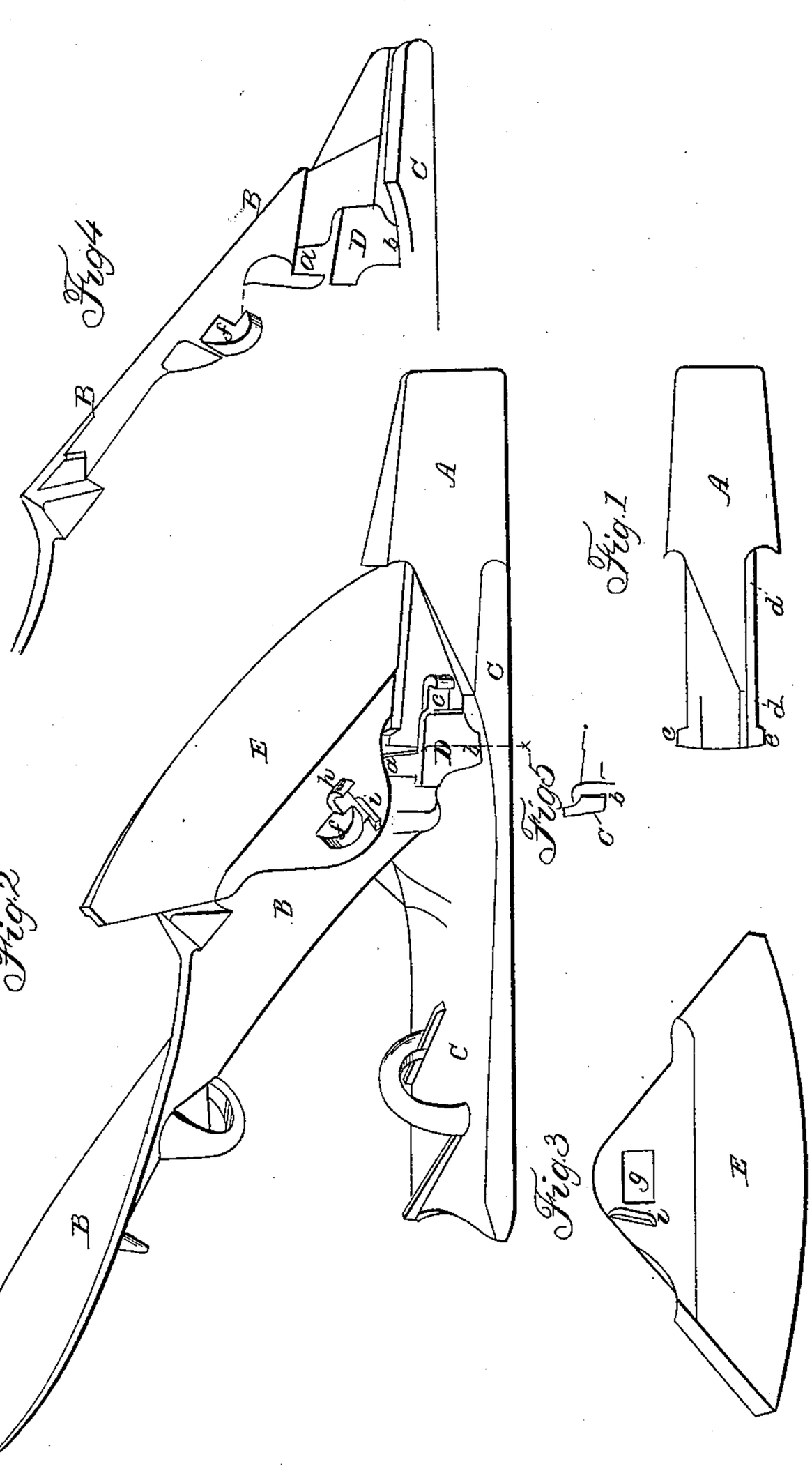
B. WOODCOCK.

Plow.

No. 3,898. Patented Jan. 31, 1845.



# UNITED STATES PATENT OFFICE.

BANCROFT WOODCOCK, OF WHEELING, VIRGINIA.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **3,898**, dated January 31, 1845.

*To all whom it may concern:*

Be it known that I, BANCROFT WOODCOCK, of Wheeling, in the county of Ohio and State of Virginia, have made certain new and useful improvements in the manner of securing together the respective parts of the plow for which I obtained Letters Patent of the United States, dated on the 14th day of June, 1837, and to which I have subsequently added an improvement in the manner of arranging and affixing the part which I denominate the "reversing-cutter;" and I do hereby declare that the following is a full and exact description of my further improvements thereon.

In their general construction and arrangement the mold-board, landside, reversible cutter, point, and share are like those described and represented in my former patent; but having found in practice that the manner of securing these together is liable to some objections, I have made certain improvements thereon with a view to obviate the difficulties encountered.

In my plow as formerly made there was a hole through the mold-board and through the shank of the point to admit a screw for the purpose of holding them together; but in the casting of these parts it is difficult to get these holes to correspond perfectly, and it has been found also that the hole through the point tended to weaken it, and to cause it sometimes to break from the effect of sudden blows. In my improved form I dispense altogether with the hole in the shank of the point, and secure it in place by means of a staple or loop of wrought-iron, which I cast or rivet in the mold-board, said staple being so formed as to embrace this point; and this staple I further secure by passing it through a hole in the lower edge of the landside, into which hole it is made to hook, its end being covered by the reversible cutter. After the point is put in place the share is inserted, and fits onto it in such manner as to aid in confining it.

In the accompanying drawings, Figure 1 is a representation of one side of my point, which, being reversible, is alike on both sides. Fig. 2 is a view of the under side of the plow with the point and share in place.

A is the point, B the mold-board, and C the landside.

D is the staple or loop of wrought-iron that confines the point in place. This, at its end *a*, is firmly attached to the mold-board by casting or riveting. At its end *b* it passes through a hole or mortise in the landside prepared to receive it, and, being hook-formed at the extreme end, it clasps against the outside of the landside, where it is covered by the reversible cutter, which is the same with that described in my former patent.

Fig. 5 shows the manner in which the hooked end *b* of the staple D holds against the outside of the landside. This figure is a section through said staple and the lower edge of the landside in the line *x x* of Fig. 2. This hooked end of the staple enables it to sustain the pressure of the wedge *c* in securing the point in place. No part of the point is represented in this section.

I form projections *e e* on the end of the shank of the point, the shoulder of one of which catches onto a knob or projection cast on the landside to receive it. It cannot therefore slip forward.

When the point A and the share E are in place a wedge, *c*, is driven in between the shank of the point and the staple D, a recess being left for that purpose, and the point is thereby effectively held and its whole strength retained.

To fasten my share I formerly employed a screw-nut and bolt passing through it and through the mold-board; but the nut gradually became loosened, and the share was consequently displaced. I now form a mortise in the share sufficiently large to pass over a wrought-iron hooked knob, *f*, which knob is attached to the mold-board by casting or riveting. This mortise is shown at *g*, Fig. 3, which represents the share alone, and the hooked knob is shown also in Fig. 4, which shows the lower edge of the mold-board with the share and point removed.

When the share is in place it is firmly secured there by means of a wedge, *h*, driven under the hooked knob, and checked from shifting by a projection, *i*, cast on the share. It fits also into a recess cast in the mold-board to receive it, and one end of it passes into a rabbet, *d d*, on the shank of the point.

Having thus fully described the nature of my improvements on my plow, and shown how the same are carried into operation, what I claim therein as new is—

The manner in which I have given stability to the respective parts of my plow by securing the same together by the means herein set

forth—that is to say, by the combined action of the staple and wedge D and *c*, of the projections *e e* on the point, of the hooked knob *f* and its wedge *h*, arranged and connected with the other parts, as set forth, by which arrangement and connection of the respective parts I leave those parts which are to bear the main strain and shocks in a form which insures the necessary strength and prevents them from moving out of their places.

I do not pretend to claim the use of hooks, mortises, or wedges, as such, but limit my claim, as above set forth, to the particular manner in which I have arranged these in my improved plow.

BANCROFT WOODCOCK.

Witnesses.
THOS. P. JONES,
EDWIN L. BRUNDAGE.