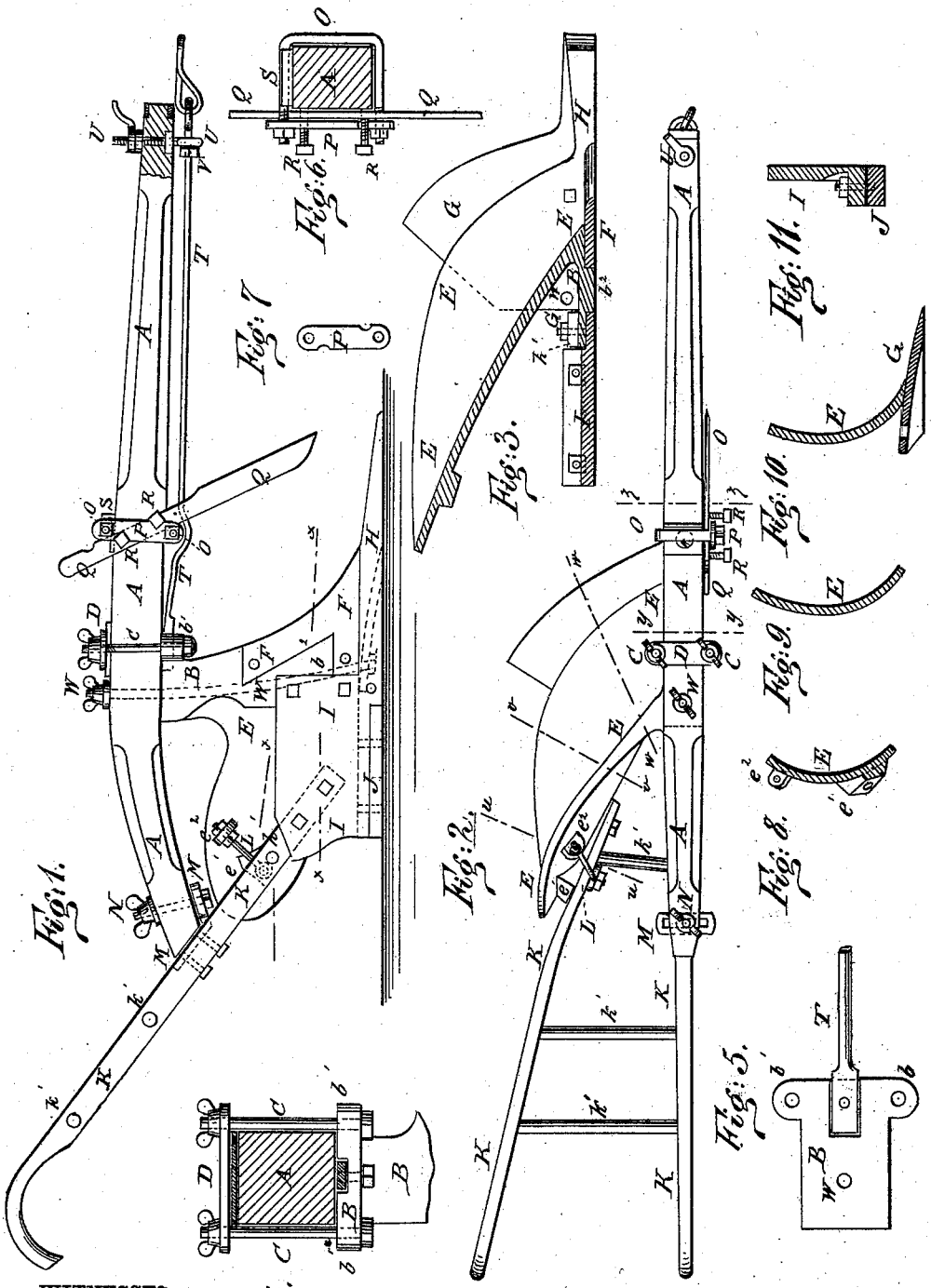
E. YEISER.
Plow.

No. 199,608. Patented Jan. 22, 1878.



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EDMUND YEISER, OF SHERIDAN, PENNSYLVANIA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **199,608**, dated January 22, 1878; application filed November 6, 1877.

To all whom it may concern:

Be it known that I, EDMUND YEISER, of Sheridan, in the county of Lebanon and State of Pennsylvania, have invented a new and useful Improvement in Plows, of which the following is a specification:

Figure 1 is a land-side view of my improved plow. Fig. 2 is a top view of the same. Fig. 3 is a detail section taken through the line *x x*, Fig. 1. Fig. 4 is a detail cross-section taken through the line *y y*, Fig. 2. Fig. 5 is a detail top view of the standard. Fig. 6 is a detail cross-section taken through the line *z z*, Fig. 2. Fig. 7 is a detail view of the yoke of the clamp for holding the colter. Fig. 8 is a detail section of the mold-board, taken through the line *u u*, Fig. 2. Fig. 9 is a detail section of the mold-board, taken through the line *v v*, Fig. 2. Fig. 10 is a detail section of the mold-board, taken through the line *w w*, Fig. 2. Fig. 11 is a detail vertical section of the land-side.

Similar letters of reference indicate corresponding parts.

My invention relates to that class of plows in which are employed a draft-rod running back to the plow-standard and a colter in front of the plow.

The nature of my invention consists in the construction and arrangement of devices for connecting and attaching the draft-rod and dividing the strain between the standard and the beam; also, in the devices for adjusting and holding the colter; and, further, in the devices for securing and holding the handle to the mold-board, all as hereinafter more fully set forth, and pointed out in the claims.

A is the plow-beam, which rests upon the upper end of the standard B, where it is secured in place by the bolts C and yoke D. The bolts C are placed at the opposite sides of the beam A, pass up through lugs b^1 formed upon the sides of the forward part of the top of the standard B, through holes in the ends of the yoke D placed upon the upper side of said beam A, and have hand-nuts screwed upon them.

The standard B is cast solid with the mold-board E, which is made in the form of a slightly-twisted section of a hollow cylinder. F is the cutter, which is placed in a recess in the land-side side of the standard B, and has an angular notch formed in its rear edge to fit against an angular projection, b^2, formed upon said standard by said recess.

The cutter F is secured to the standard B by bolts, and its edge projects a little beyond the forward edge of the mold-board E. By this construction the cutter F will be held securely in place, and its lower corner or point will be kept from rising, so that grass and weeds may not catch upon it, and thus impede the operation of the plow.

G is the shear, H is the point, and I is the land-side, which three parts are cast in one piece. The shear G and point H are laid with steel, which can be renewed when worn. The shear G is bolted to the mold-board E. The point H has a lug, h', formed upon or attached to its inner side, to overlap and be bolted to the inner side of the lower end of the standard B.

The forward end of the land-side I is inserted in a recess formed in the land-side side of the standard B, and is bolted to said standard. This construction makes the projection b^2 of the standard B triangular in form, and leaves the outer surfaces of the standard B, cutter F, and land-side I flush with each other.

The rear part of the lower edge of the land-side I is cut away, and in the recess thus formed is placed a steel bar, J, which is secured in place by bolts passing through it and through a flange formed upon the inner side of said land-side I, as shown in Fig. 11.

By this construction, as the bar J wears, strips of leather or metal may be inserted between it and the land-side I, so as to keep the base of the plow level. The steel bar J, when worn out, may be readily replaced with a new one.

K are the handles, which are connected by rounds k'. The lower end of the land-side handle K is bolted to the rear part of the land-side I. The lower end of the mold-board handle K is bolted to a projection or rib, e^1, cast upon the rear part of the mold-board E, and the connection is strengthened by the brace-rod L. The rear end of the brace-rod L is secured by the upper one of the bolts that secure the said handle. The forward end of the brace-rod L passes through a lug, e^2, cast

upon the mold-board E, and has a screw-thread cut upon it to receive the two nuts, which are screwed upon it, one upon each side of the said lug e^2.

To the land-side handle K, directly opposite the end of the plow-beam A, is secured a plate, M, the lower part of which is bent forward beneath the said beam A, is widened, and is slotted transversely to receive the bolt N. The bolt N passes up through the beam A, and has a hand-nut screwed upon its upper end, so that by loosening the said nut the plow-beam A may be adjusted laterally to cause the plow to take or leave land, as may be required.

O is a bow that passes around the plow-beam A, and the ends of which pass through holes in the ends of the yoke P, and have nuts screwed upon them. Q is the colter, the shank of which passes between the yoke P and the side of the beam A diagonally, so that the draft-strain upon the said colter may be sustained by the arms of the bow O. R are two set-screws, one or both of which may be used, and which pass through screw-holes in the shank of the colter Q, and rest against the side of the beam A, to enable the said colter Q to be adjusted in line with the cutter F.

The upper arm of the bow O may rest against the flange of a plate, S, attached to the upper side of the beam A, to strengthen the said bow against the draft-strain upon the colter Q.

The yoke P may have notches formed in its edges to receive the set-screws R, and allow the edges of the shank of the colter Q to bear against the arms of the bow O. The edges of the shank of the colter Q may have notches formed in them to receive the arms of the bow O, to prevent the said colter from slipping down when in use.

T is the draft-rod, the rear end of which is inserted in a notch in the forward part of the top of the standard B, where it is secured in place by a bolt, as shown in Fig. 5. The rod T passes forward beneath the beam A, passes through the eye of the eyebolt U, and has an eye or hook formed upon its end to receive the draft-link, hook, or clevis.

The eyebolt U passes up through the forward end of the beam A, and has two nuts placed upon it, one above and the other below said beam, so that by adjusting the said nuts the forward end of the rod T may be raised and lowered to raise and lower the point of draft attachment, to cause the plow to run deeper or shallower in the ground.

Upon the forward part of the draft-rod T is cut a screw-thread to receive a nut, V, which is screwed up against the rear side of the eyebolt U, so as throw part of the draft upon the plow-beam A.

W is a long bolt, which passes up through the shear G, through the cavity of the standard B, and through the plow-beam A, to bind the various parts of the plow together, and at the same time serve as a pivot for the lateral adjustment of the plow-beam.

I am aware that the construction of the various parts of the plow herein shown and described, and not embraced in the claims, is not new; and I do therefore lay no claim to the same.

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

1. The combination, with the beam A and standard B, of the draft-rod T, secured, as shown, to the top part of the standard, and running forward under the beam, the eyebolt U, with its two adjusting-nuts, and the nut V, adjusted upon the threaded portion of the draft-rod behind the eyebolt, all substantially as and for the purposes herein set forth.

2. The combination, with the plow-beam A, of the colter Q, having its shank perforated and notched, as described, the notched yoke P, set-screws R R, bow O, and flanged plate S, all substantially as and for the purposes herein set forth.

3. The combination of the mold-board E, having rib e^1 and lug e^2 upon its under side, the mold-board handle K, and the rod L, secured to the handle by one of the bolts fastening said handle, and the upper end of the rod passing through the lug e^2 and held by nuts on both sides of said lug, substantially as and for the purposes herein set forth.

EDMUND YEISER.

Witnesses:
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