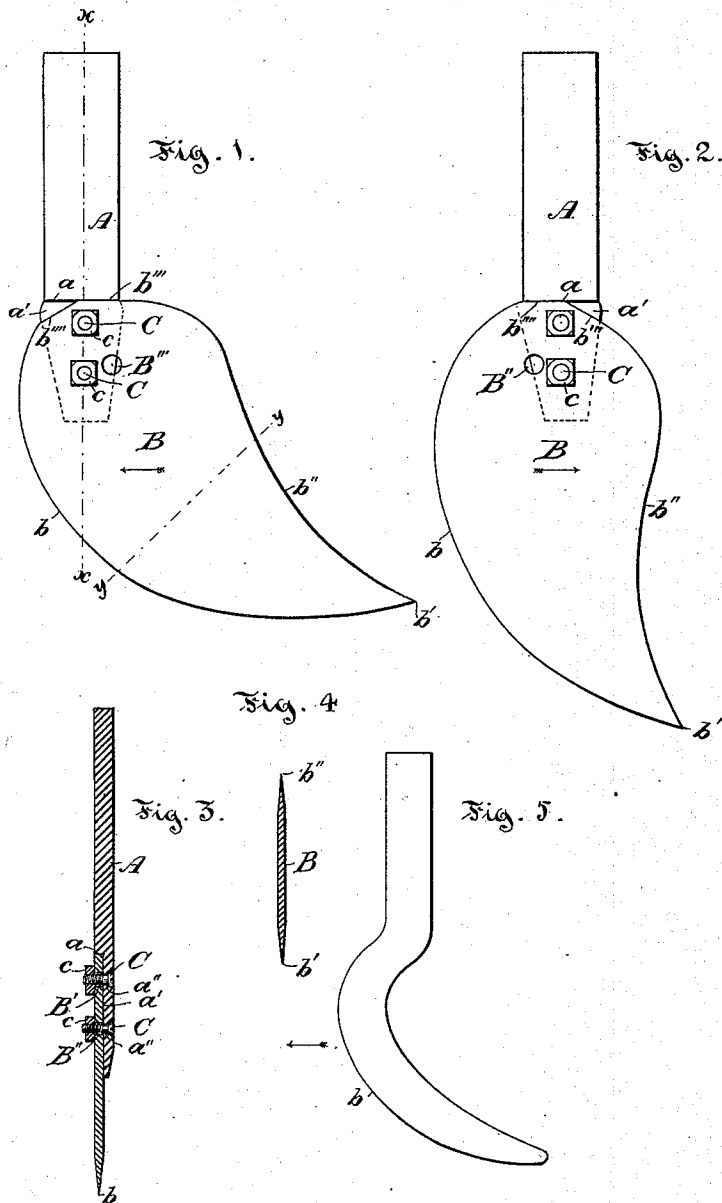


(No Model.)

L. WALKER.
PLOW COLTER.

No. 410,055.

Patented Aug. 27, 1889.



Witnesses:
Chas. Haley,
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UNITED STATES PATENT OFFICE.

LEVI WALKER, OF DELHI, ONTARIO, CANADA.

PLOW-COLTER.

SPECIFICATION forming part of Letters Patent No. 410,055, dated August 27, 1889.

Application filed April 20, 1889. Serial No. 308,027. (No model.)

To all whom it may concern:

Be it known that I, LEVI WALKER, of Delhi, in the Province of Ontario, Dominion of Canada, have invented certain new and useful
5 Improvements in Plow-Colters; 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 a part hereof.

10 My invention, which will be hereinafter fully set forth and claimed, relates to plow-colters.

The object of my invention is a reversible and adjustable colter that shall reduce the draft, make an effectual cut, and be easily
15 and cheaply manufactured and kept in repair.

Figure 1 is an elevation of my improved colter. Fig. 2 shows my improved colter in a different adjustment. Fig. 3 is a vertical
20 section on line *xx*, Fig. 1. Fig. 4 is a transverse section on line *yy*, Fig. 1; and Fig. 5 shows a modification of my improved colter.

The arrows show the direction in which the colter is intended to work.

25 A is a detachable colter-shank, consisting of a straight flat bar having its lower end reduced in thickness from a square shoulder *a* at a right angle, or nearly so, to the shank, and forming a recess *a'* for the reception of
30 the colter-blade flush with the flat side of the shank. Said recess is provided with two bolt-holes *a''* for the reception of bolts with sunk heads.

B is the colter-blade, made of thin steel, and
35 of the shape, or as near as may be, as shown, one edge *b* being convex, commencing at the top with a moderately quick curve on a line approximately vertical, then gradually sloping rearwardly, and flattening out to almost
40 a straight line as it approaches and finally passes the horizontal with a quicker turn, terminating at the point *b'*, while the other edge *b''* is concave where it adjoins the point
45 and convex at the top, the latter or that part connecting the two cutting-edges approximately a portion of a circle, but having two straight lines or edges *b'''* and *b''''* joining each other at a very obtuse angle of such
50 magnitude as to form a horizontal to the desired corresponding position of the blade and to fit snugly on the shoulder *a* of the shank A. The straight lines *b'''* and *b''''* are adapted to lie snugly on the shoulder *a* when the
55 blade is bolted in its different positions, and three bolt-holes *B'*, *B''*, and *B'''* are provided

in the top of the blade, through which the bolts C pass and are secured by nuts *c*. One of these bolt-holes *B'* is placed about opposite the obtuse point formed by the straight
60 edges *b'''* *b''''*, and the two lower ones are placed so that a line drawn through the center of either of them and the upper one *B'* is at a right angle with opposite straight edges *b'''* or *b''''*.

When it is desired to plow sod, clover-roots, 65 and the like, the colter is used, as shown in Fig. 1, with its convex edge foremost, giving a draw cut, while for plowing stubble and the like, where particular cutting properties are not requisite, the blade is reversed and
70 used in the opposite position, (shown in Fig. 2,) in which position the edge *b* is preserved and kept sharp. Being detachable, the blade B is readily and cheaply replaced when worn out, the shank practically lasting as long as
75 the plow-frame.

A non-reversible draw-cut colter combining shank and blade in one and answering the same purpose as that shown in Fig. 1 as regards cutting quality is shown in Fig. 4, 80 which practically represents the convex edges *b* of Figs. 1 and 2.

I claim as my invention—

1. In a plow-colter, the combination of a shank A, having recess *a'*, with shoulder *a* 85 and bolt-holes *a''*, a flat blade B, having a convex cutting-edge *b*, terminating at the point *b'* in a flat sweep, and a partly concave and partly convex cutting-edge *b''*, said cutting-edges joined by a wide top having
90 straight edges *b'''* *b''''*, joining each other at an obtuse angle and provided with bolt-holes *B'* *B''* *B'''*, and the bolts C, connecting said shank and blade adjustably, substantially as set forth.

2. A reversible colter having a convex cutting-edge *b*, terminating by a flat sweep in a point *b'*, and a concave cutting-edge *b''*, said cutting-edges joined by the point *b'*, and a wide upper part having two straight edges 100 *b'''* *b''''*, meeting at an obtuse angle and determining the position of the blade on the shank, and said blade provided with bolt-holes *B'* *B''* *B'''*, substantially as set forth.

In testimony whereof I have signed in the 105 presence of the undersigned witnesses.

LEVI WALKER.

Witnesses:

DONALD GRANT,
JAMES ROBB.