

EDDY v. DENNIS.

DENNIS v. EDDY.

1. In reissued letters-patent No. 1515, granted to Paul Dennis Aug. 4, 1863, for a new and useful improvement in cultivators, the second claim in the specification is for a combination of the beam and the mould-board with the adjustable wheel, of which combination the adjustable wheel is an essential element.
2. The first claim does not cover an inclined shovel mould-board simply, nor the principle of passing the earth over the recess of the plow into the furrow behind, or passing it over a recess formed exclusively with a curved edge. Its effect is to provide for that which is not novel; viz., a recess cut or carved out for the purpose intended.
3. There is no evidence in this case to show that, by passing the earth through a recess in the mould-board formed by curved lines, any advantage is obtained over passing it through one formed by right lines.
4. There having been no infringement by the defendants of the rights of the complainant, the question of his measure of damages does not arise here.

APPEALS from the Circuit Court of the United States for the Northern District of New York.

This is a suit by Paul Dennis against Daniel Eddy, Walden Eddy, and Abram Reynolds, doing business as Eddy & Co., for an infringement of reissued letters-patent No. 1515, granted to the complainant Aug. 4, 1863, being a reissue of original letters No. 19,412, which bear date Feb. 23, 1858. The specification and drawings of the reissue are as follows:—

“To all whom it may concern :

“Be it known that I, Paul Dennis, of Bemis Heights, in the county of Saratoga, and State of New York, have invented a new and improved shovel-plow, and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which Fig. 1 is a side view of my invention; Fig. 2, a back view of the same; Fig. 3, a plan or top view of the same. Similar letters of reference indicate corresponding parts in the several figures.

“This invention consists in a peculiar manner of constructing or forming the upper edge of the mould-board, with recesses, so that the earth, as the implement is drawn along, will pass over the top of the mould-board and drop into the furrow behind it, and partially or wholly fill the same, thereby leaving the earth in a level

and also in a loose, light, or pliable state, permeable to air and moisture, and at the same time preventing earth, sods, stone, &c., being cast against the growing plants by the mould-board, a contingency of frequent occurrence in using the ordinary plows.

"The invention further consists in the employment or use of a gauge applied to the implement in such a manner as to admit of the mould-board penetrating the soil at a greater or less distance, as may be desired.

"To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

"A represents a metallic bar, which is curved so that the front part will form the beam of the implement, and the back part an inclined portion to which the mould-board B is firmly attached. The form of the bar A is clearly shown in Fig. 1.

"To the bar A, near the centre of its curve or bend, the lower ends of handles *c c* are attached by a bolt, as shown at *a*. These handles are braced by a V-shaped support, D, the lower end of which is secured to the bar A, as shown at *b*.

"The mould-board B is of shovel form, and is much like those usually made, with the exception that its upper edge or part is scalloped out so as to form a recess *c* at each side of the bar A, as shown clearly in Figs. 2 and 3, said recesses extending down nearly or about one-half the length of the mould-board. The mould-board may be constructed of malleable cast-iron.

"E is the point or share, which is constructed of steel, the lower end being pointed, and its sides slightly rounded or curved, so that the form of the mould-board and point or share, when connected together, will closely approximate to those which are cast in one piece, the recesses *c* being excepted. The point or share E may be attached to the mould-board B by bolts *d*, which are attached to the under side of the point or share, and pass through a projecting plate, *e*, at the under side of the mould-board. (See Figs. 1 and 2.)

"F is an adjustable metallic roller, which is attached to the bar A, just back of the mould-board B. The axis of the roller F is fitted or has its bearings in arms *f f*, which project obliquely from a plate *g*, said plate being slotted longitudinally, so that the bolts *h h*, which secure the mould-board to the bar, may pass through said slot, the bolts *h* having each a nut *i* on them, by screwing up which the plate *g*, and consequently the roller F, may be secured higher or lower, as desired.

"From the above description it will be seen that the point or share

E and mould-board B may be made to penetrate the soil at a greater or less depth, as may be desired, by adjusting the roller F and draught-chain, said roller serving as a gauge or guide, and the draught-chain being adjusted at the end of the beam so that the draught may aid the roller, and the point or share be made to have a tendency to penetrate the soil or otherwise. This will be understood by referring to Fig. 1, in which it will be seen that, by depressing or lowering the roller on the bar, the mould-board will be less inclined, and, consequently, if the draught-chain or whiffletree be properly adjusted at the end of the beam, the point or share will have a greater tendency to penetrate the earth than if the roller were higher up on the bar, the roller always bearing upon the earth.

"The mould-board B does not cast the earth from either side as usual, but the earth, in consequence of the recesses *c c*, will pass over the top of the mould-board and drop behind it, so that no furrow will be formed or left behind the mould-board, but the soil will be left in a loose, light state, permeable to air and moisture, and all grass, weeds, roots, and the like perfectly cut up. The mould-board, by operating in this manner, does not, of course, cast earth, sods, or stones upon the growing plants, as is frequently the case in using the ordinary shovel-plows, which cast the earth from either side of them. This is an important feature of the invention.

"The point or share E, also, in consequence of being made separate, of steel, and attached to the mould-board, may be readily detached and sharpened; and, when much worn, a new one may be attached to the mould-board. The plow is, therefore, not only rendered far more durable, but it may always be kept in perfect order; for the mould-board will last an indefinite period of time, if not being subjected to much wear, and the plow will always be in order, provided the point or share is kept in proper condition. By my improvement this can be done; but it cannot be done when the mould-board and share are cast in one piece.

"The ordinary shovel-plows cannot be regulated by the draught-chain so as to regulate the depth of the furrow, for they have no guide, the point or share merely penetrating the soil. The roller F in my improvement diminishes friction, and serves as a more perfect guide than the land-side of ordinary plows.

"Having thus described my invention, I wish it distinctly understood that I do not claim broadly the idea of passing a portion of the earth over the mould-board into the furrow behind, as I am aware that this has before been done.

"Neither do I claim applying a movable mould-board to one of

the outer edges of the share, as described in an application of J. Drummond, rejected Oct. 25, 1844.

"Neither do I claim the use of projecting blades at the outer ends of the share, as described in the patent of B. Langdon, granted June 22, 1842, and others ; but,

"Having thus described my invention, what I claim as new therein and desire to secure by letters-patent is —

"1st, The inclined shovel mould-board B, formed and mounted substantially as described, and constructed highest at its outer edges, so as to form on each side of the standard A a recess, c, through which recesses a portion of the earth may, after rising upon the mould-board, descend into the furrow in the rear of the plow.

"2d, The combination with the beam A and mould-board B of the adjustable wheel F, arranged and operating substantially as and for the purposes specified.

"PAUL DENNIS."

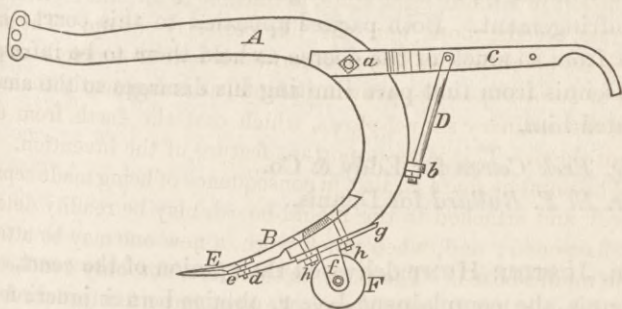


Fig. 1.

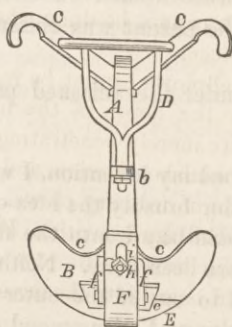


Fig. 2.

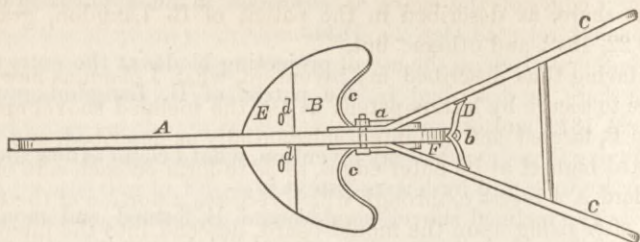


Fig. 3.

The court below, upon hearing, was of opinion that the defendants had infringed the first claim of the specification, but not the second. An injunction was thereupon issued against the defendants; and they were decreed to pay the complainant \$596.50 damages, on account of gains and profits resulting from the infringement. Both parties appealed to this court: Eddy & Co. from so much of the decree as held them to be infringers, and Dennis from that part limiting his damages to the amount awarded him.

Mr. Esek Cowen for Eddy & Co.

Mr. E. F. Bullard for Dennis.

MR. JUSTICE HUNT delivered the opinion of the court.

Dennis, the complainant below, obtained an injunction and recovered damages against Eddy and others for an infringement of his letters-patent for an improvement in "shovel plows." The original letters were issued on the twenty-third day of February, 1858, and the patent was reissued on the fourth day of August, 1863.

The claim made under the reissued patent is in the words following:—

"Having thus described my invention, I wish it distinctly understood that I do not claim broadly the idea of passing a portion of the earth over the mould-board into the furrow behind, as I am aware that this has before been done. Neither do I claim applying a movable mould-board to one of the outer edges of the share, as described in an application of J. Drummond, rejected Oct. 25, 1844. Neither do I claim the use of projecting blades at the outer ends

of the share, as described in the patent of B. Langdon, granted June 22, 1842, and others; but,

"Having thus described my invention, what I claim as new and desire to secure by letters-patent is, 1st, the inclined shovel mould-board B, formed and mounted substantially as described, and constructed highest at its outer edges, so as to form on each side of the standard A a recess *c*, through which recesses a portion of the earth may, after rising upon the mould-board, descend into the furrow in the rear of the plow.

"2d, The combination with the beam A and mould-board B of the adjustable wheel F, arranged and operating substantially as and for the purposes specified."

The original patent claimed only what is here described as the second claim. The point of the reissue is in the claim as first above set forth.

The use of the shovel-plow is in cultivating the soil between the rows of growing crops, after they are somewhat advanced in their growth, to stir up and loosen the soil, and to free it from weeds. This plow is distinct in many parts of its construction, as well as in its intended effect, from the plow used in breaking up the soil; that is, from the plow in common use.

In first considering the claim contained in both the original and reissued patents, and in the latter described as the second claim, we remark, that we concur entirely with the learned judge who tried this case at the circuit, in his view of it.

The adjustable wheel is the important feature of this claim. The bar or beam and the mould-board suggest nothing in the way of novelty, invention, or of peculiarity. The use of the base of a plow as a fulcrum, by means of which the plowman can raise or lower the point of the plow, or turn it in different directions, has long been in use, and on nearly every kind of plow. Peter Dutton's stay-iron, rejected in 1865, affords an illustration.

That an adjustable wheel was deemed by the inventor to be quite a different thing from the simple bar or shoe in ordinary use, is manifest from the careful description of its advantages in the original patent. It is described in these words:—

"F is an adjustable metallic roller, which is attached to the bar A, just back of the mould-board B. The axis of the roller F is

fitted or has its bearings in arms *f f*, which project obliquely from a plate *g*, said plate being slotted longitudinally, so that bolts *h h*, which secure the mould-board to the bar, may pass through said slots, the bolts *h* having each a nut *i* on them, by screwing up which the plate, and consequently the roller, may be secured higher or lower, as may be desired."

It is also set forth that the point or share of the plow may be made to penetrate the soil at a greater or less depth, by adjusting the roller and draught-chain; the roller serving as a gauge or guide, and the draught-chain being adjusted at the end of the beams, so that the draught may aid the roller; the point or share may be made to penetrate the soil, or otherwise.

The plows proved to have been manufactured by Eddy & Co., the defendants, have none of them this element of an adjustable wheel or roller. Their plow rests upon a plain bar or shoe of iron. It has no mechanical contrivance for fixing the angle at which the point shall penetrate the earth. This is done by the strength of the plowman, who uses the shoe as a fulcrum for that purpose.

No argument is needed to show that there has been no violation by the defendants of the Dennis patent in this particular.

In considering the effect of the remaining claim of the reissue, we are greatly aided by the clear and explicit statement of the patentee of what he does not claim as his invention.

There are three mechanical advantages in his plow, which he says he does not claim to have invented:—

1st, The idea of passing the earth over the mould-board into the furrow behind. This result is really the fundamental advantage in both the plaintiff's and defendants' plows. In other words, the principal benefit to be derived from either is found in the fact that the earth, loosened and broken, will be deposited in the furrow behind the plow, the movable mould-boards and the projecting blades at the outer ends of the share both contributing to this result. But the patentee says that he is aware that this had been done before his invention, and he makes no claim to an invention or discovery in this respect.

2d, The patentee does not claim the application of a movable mould-board to one of the outer edges of the share. This, he says, was described in an application previously made (in 1844) by Drummond.

3d, The patentee does not claim the use of projecting blades at the outer ends of the share. This had been described in a patent granted to Langdon in 1842.

To these disclaimers we may add that he does not make a claim for invention in using the shovel of this plow in an inclined form. He does not even give the angle of inclination at which it shall be used, whether it shall be 75° , like the old plows, or 45° , like this one. Ever since plows have been used, — and there is no secular history of man in which the plow and the hoe are not recorded, — we may safely believe that there has been an inclination, sometimes greater and sometimes less, in the shovel and mould-board. A perfectly upright shovel would be nearly immovable, except in a light soil and to a very slight depth, while one perfectly flat would be of little value.

Remembering these four items as not being parts of the plaintiff's invention, we are prepared to consider what he claims to have invented and desires to secure by a patent. In his own words, it is "the inclined shovel mould-board B, formed and mounted substantially as described, and constructed highest at its outer edges, so as to form on each side of the standard A a recess *c*, through which recesses a portion of the earth may, after rising upon the mould-board, descend into the furrow in the rear of the plow."

An inclined shovel mould-board, simply and alone, is not spoken of as an invention. It had long been in use in other plows. What the claim means to appropriate is a shovel "formed and mounted and constructed as described." There is nothing in the form of mounting — that is, placing it upon the beam of the plow — that is peculiar. It is the construction that gives it effect. How is it formed and mounted and constructed? He says, in the general description, that it is a metallic bar so formed or curved that the front will form the beam of the implement, and the back an inclined portion to which the mould is attached, while the upper edge of the mould-board is so scol-

loped out as to form a recess over which the earth may pass, to which is attached a metallic adjustable roller, serving as a gauge or guide to regulate the depth that the point shall penetrate the earth.

The defendants insisted that, like the other, this claim also describes a combination, of which the adjustable roller is an essential element, and that there can be no infringement unless the roller is used. There is much force in this argument.

There is, also, another view of this part of the case. Eliminate from this description, first, the idea of an inclined shovel or mould-board, and, second, the idea of passing the earth over the plow into the furrow, both of which are outside of the plaintiff's invention, and nothing remains, except a recess formed by a scolloped edge on which the earth will pass, and an adjustable roller in connection with the beam of the plow.

As has been before said, the defendants have never used the adjustable roller. The infringement, then, if any, consists in the use of a recess formed by a scolloped edge over which the earth will pass. The learned judge at the circuit held that the patent was good for this claim, and that the defendants had infringed it. We have reached a different conclusion.

We think the use of the expression, "scolloped out so as to form a recess," was not intended to say that the particular form in which the recess was made should be that of a curve. A scollop may, indeed, imply the idea of a curve, but in a vague and indefinite manner. It is as if it had been said, it "shall be so cut out as to form a recess." The formation of the recess was the idea in the mind of the draughtsman, with no reference to any question of curved lines or right lines. That this was the fact, is made evident by the absence of the word "scolloped" in the claim itself, although used in the general description. If that form had been deemed material, it would have been inserted where the patentee sets out with precision what it is that he claims. In the claim, it is described by the words "constructed highest at its outer edges, so as to form on each side a recess" through which the earth may pass. A recess made by the outer edges being higher than the inner parts was the effect intended to be provided for, and that only. If it had

been intended to describe a recess made by a curve, to the exclusion of a recess made in any other manner, it was very easy to say so; but the patentee did not so say, and we think he did not so mean.

If the patentee here had been the inventor of the mould-board with a recess for the purpose of passing the earth through it into the furrow behind, and had described his invention in the words used in his reissued patent, would it not have included as well a structure made by right lines as one made by curved lines? In *Winans v. Denmead*, cited by the respondent's counsel, it is said, "Although a particular geometrical form is best for a certain purpose, yet other forms, giving substantially the same result, are infringements. The result need not be the same in degree if it be the same in kind." 15 How. 344.

If this be so, it can scarcely be denied that the words used in this reissued patent include both forms of a recess, and that it thereby claimed what was previously known and in use; to wit, a structure for the passage of the earth into the furrow behind.

No testimony is given that the sod will be more thoroughly broken, the earth better pulverized, or the furrows better filled by the passage of the earth through a recess made by curved lines, than by its passage through a recess of the same depth made by straight lines. The plaintiffs, although witnesses, gave no testimony to that effect. Of our own knowledge, we do not know that it is so. As a matter of law, certainly we are not able to decide that the right-lined recess is any less efficacious for the purpose desired than a curved-line recess.

There is, indeed, testimony to show that the earth and sod passing over the low mould-boards of the exhibit M were left in a worse condition than when passed over the recess of the Dennis plow.

In speaking on this subject, Henry Holmes says that it left the furrow behind hard and flat, as if a log had been drawn between the rows. The witness Broughton speaks of it as throwing a double furrow outward, and as leaving the furrow bare behind.

But neither of these witnesses attribute the excellences of the one plow or the defects of the other to the existence of curved or straight lines in forming the recess.

To recapitulate :

1. The second claim of the plaintiff's specification, "the combination with the beam A and the mould-board B with the adjustable wheel F, arranged and operating substantially as used for the purposes specified," gives no cause of action. It is a claim for a combination of which the adjustable wheel F is an essential element ; and it is not pretended by any one that the defendants have ever used an adjustable wheel in the plows made by them.

2. The first claim does not cover an inclined shovel mould-board simply, nor does it cover the principle of passing the earth over the recess of the plow into the furrow behind, nor does the claim cover the passage of the earth over a recess formed exclusively with a curved edge. Its effect is to provide for a recess cut or carved out for the purpose intended. This is not novel, the evidence showing many instances prior to the plaintiff's original patent in which the principle and process had been used and patented.

3. There is no evidence to show that there is any advantage in passing the earth through a recess formed by curved lines, rather than through a recess formed by right lines.

For these reasons, the decree of the court below must be reversed.

As Dennis has no cause of action, the question of the amount of damages cannot arise.

Decree reversed, and cause remanded with instructions to dismiss the bill with costs.