E. WIARD.
Plow.

No. 216,773. Patented June 24, 1879.

Fig 1.

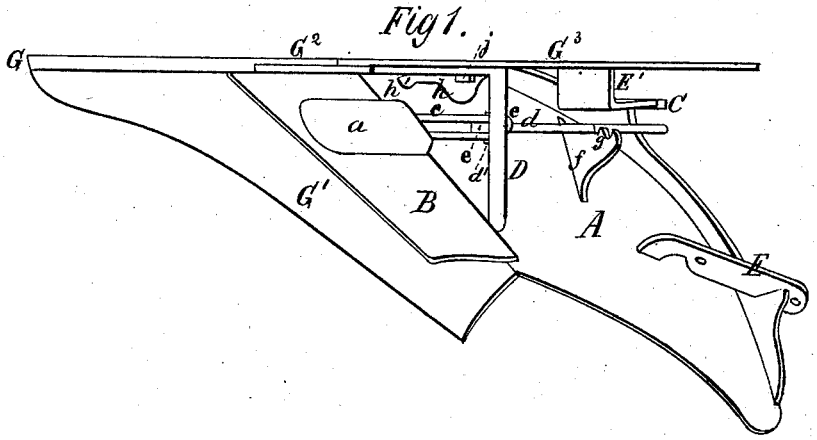


Fig 2

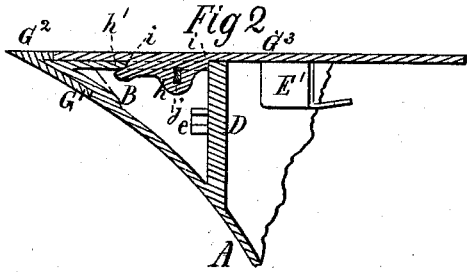


Fig 3.

Fig 4.

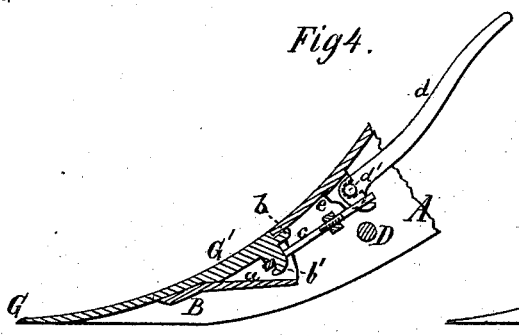
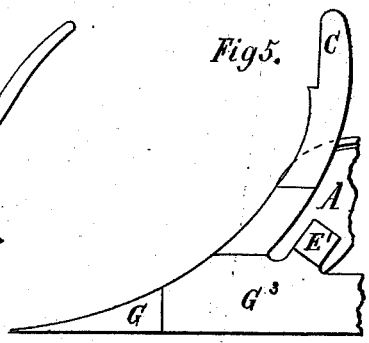


Fig 5.



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EDWARD WIARD, OF LITCHFIELD, MINNESOTA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **216,773**, dated June 24, 1879; application filed April 19, 1879.

To all whom it may concern:

Be it known that I, EDWARD WIARD, of Litchfield, in the county of Meeker and State of Minnesota, have invented a new and useful Improvement in Plows; 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, forming part of this specification, in which—

Figure 1 is a bottom view of my improved plow. Fig. 2 is a horizontal section of a portion of the plow, the plow being inverted. Fig. 3 is a vertical longitudinal section of the plow, the plow being in its right position. Fig. 4 is a similar section of a portion of the plow, showing another way of applying the mechanism by which the point of the plow is locked to the mold-board and land-side, and Fig. 5 a partial side elevation.

The nature of my invention consists, first, in certain means whereby the point, share, and forward portion of the land-side of a plow can be either locked together or loosened, so as to be separated, by operating a lever or other equivalent device; and by this part of my invention, keys, nails, screws, or other like fastenings are dispensed with, and tools for either driving home or loosening such fastenings are rendered unnecessary.

It consists, secondly, in having the rear portion of the land-side provided with a perforated horizontal lug having an overlapping hook, in combination with the land-side portion of the frog, provided with an oblong horizontal slot which is extended back to the transverse brace-rod of the mold-board and land-side, and closed by one end of said rod.

By this part of my invention the rear part of the land-side is held in place not only by a nail passed down through the lug, but is further held by the overlapping hook, and thus the long lug, which is obtained by extending it back to the brace-rod in casting the plow, is made available, not only for preventing the rear portion of the land-side from vibrating up and down vertically, but also in and outward horizontally.

In the accompanying drawings, A is the mold-board, B the frog, D the transverse brace-rod, C the standard, and E the mold-board, handle-lug or handle-support, of the plow, all cast in one piece. G is the point of the plow, having the share G^1 and the front portion G^2 of the land-side cast upon it. G^3 is the rear portion of the land-side, and E′ the land-side handle-lug or handle-support of the plow, cast in one piece. The mold-board portion of the frog B is provided with a depression, *a*, which is open at front and rear, and on the under side of the share an underlapping lug, *b*, with a hook, *b′*, is cast, and this lug *b* and its hook *b′* are passed into the depression *a* of the frog when the point and share and front portion of the land-side are brought in proper position upon the mold-board, as shown, the lug *b* hooking under the mold-board, and the hook resting in depression *a*. A link, *c*, is fitted upon the hook *b* and extends back to a lever, *d*, which has its fulcrum or pivot *d′* seated in half-boxes of a bearing, *e*, cast on the under side of the mold-board, as shown. A notched stop-lug, *f*, also cast on the under side of the mold-board, serves as a means for holding the lever after the plow-point, with share and front portion of the land-side, has been drawn in proper position upon the mold-board. This lug *f* has several notches, *g*, in order that the parts may be drawn together and locked by a greater or less movement of the lever *d*, accordingly as the fit of the parts may require.

It will be seen that, by raising the lever after the parts have been properly adjusted for locking them together, the link will be drawn back and caused to pull upon the hook *b′* of the share, and thus cause the share-point and front portion of the land-side to be firmly united to the mold-board through the aid of the underlapping lug *b*. The sheath-like form of the depressed portion *a* of the frog of the plow shields the hook and link from any objects which might be liable to come in contact with and disconnect them.

The rear portion, G^3, of the land-side is provided with an oblong lug, *h*, and on the front end of this lug an overlapping hook, *h′*, is provided, which bears against the inner side of the land-side portion of the frog of the plow, which frog B has an oblong slot, *i*, cast in it, extending to the brace-rod D. In the slot *i* the lug *h* fits snugly, and its rear end abuts against the rod D, while its front end fits snugly against the front wall of the slot *i*, and

its hooked portion overlaps upon the inner side of the frog just forward of said front wall of the slot. The lug is perforated vertically and receives a nail, *j*, through it, as shown.

By means of the oblong lug *h* the land-side is prevented from longitudinal, lateral, and up-and-down movement, the overlapping hook *h'* specially aiding the nail *j* in preventing lateral vibration of the part G^3 of the land-side in a horizontal direction.

In Fig. 4 another plan of constructing the link *c* is shown, a swivel-eye with a screw-stem being connected to the link for the purpose of adjusting the movement of the lever in cases where the amount of movement of the lever shall be less than the distance between any two of the notches *g*.

What I claim as my invention is—

1. The point comprising the portions G G^1 G^2, provided with the underlapping lug *b* and hook *b'*, in combination with a mold-board provided with a fulcrum-bearing on its under side, in rear of the joint between the share and the mold-board, and the lever mechanism connected to the hook of the point, and with its fulcrum-pin resting in the fulcrum-bearing of the mold-board, substantially as and for the purpose herein described.

2. The combination of the mold-board provided on its under side with the fulcrum-bearing for the pivot of the lever mechanism, and with the adjusting stop-lug, also on the under side of the mold-board, the point provided with the underlapping lug and hook, and the lever mechanism, substantially as described.

3. The combination of the point comprising the parts G G^1 G^2, provided with a hook, *b'*, and lug *b*, and the mold-board having a frog with a sheath at *a*, and the lever mechanism, substantially as and for the purpose described.

4. The land-side G^3, provided with the oblong lug *h*, having the overlapping hook *h'*, in combination with the frog of the mold-board, having an oblong slot, *i*, substantially as and for the purpose described.

EDWARD WIARD.

In presence of—
G. L. McCARGER,
SAML. L. BARR.