J. T. WATKINS.

PLOW.

No. 175,311. Patented March 28, 1876.

Fig. 1

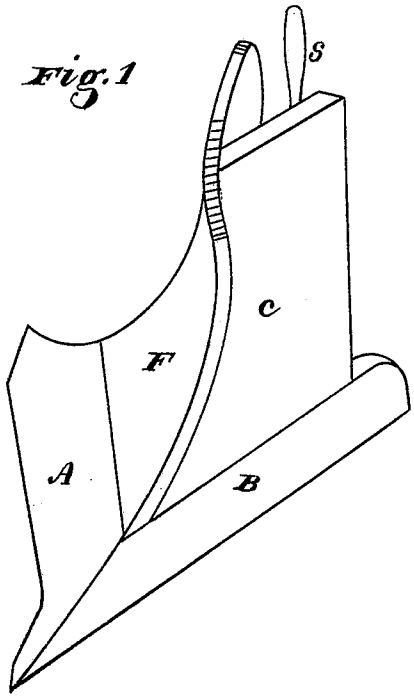


Fig. 3.

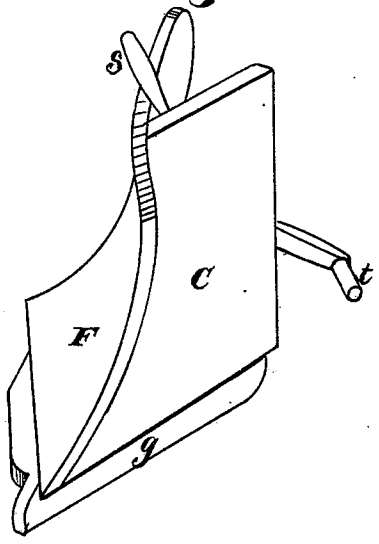


Fig. 2.

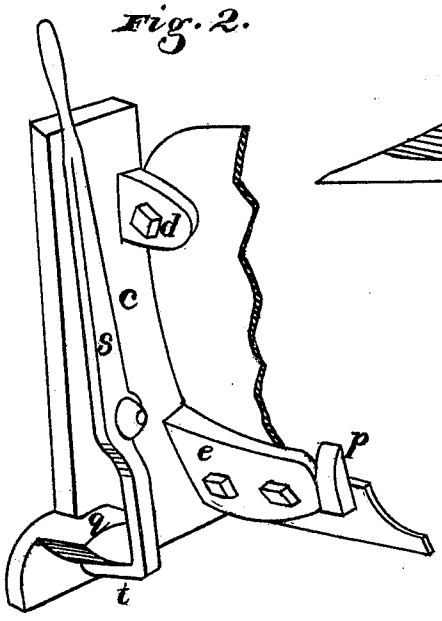
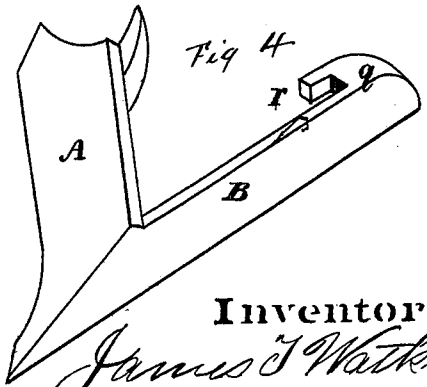


Fig 4



Witnesses

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IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **175,311**, dated March 28, 1876; application filed January 21, 1876.

To all whom it may concern:

Be it known that I, JAMES T. WATKINS, of Santa Clara town and county, State of California, have invented Improvements in Plows; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My improvement in plows consists in constructing the share and land-side in one single piece, and in providing a simple and extremely effective means for attaching it to the standard and mold-board, so that the share and land-side can readily be removed for sharpening or other purpose when desired.

It is not new to make the share and land-side of a plow in one single piece and secure them by means of bolts to the mold-board and standard. Neither is it new to make the share so that it can be attached to the mold-board and detached from it without the use of bolts. But my invention differs from both of these devices, as will be more fully explained in the following description, in which reference is had to the accompanying drawings, in which—

Figure 1 is a front view of the share, colter, and land-side. Fig. 2 is a rear view. Figs. 3 and 4 are details.

The share A and land-side B I form in one piece, as represented. The standard C I cast with the two lugs *d e*, such as are used when the share is riveted or bolted in place, the lower lug *e* being sufficiently wide to allow the lower edge of the mold-board F, when it is secured to the standard, to be bolted to the upper half of the lug, while the upper edge of the share fits over its lower half, thus bringing the share and mold-board in line. I then rabbet the lower end of the standard C on the side next to the land, so as to form a downward-projecting plate, *g*, which corresponds in width with the lower half of the lug *e*, so that the land-side B will fit in the rabbet when the share A is placed in position upon the lower half of the lug, and form a perfect extension of the mold-board and standard. Numerous devices could be devised for attaching the combined share and land-side to the standard and its lug *e*, and locking it firmly in place, but I have devised an arrangement of interlocking points and a binding device, which is at once simple, convenient, and effective; and these devices are described as follows: First, I file a depression in the lower edge of the lug *e*, close to the plate *g*, so as to form a toe, *i*, which projects forward in front of the angle formed by their junction. I then form the rear end of the plate *g* at an angle, or rounding toward the toe of the plow. Secondly, in casting the share and land-side, I form a projection or extra thickness of metal on the under side of the share, in the angle formed by their junction, and in this extra thickness of metal I make a notch or recess, *o*, in which the toe *i* of the standard and land-side will fit when the parts are put together. On the rear lower edge of the share I cast a lug, *p*, which projects upward above the share, and upon which the rear edge of the mold-board will rest when the parts are put together, and on the rear of the land-side I cast a lug, *q*, which has an inclined groove or recess, *r*, on its forward edge, while its lower or under face is rounded or inclined, as represented. It will thus be seen that I provide three interlocking points, which are arranged with reference to each other, as the three angles of a triangle. In order to bind the parts together, I secure a lever, *s*, to the inside of the standard B, the handle of which projects above the standard, while the lower end is bent at right angles so as to form a bar, *t*, which passes under the inclined face of the lug *q*, so that, by drawing the upper end of the lever backward, the bar *t* will be forced down the incline, and thus draw the parts together. A pawl can be formed on the upper end of the lever, which will engage with notches on the standard, to retain the lever in the desired position. To separate the shoe and land-side from the mold-board and standard, it is only necessary to throw the upper end of the lever forward so as to free the bar *t* from the lug *q*. The standard and mold-board can then be lifted off of the share and land-side, the locking-points separating easily. When the parts are put together and locked, the union will be extremely permanent and rigid. A brace-bar can be applied between the lugs *p* and *q*, if desired, to strengthen the share and land-side.

Although these devices can be varied in their construction and application, it is necessary to have three interlocking points and a clamping or binding device.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The standard C, having the lugs *d e*, and downwardly-projecting plate *g*, the forward end of which plate is formed into a toe, *i*, and its rear end beveled, as described, in combination with the land-side B and share A, formed in one piece and provided with the recess *o*, lug *p*, and grooved lug *q*, with its beveled or inclined rear face, the whole clamped rigidly together by the locking-lever *s*, with its rectangular bar *t*, all combined and arranged to operate substantially as and for the purpose set forth.

2. The land-side B and share A, made in a single piece, and having the three locking-points *g o p*, triangular with each other, in combination with the standard *c e d*, and locking-lever *s*, as shown and described.

JAMES T. WATKINS.

Witnesses:
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