E. C. Hodge,

Plow Coulter.

No. 112,039. Patented Feb. 21. 1871.

Fig. 1.

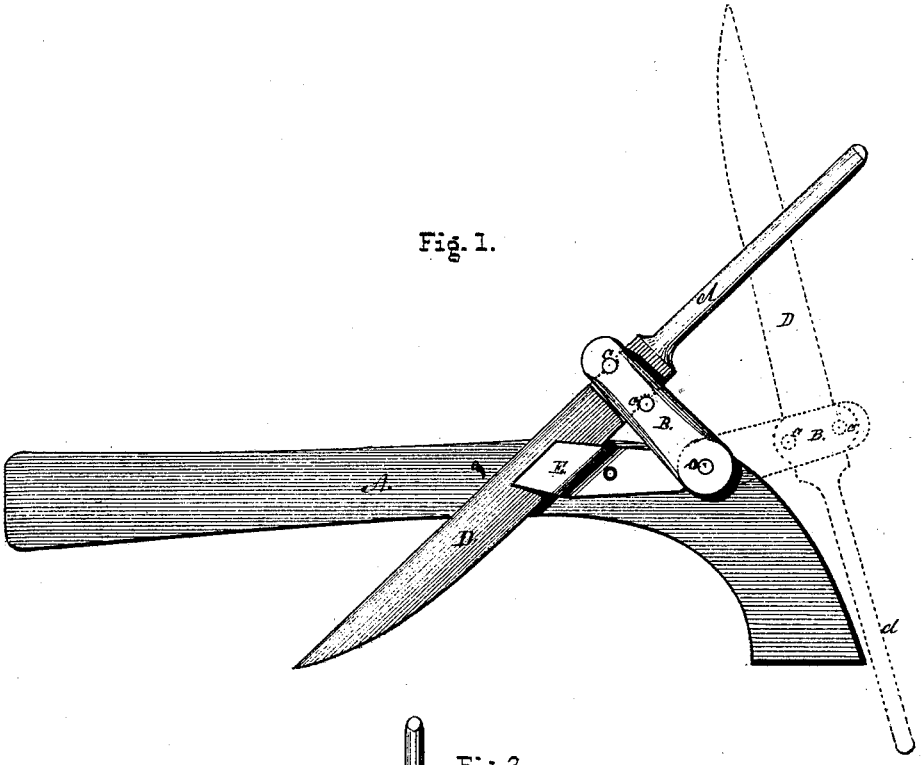
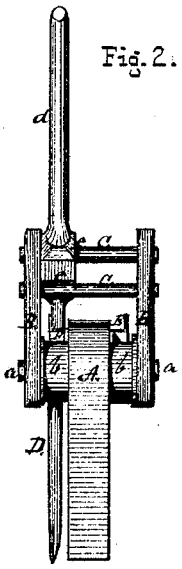


Fig. 2.



Witnesses.

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EPHRAIM C. HODGE, OF ONEONTA, NEW YORK.

IMPROVEMENT IN PLOW-COLTERS.

Specification forming part of Letters Patent No. **112,039**, dated February 21, 1871.

To all whom it may concern:

Be it known that I, EPHRAIM C. HODGE, of Oneonta, in the county of Otsego and State of New York, have invented certain new and useful Improvements in Colters and the Manner of Operating them on Reversible and Flat-Land Plows; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 represents a side view of a section of the plow-beam, yoke, and colter in the proper position for use, on one side of the beam, the colter thrown back, shown in dotted lines. Fig. 2 shows a rear end view of the same.

The object of my invention is to provide a colter that may be used on a reversible plow, sustaining the same relation to the point of the plow when used either right or left, and cutting the furrow-slice in the same manner as the stationary colter of a flat land-side plow, while at the same time it is easily adjusted to the change, is strong, light, and durable, and may be used or not, at pleasure, without removing it from the plow.

My invention consists in providing the colter-blade with a handle extending up and back a sufficient distance to be within easy reach of the plowman while holding the plow, and securing the same to the plow-beam by means of a yoke or frame pivoted to the beam in such a manner as to admit of the colter being raised above the beam when it is moved from one side to the other, to operate conjointly with the reversible point or plow, and also to allow the frame and colter to be thrown back when desired.

To enable others to make and use my improvements in colters, and operate them on reversible plows, I will describe them more in detail, referring to the drawing and the letters marked thereon.

The plow-beam A may be made of wood or of cast metal of any desired pattern, form, or dimensions suitable for a hill-side or reversible plow.

To the beam A, in a proper position, is attached a yoke or frame, B, made in two pieces of flat bar-iron, which are connected together at the top with two bars of round iron, C C, of a sufficient length to give the width or space between the flat bars B B for the colter D to be secured by holes through it, or notches *e e* in the edges, so that it will slide freely from side to side.

The yoke B is pivoted to the beam A by a bolt, *a*, passing through both sides and the projections *b b* on both sides of the beam, to make it fill the space between the lower ends of bars B B, which make the sides of the yoke.

The colter D may be made of wrought-iron laid with steel and tempered on the forward edge, or of cast-iron chilled on the cutting-edge, the form being such that it can be secured to the yoke by having two holes through the central portion near its edges, or two notches, *e e*, fitting on the rods C C, so as to slide freely on or between the rods from side to side.

The upper end of the colter D, that extends above the yoke B, is formed into a handle, *d*, and is within easy reach of the plowman, so that he can disengage it from obstructions, or shift it from one side of the beam to the other, or elevate it entirely out of the way, or throw it back into a reversed vertical position, without leaving his position between the handles of the plow or stopping his team.

On both side of the beam A are placed and secured clasps or stops E E, of any suitable design, to support the colter D in its proper position when in use.

The yoke, attached to the beam in the manner described, may be made tight, as the colter D is supported on the stops E E. The fulcrum-power is in a direct line with the greatest strength of the bars B.

The two rods or bolts C C secure the colter more firmly, and prevent it from turning from a direct line when in the ground.

The yoke being pivoted, or the axis of motion being at its lower end, it may be thrown up very easily, bringing the center of gravity toward the rear end of the plow, thus holding the colter out of the ground by its own weight when desired, and at the same time in a position where it can be instantly used. By add-

ing weight to the handle *d* the colter may be nicely balanced, so as to facilitate the design and operation.

What I claim as my invention, and desire to secure by Letters Patent, is—

The colter D *d*, in combination with yoke B, stops E E, slide-rods C C, and beam A, whereby the colter may be used on either side of the beam and adjusted at the will of the operator, as and for the purpose set forth.

In testimony whereof I hereunto subscribe my name.

EPHRAIM C. HODGE.

Witnesses:

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