

A. W. WASHBURN.
Plow.

No. 214,476.

Patented April 15, 1879

Fig. 1.

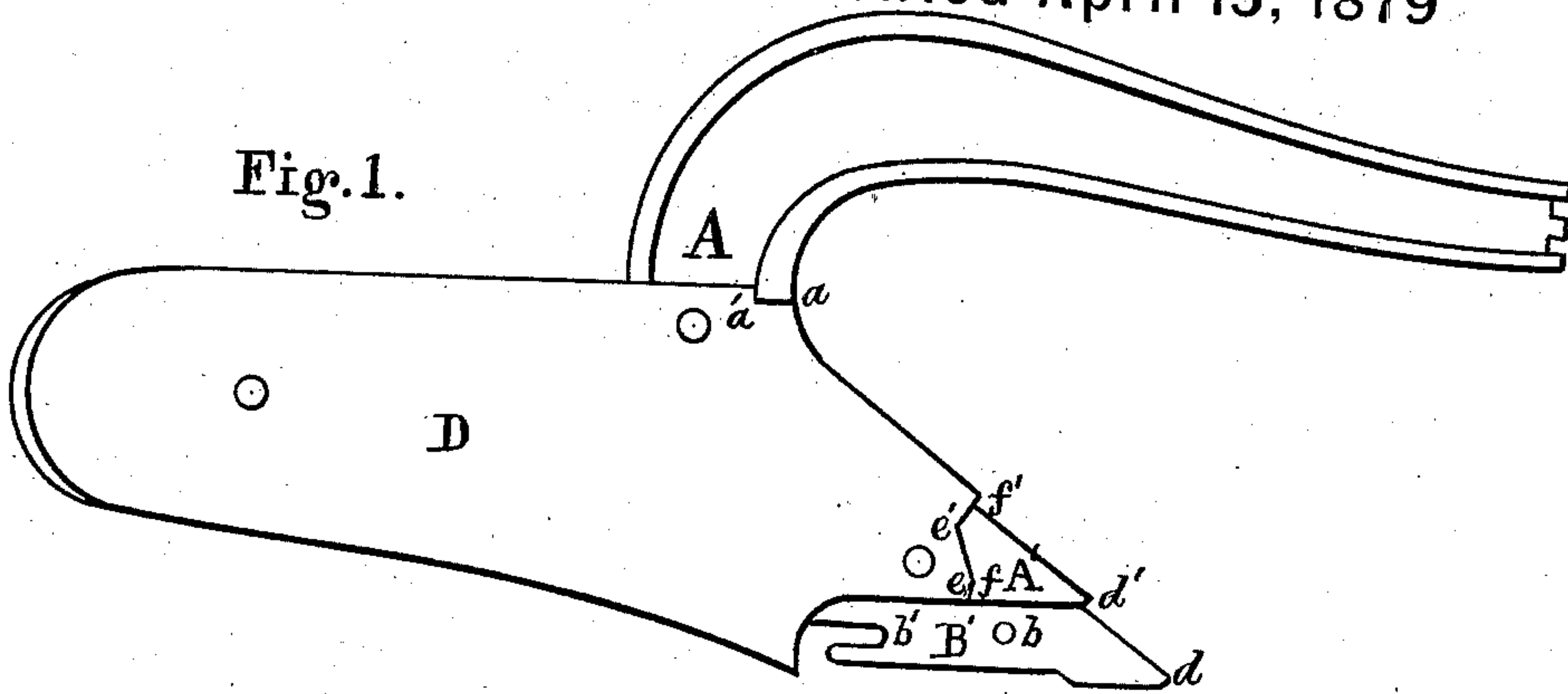


Fig. 2.

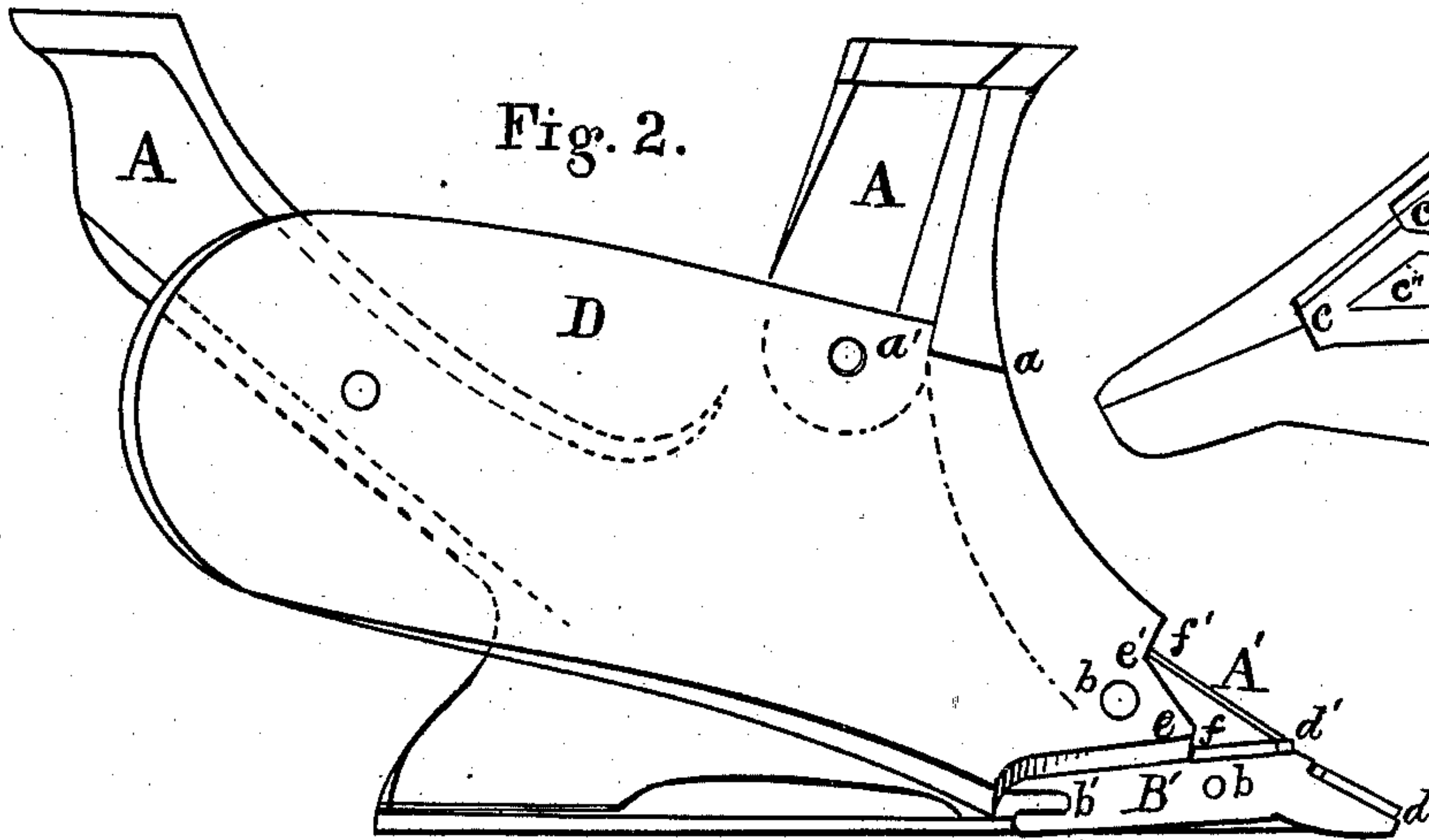


Fig. 3.

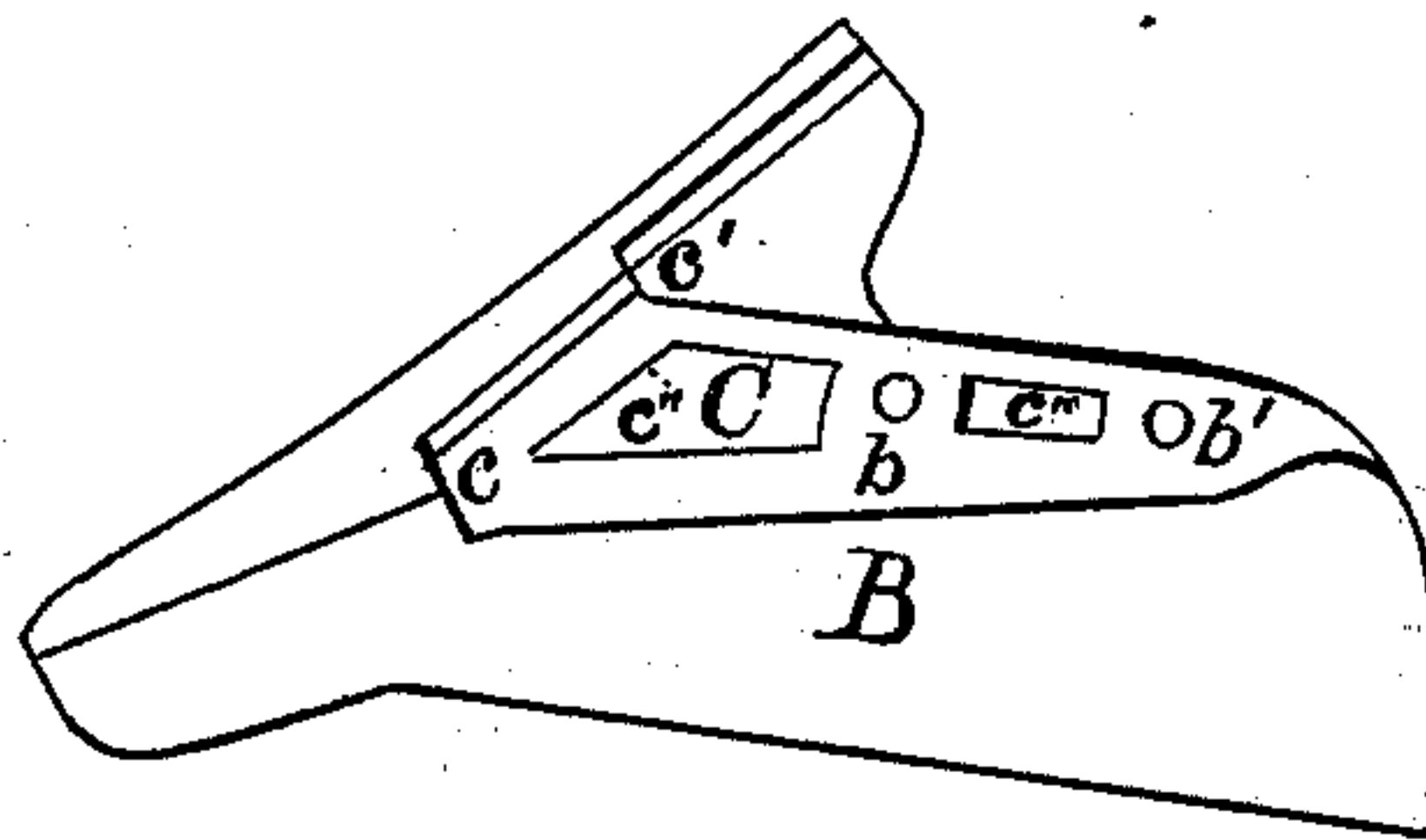


Fig. 4.

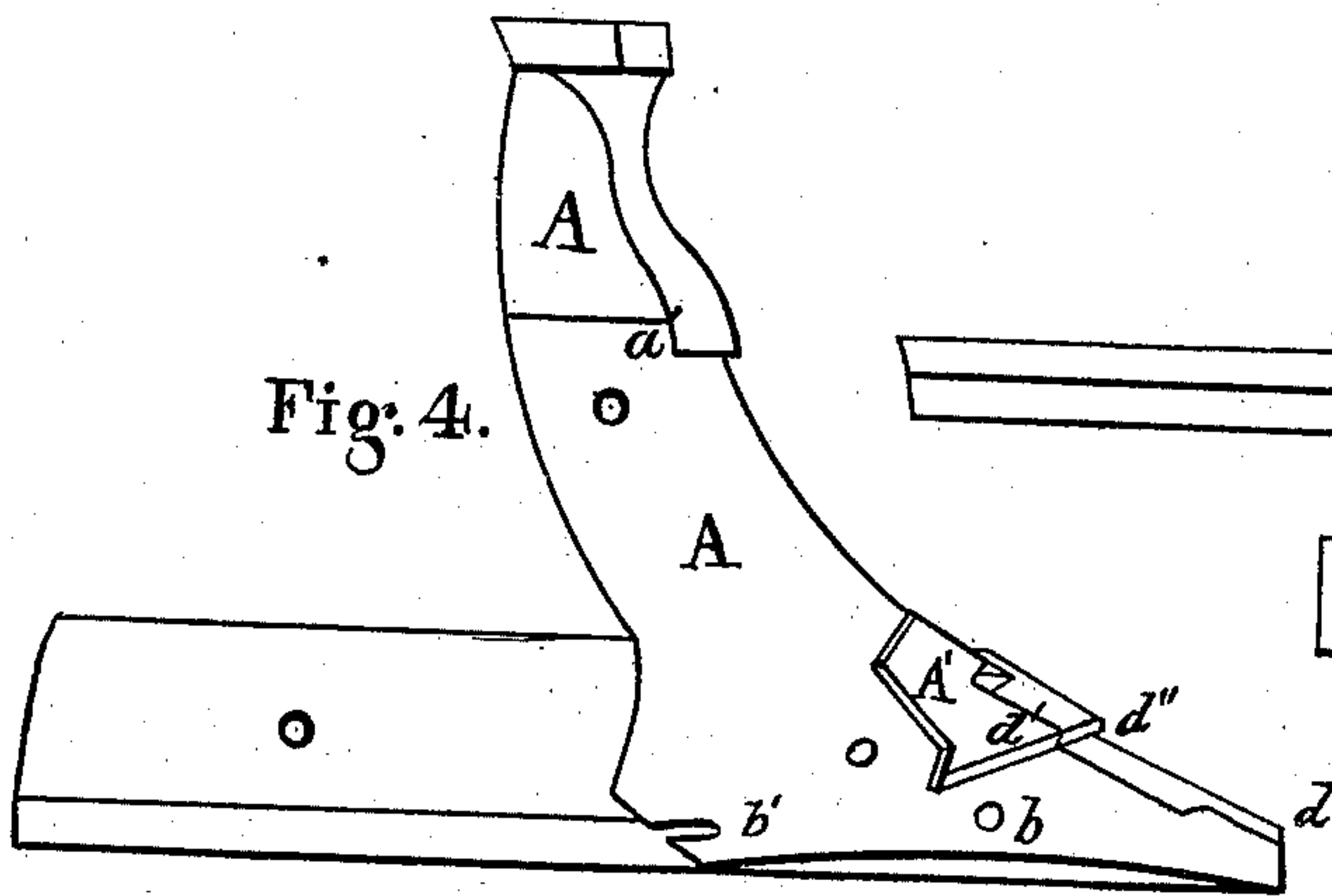
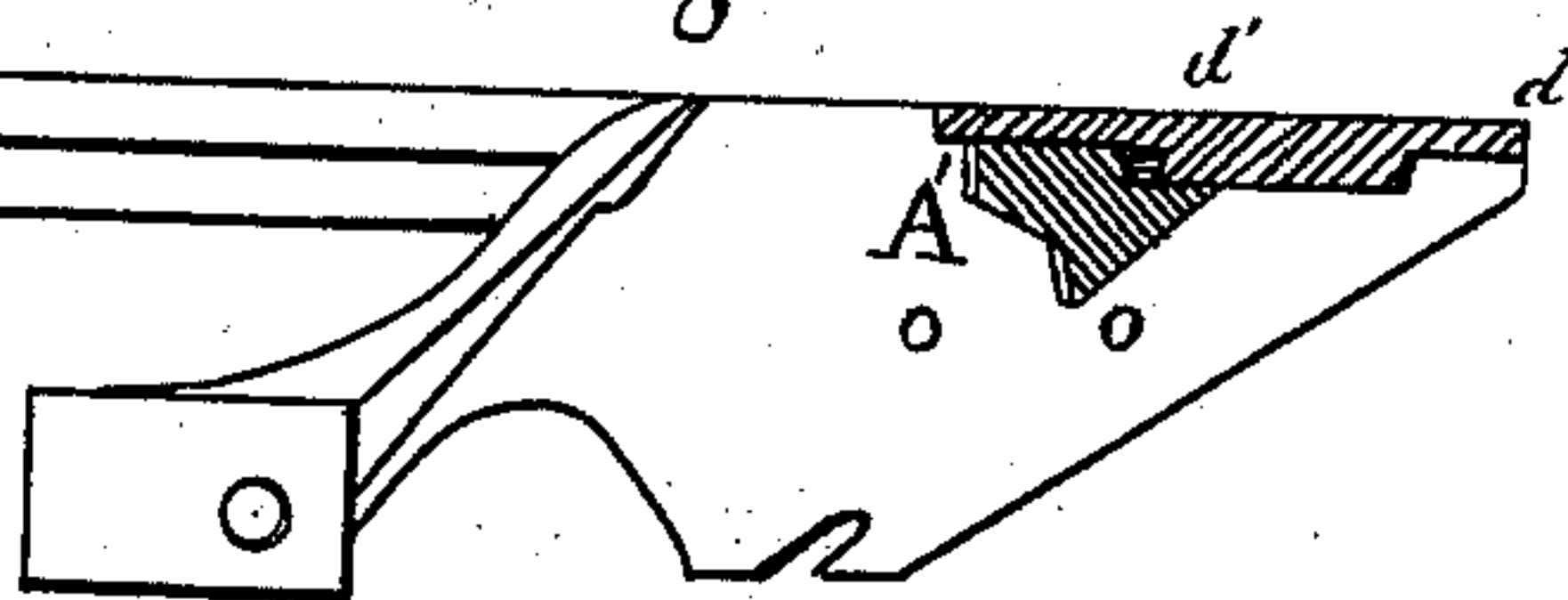


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

AMOS W. WASHBURN, OF GREENVILLE, PENNSYLVANIA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **214,476**, dated April 15, 1879; application filed February 24, 1879.

To all whom it may concern:

Be it known that I, AMOS W. WASHBURN, of Greenville, in the county of Mercer and State of Pennsylvania, have invented certain new and useful Improvements in Plows; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in the manner of fastening and sustaining the mold-board and share upon the standards of plows, and also in the peculiar shape of the point on the under side, which is so made as to correspond with the guide; also, in forming the mold-board and land-side to correspond with the same guide, all of which will be hereinafter more fully described, and set forth in the claims.

Figures 1 and 2 in the drawings represent side views of two plows, showing the mold-board on the standard and the guide on the foot, the point or share being removed; and in Fig. 3 the point is represented as being turned over to show the peculiar construction of the bearing-surfaces and the notches to correspond with the guide. Fig. 4 is a side view of a single standard, showing the guide as it is formed thereon. Fig. 5 is a view looking down upon Fig. 4.

A represents the standard, which may have two branches, as in Fig. 2, or only one, as in Figs. 1 and 4. B is the share or point, which is secured to the foot B' of the standard by the screw-bolts *b b'*, and it is braced in its proper position by the guide A', which is cast upon the standard A, and is formed, as shown in Figs. 1, 2, and 4, with notches and edges to fit into corresponding parts of the mold-board D and of the point or share B, both of which are to be guided and braced and firmly sustained by its peculiar shape.

By the guide A', I am enabled, with the employment of draw-boring, to bring the point and mold-board to a close and unalterable bearing, and thus prevent the parts from working loose. This guide A' is the peculiar fea-

ture of my invention by reason of its connection with the two essentials of a plow—viz., mold-board and share.

At *a* in the standard A is formed a notch or joggle in the flange, which is made to correspond with a notch, *a'*, in the top line of the mold-board D, so that it can be braced firmly against the flange of standard A in two directions when the strain of the mold-board is upward and the form of the guide A' at *f'* is such as to aid in sustaining the mold-board where the most resistance is required, and thus all cross-strain on the bolts is avoided, they being necessary only to keep the board flat to the standard.

In Fig. 3 is shown at C the plane surface of the under side of the share, which corresponds with the foot B', having recesses *c'' c''*, to prevent the share from rocking. At *c* and *c'* are notches to correspond with the joggles *d d'* on the foot and guide A'. These notches *c c'* and joggles *d d'* are so arranged as to brace the share against the usual strains on it in plowing, in addition to which the angular shape of the covering-plate of the share, where it joins the lower end of the mold-board at *e e'*, has a tendency more firmly to brace them together and prevent any twisting when the plow is thrown upon the point, as in turning it at the end of the row.

Whenever a wide land-side is used the guide A' has a notch at *d'*, Fig. 4, to admit a projecting piece, *d''*, of the land-side to fit in it; or vice versa, as may be desired or most convenient, so that the guide A' may serve for all of the movable parts of a plow which are to be adapted to the standard—viz., mold-board, share, and land-side shoe.

In the foot B', at the heel, the bolt-hole *b'* can be cut into a long slot open at the end, so that there may be a projecting lug from the under side of the share, and so formed as to slide into the slot and tighten itself therein as the other fastening, at *b*, is screwed up, drawing the joints closer up.

This construction will save half of the time usually employed where two bolts have to be unscrewed.

I am aware that it is not new to construct a plowshare with its under side or bearing made hollow, as in the case of N. P. Bowsher,

No. 205,236, or with locking lugs or projections; and I do not claim such broadly.

I claim—

1. A plow-standard having the guide-piece A', constructed with notches and inclined edges $f f'$ and d' , all substantially as and for the purpose described.

2. The combination of the mold-board D, having the notch a , and the standard having a notched flange, a' , and guide-piece A', substantially as and for the purpose described.

3. The plowshare B, having bearings $b b'$ c on the lower side, recesses c'' , and thin section c' , made to cover the guide on the standard, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

AMOS W. WASHBURN.

Witnesses:

E. P. GILLESPIE,
S. BOND.