plow in the ground, and in the other it aided in raising the plow-beam. *Held*, that under the Wright patent the inventor was not limited to any special form of spring, and any other device which combines a spring with the plow-beam in such manner as, to perform the functions of the springs shown in the Wright patent is an infringement of such patent.

2. SAME-PATENTABILITY-ANTICIPATION.

The fact that other inventors were working on the same device covered by the Wright patent at the same time, whose applications were not filed until after the application for the Wright parent, does not show such an anticipation of the Wright patent as will affect its validity.

3. SAME-UTILITY-IMPROVEMENT IN CULTIVATORS.

In an action to restrain the infringement of a patent for a device to give a lateral movement to the plows on cultivators, it appeared that in 1856 a patent had been issued for a device for hanging two or more plows to a supporting axle or beam by

swiveling joints at the ends of the drag-bars, so that the plows may be moved either way laterally without affecting the axle, and remain parallel; this effect being produced by handles attached to the rear end of the parallelogram carrying the plows. *Held*, that the mere fact that, because of certain defects in this machine, it could hot be used after the plants had reached a certain size, did not render it worthless, so that it could be disregarded in determining the scope of subsequent patents.

4. SAME-EXTENT OF CLAIM-LIMITATION.

The first claim of letters patent issued February 18, 1873, to John W. Swickard, which was for a device to improve the means of giving a lateral motion to the plows by the use of handles pivoted at their forward ends to the upper sides of plates partially encircling the journals, and pivoted near their centers to a yoke extending upward from the plow-beam, must be limited to the combination therein set out, as Swickard was not the first to make such use of handles.

5. SAME—PRIOR STATE OF THE ART.

The claim of letters patent issued December 11, 1883, to Charles D. Reed, for an improvement in the manner of attaching plow-beams, which covers a combination with a pivoted beam, a coupling, and the standards of a box-coupling, receiving within it the rear end of the beam on a median pivot, must, in view of the prior state of the art, be limited to the particular combination therein described.

6. SAME.

Letters patent issued November 10, 1885, to E. P. Lynch, for an improvement in cultivators, must, in view of the prior state of the art, be strictly construed; and claims 5 and 6, which describe the combination of a plate having an opening therein, a block extended through the opening, and connected by a vertical pivot to the plate, and a swinging rod jointed to the plate, the plate being adapted to receive the beam and handle, must be held also to include the conical bearings shown in the drawing, and limited to the parts expressly claimed in the drawing.

7. SAME—INFRINGEMENT—INJUNCTION—PLEADING—PARTIES.

On a bill to restrain the infringement of a patent, it appeared that the defendants were merely the agents of a corporation which manufactured the machine which it was alleged was an infringement of complainant's patent. Complainant filed an amendment to the original bill making such corporation a party defendant, but no subpœna was issued or served on the corporation, nor did it enter appearance or answer the bill. *Held*, that the decree should nevertheless run against such corporation, and be binding on it in all respects.

In Equity. Bill to restrain infringement of patents.

This is an action in equity, brought by the Eagle Manufacturing Company against W. L. Miller, L. W. Miller, and others, to restrain defendants from infringing certain patents owned by plaintiff.

N. French and George H. Christy, for complainant.

Wood & Boyd and H. A. Toulmin, for defendants.

Before SHIRAS and LOVE, JJ.

SHIRAS, J. In the bill of complaint it is charged that the defendants are infringing five several patents owned by complainant, *i. e.*, the patent of February 18, 1873, issued to John W. Swickard and John Hough; that of December 11, 1883, issued to Charles D. Reed; that of November 10, 1885, issued to E. P. Lynch; that of December 16, 1879, issued to Edgar A. Wright; and that of June 7, 1881, to Edgar A. Wright. Following the

order in which these patents have been discussed by counsel, we will consider, first, the questions arising under the Wright patents.

In the cases of *Manufacturing Co.* v. *Bradley*, 35 Fed. Rep. 295, and *Same* v. *Moline*, *Milburn & Stoddard Co.*, Id. 299, (decided by this court,) it was held that the patent No. 242,497 was not void for want of novelty, nor was it invalidated by the issuance of the prior patent, No, 222,

767; and the validity of both patents was also sustained by this court in the case of *Manufacturing Co.* v. *Davenport Plow Co.* Under these circumstances, we shall not, in the present opinion, again discuss these questions, but shall consider only the extent and limitations of these patents, and the question of infringement.

On part of the defendants, the contention is that, in view of the state of the art when Wright entered the field, his patents must be limited practically to the particular combination described in his specifications and drawings; and in support of this position reliance is had upon the inventions of Dalton, Allison, and W. P. Brown. It is not to be questioned that prior to the date of Wright's patents the desirability of some method by which the operator of a plow or cultivator could be aided in raising the plow-beams had been well recognized, and various devices for that purpose had been suggested and tried. Among such devices, springs had been used, so attached to the plow-beams as to aid in raising the beams from an operative to an inoperative position; but in the Dalton and Allison patents the springs exerted the greatest lifting effect upon the plow-beams when the plows were in the soil, and thus had a tendency to raise the plows when the same were in operation. In the W. P. Brown combination, as described in his patent of 1877, is found a spring so arranged as to exert a lifting effect upon the plow-beams, and there is also attached to the pipe-box surrounding the horizontal ends of the crank-axle an adjustable perforated projection, to which the draft attachment may be fastened. If this attachment is made above the center of the pipe-box, the draft, when the machine is in motion, will tend to raise the plows; but, if it is made below the center of the pipe-box, the draft will tend to aid in forcing the plows downward. In this combination, if the attachment of the draft to the projection named is made above the center of the pipe-box, then the effect of the spring, and that of the draft attachment, is always exercised in lifting the plows, and when in use this tendency must be counteracted. If, however, the draft attachment is fastened to the projection at a point below the center of the pipe-box, then, when in use, the tendency of the draft attachment is to pull downward, and that of the spring is to pull upwards; thus operating one against the other in their effect upon the plow-beams. This counteracting effect cannot be changed into the combined lifting effect, except by shifting the point of attachment between the draft and the pipe-box projection, which cannot be done while the machine is in motion. The problem which Wright sought to solve was the production of a practicable means whereby the operator could be aided in raising the plow-beams when the machine was operating, and also could be aided in keeping the plows in the ground. Brown had sought to solve this problem in the way already stated. Wright's solution was in the application of a double-acting spring, so connected with the frame of the cultivator and the plow-beams that in one position of the spring the effect thereof upon the plow-beams aided in keeping the plows in the

ground, and in the other it aided in raising the plow-beams; such lifting effect increasing as the tension of the spring increased. Brown combined a spring acting in one way, and with decreasing effect as the tension lessened with the effect of the draft attachment; but this did not embrace the idea of utilizing a double-acting spring. It is in the application of the double-acting spring that the main novelty of the Wright invention consists, and we do not think he is limited to any special form of such spring. In the specifications in both patents he expressly claims any spring so combined with the other parts of the cultivator as to produce the desired effect, which in one case is limited to exerting an increasing lifting effect when the plows are raised out of the ground, but having little or no effect when the plows are in the soil, and in the other to a lifting effect in the one position, and a downward pressure when in the other; and, if these patents are valid for any purpose, it seems that they must be held to cover the idea of using a spring so arranged as to be capable of exerting a lifting and depressing effect upon the plow-beams as the bearing of the spring is shifted. If this is the true construction of the Wright invention, the defense of want of utility has no force; nor can it be doubted that the machines sold by the defendants are an infringement thereof, for they include a spring so combined with the plow-beams as to perform the functions of the springs shown in the Wright patents.

We have considered the evidence adduced in support of the defense that Wright was not the first inventor of this combination, but was preceded by Charles A. Hague and M. L. Kissell. The evidence shows that these parties were working upon the problem about the same time that Wright was. Both applied for patents subsequent to the date of Wright's application. We do not think it is sufficiently shown by the evidence that, in fact, either one had anticipated Wright, to justify us in holding that Wright's patents must, for that reason, be held void. We conclude, therefore, that Wright's patents must be held to be valid, and that the charge, of, infringement is sustained.

The other patents declared upon have reference to what is termed the "parallel movement" in cultivators; that is, a mode of construction which enables the cultivators to be moved sidewise in following the sinuosities of the rows of plants being cultivated, or to avoid obstructions in the line of travel, and yet keeps the face of the shovels or plows at the same angle to the soil. In 1856 a patent was issued to George Esterly, the claim of which is as follows:

"The hanging of two or more plows to a supporting beam or axle by swiveling joints at each of the ends of their drag-bars, so that said plows may be moved either way laterally without affecting the axle, and still maintain their parallelism; and this I claim, whether the stock to which the plows are connected be adjustable in the drag-bars, or the plows be adjustable in the stock, or otherwise, substantially as described."

It is strongly urged that a cultivator of this construction would be useless, because the cross-beam at the rear of the machine and the axle are not arched, and hence the machine could not be used after the plants

had reached any considerable size. This and other defects in the joints are relied upon as sufficient to show that the Esterly machine or invention was worthless, and therefore to be disregarded in determining the scope of the succeeding patents. We do not think, however, that the Esterly patent is to be thus wholly disregarded. The mechanism he describes will produce the result aimed at. He shows a mode by which it is entirely possible to so construct a cultivator as to permit a lateral movement of the plow-beam, while preserving an unchanged direction of the face of the shovel or plow. Some of the objections urged against the form of the machine have nothing to do with the mechanism for securing the desired lateral movement, and others are of the kind that experience in the use of the machine would point out the means for obviating them. While, therefore, succeeding inventors have doubtless greatly improved upon his form of a machine, so that it would not now be deemed a valuable model, nevertheless it must be held that Esterly pointed out the general method which would meet the desired end; or, in other words, he demonstrated that it was possible to provide for lateral movement of the cultivator beams, and yet keep the direction of the face of the shovels unchanged.

In the specifications of the Swickard patent it is stated:

"The nature of my invention relates to improvements in that class of cultivators known as 'straddle-row cultivators;' and the invention consists in a new and improved combination of devices whereby the gangs of plows are more readily operated through the leverage of a pivoted handle, and always kept at the same angle with relation to the line of progression, as hereinafter more fully set forth."

Treating Esterly as the pioneer in the field of providing for lateral movement, while preserving the angle of direction of the faces of the shovels or plows unchanged, it follows that Swickard's invention is only for an improved means of accomplishing this end; or, in other words, it is for the particular combination described in his patent. He proposed to improve the means of giving the lateral movement by the use of handles pivoted at their forward ends to the upper side of the plates partly encircling the journals, and pivoted near their centers to a yoke extending upward from the plow-beam. The first claim in the patent, and the one claimed to be infringed by the defendants, is as follows:

"The combination of plates, K, bars, *h*, *h*, and beams, E, E, with the pivoted handles, N, substantially as and for the purpose specified."

In the Esterly machine, handles were attached to the rear end of the parallelogram carrying the plows, and, as thus attached, would exert, to some extent, a leverage upon the machine. This leverage action is present in the ordinary or old-fashioned plow; and it cannot be claimed, therefore, that Swickard was the first to so attach handles to a cultivator as to apply thereto the principle of a lever in changing the direction of the plow-beams. We conclude, therefore, that the first claim of the Swickard patent must be limited to

a combination having the handles pivoted substantially in the mode pointed out in the specifications and

drawings, and that it cannot be extended so as to cover the use of handles attached to the rear end of the plow-beam in the manner used by defendants. It follows that the combination covered by the first claim of the Swickard patent is not found in the machines sold by defendants, and the charge of the infringement of this patent has not been sustained.

The Reed patent covers "the combination with a pivoted beam, E, a coupling, C, and standards, I, I, of the box-coupling, H, receiving within it the rear end of the beam on a median pivot," etc. In view of the state of the art when this patent was granted, we think this claim must be limited to the form of box-coupling therein described; that is, a form so arranged for receiving within it the end of the beam. In the machines sold by defendants this form is not found, but in place of it, the end of the beam is separated into jaws, which receive between them the cross-head connected with the block to which the plow standards are attached. It is true, the difference in these forms of connection of the ends of the plow-beams is, in one view, but slight, and, if Reed's patent was a foundation patent, it might not suffice to defeat the charge of infringement; yet, as the Reed patent is for a combination intended to be an improvement upon pre-existing forms, it must be limited to the form of combination therein described. The claim expressly declares that part of the combination consists of "the box-coupling, H, receiving within it the rear end of the beam on a median pivot." If this declaration is not to be construed to be a limitation, and the doctrine of equivalents can be invoked as to the form of the box-coupling, then it could be likewise invoked to protect all other parts of the combination, and thus the Reed patent would be expanded into an original or foundation patent, which claim in its behalf cannot be sustained. Notwithstanding the general merits of the combination forming the basis of the Reed invention, we are constrained to hold that one of the essential elements of his combination is the box-coupling, H, so constructed as to receive within it the rear end of the beam on a median pivot; and that, as this form of box-coupling is not found in the machines sold by defendants, it cannot be held that such machines are infringements of the Reed patent.

It is also claimed that the machines sold by defendants are infringements upon the fifth and sixth claims of the Lynch patent of November 10, 1885. It is not questioned that, in view of the prior state of the art, this patent is for improvements merely and must perforce receive a narrow construction. It is based upon the Swickard and Reed patents, and combines the approved features therein found with certain improvements, the object of which is stated to be "to simplify and strengthen the operative parts, provide a compensation for wear in the joints, to give a stability and ease of action not attainable under the ordinary construction, to provide for the vertical adjustment of the beams at their forward ends in order to change the vertical inclination of the shovel faces or depth of cultivation, and to provide for the convenient adjustment of the shovels with reference to their stan-

dards, and for the adjustment of the standards with reference to the beams." The fifth and sixth claims describe the combination of the plate, I, having an opening therein, the

block, K, extended through said opening, and connected by a vertical pivot to the plate, and the swinging rod jointed to the block; the plate, I, being adapted to receive the beam and handle. The device of using at the ends of the beam a plate or box for the purpose of strengthening the point of attachment, and giving stability thereto, was already known and in use upon cultivators at the date of the Lynch patent, as well as the combination therewith of a block, or its equivalent, connected to the plate by a bolt, to which was attached the plow standards, and in some cases the handles also. Under these circumstances, if we do not include in the combinations described in the fifth and sixth claims of the Lynch patent the conical bearings shown in the drawings, and limit the same simply to the parts expressly named in the claims, which is the construction claimed by complainant, and we think correctly, it is difficult to see wherein invention was required in the production of the combination, unless it be found in the precise form given to the different parts of the combination; and, granting the existence thereof, then the defendants cannot be held liable for infringement, unless it appears that there is identity of form in the two structures, in the sense that the one is an exact copy of the other. While there is substantial likeness between the machines, there is sufficient doubt of the identity to justify the conclusion, in view of the narrow construction that must of necessity be given to these claims of the Lynch patent, if the same are to be sustained, that the machines sold by defendants do not infringe the named claims of the Lynch patent. Complainant is therefore entitled to an injunction and accounting for the infringement of the Wright patents, but as to the other patents the bill must be dismissed.

In the brief filed by complainant, it is asked, in case a decree is ordered in favor of complainant, that the same, in terms, shall run against P. P. Mast & Co., a corporation created under the laws of Ohio. From the evidence in the case, it appears that the defendants W. L. Miller and L. W. Miller are the agents for Mast & Co. in Iowa, and that the machines sold by them were manufactured by the Mast & Co. Company, and that the company, through its attorney and agents, is in fact conducting the defense of the case. The complainant filed an amendment to the original bill, making the Mast \mathfrak{S} Co. Company a party defendant, but no subpœna was issued or served upon the corporation, and that company never answered the bill, nor in its own name has it entered its appearance in the case. Under the rule recognized in Lovejoy v. Murray, 3 Wall. 1, and Robbins v. *Chicago*, 4 Wall. 657, it is clear that the Mast & Co. Company will be as fully bound by the results of the present litigation as though the corporation was a party to the record; for it is made clear that it is the principal party in interest, being the manufacturer of the machines sold by defendants Miller, and bound by contract with them to protect them against the consequences of infringement. It has had notice of the pendency of the suit, and in fact has assumed the control and management of the defense; and therefore, under

the doctrine of the cases just cited, the decree herein will in fact be binding upon the corporation. No good reason is perceived why, by apt statement in the

decree, it may not be made to appear upon the face of the decree that in fact the Mast & Co. Company is bound by the results reached in the progress of the litigation in which it has been actively engaged; for that, in effect, is only stating, in set phrase, the force which the decree would in fact have as against the corporation.

LOVE, J., concurs.

¹ No opinion filed.