J. OLIVER.

PLOW.

No. 185,833. Patented Jan. 2, 1877.

Fig. 1.

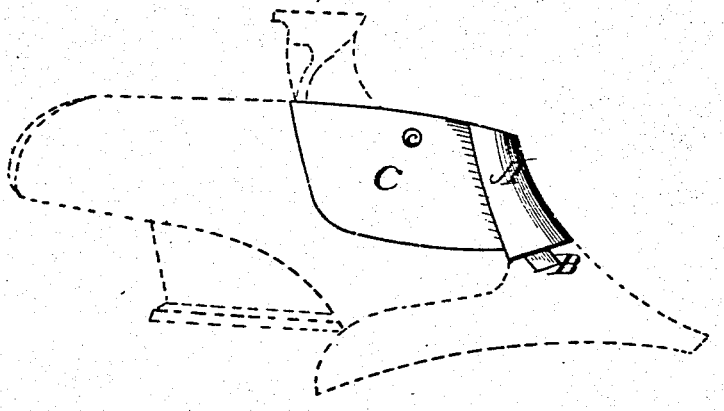


Fig. 3.

Fig. 2.

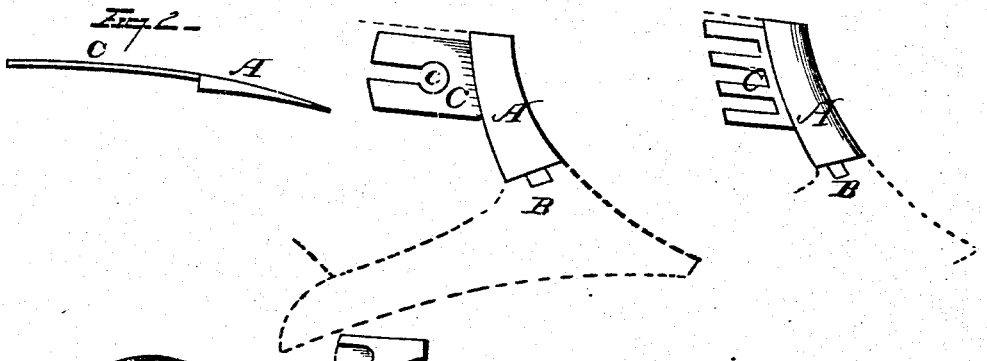
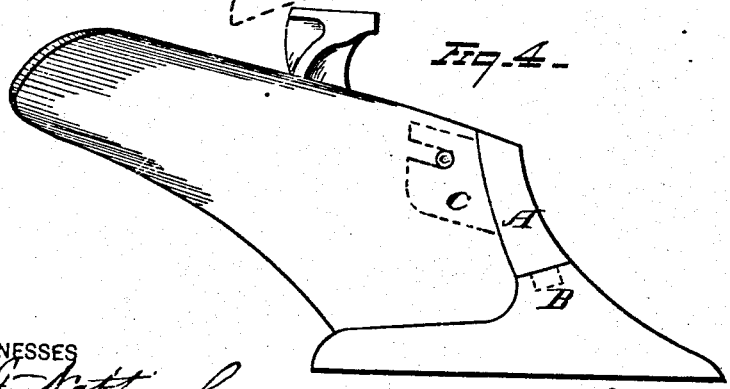


Fig. 4.



WITNESSES

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JAMES OLIVER, OF SOUTH BEND, INDIANA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **185,833**, dated January 2, 1877; application filed November 29, 1876.

To all whom it may concern:

Be it known that I, JAMES OLIVER, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvent in plows, and consists in the following parts and combinations, as hereinafter specified and claimed.

In the drawing, Figure 1 is a view in side elevation of my plow-colter and its attaching-plate and lug. Fig. 2 a top view of the same. Fig. 3 represents modifications of the same. Fig. 4 is a view showing the method of attaching the colter and its plate to the plow-point.

A is the colter; B a lug, projection, or any equivalent device, proceeding from the lower edge of the colter where it joins the upper portion of the plow-point, said lug or projection entering and fitting into a corresponding recess made in the portion of the plow-share or point adjacent below. C is a thin plate or flange attached to the rear edge of the separate colter A, shaped and bent in such a manner as to conform to the interior surfaces of the standard and mold-board, so that it may rest between the said standard and mold-board.

This pin-plate flange is attached to the colter either by riveting, or, preferably, by having the colter cast upon said plate or flange after having previously been properly fashioned. By this process of casting, the colter A and plate C are substantially one solid piece, and less liable to accident or derangement.

I do not limit myself to the exact size of the plate C, inasmuch as the same may be made to extend so as to well fill the space between the plow-standard and mold-board, or it may be cut away substantially as shown in Fig. 3 of the drawing, and the rivet-hole *c* may be made a slot opening toward the rear, as shown in Fig. 3, so that the colter and its plate C may be slid into position without detaching the mold-board or removing the bolt, it being necessary only to remove the point of the plow in order to insert it.

It will be obvious that when the colter A is placed in position with its plate C resting between the mold-board and plow-standard, when the bolt passing through the hole or slot *c* is fastened, the colter will be securely fixed and firmly held in position. The rear and lower edges of the colter A are shaped to fit closely upon the adjacent mold-board point, and its face or outer surface is fashioned so that in connection with said point and mold-board a continuous smooth and unbroken surface shall be presented that may be ground over and polished as a single piece, and that may present a corresponding operating surface.

What I claim is—

1. The combination, with the detachable mold-board, standard, and point of a plow, of a detachable colter formed with a thin rear flange, which latter is secured between the standard and mold-board, thereby preserving an unbroken working face on the land-side of the plow, substantially as and for the purpose described.

2. The combination, with the mold-board, standard, and point of a plow, all formed in independent parts, of a detachable colter constructed with a thin flange extending rearward between the mold-board and standard, and provided with one or more open slots for adjustable bolt engagement therewith, substantially as and for the purpose described.

3. The combination, with the mold-board, standard, and point of a plow, all formed in independent parts, of the detachable colter, the latter provided with the flange secured between the standard and mold-board, and also constructed with the lower lug projection seating into the mortise formed in the point, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES OLIVER.

Witnesses:

WM. BEHRENS,

FRANCIS TOUMEY.