(No Model.)

H. F. LYLE.

PLOW POINT AND COLTER.

No. 272,283. Patented Feb. 13, 1883.

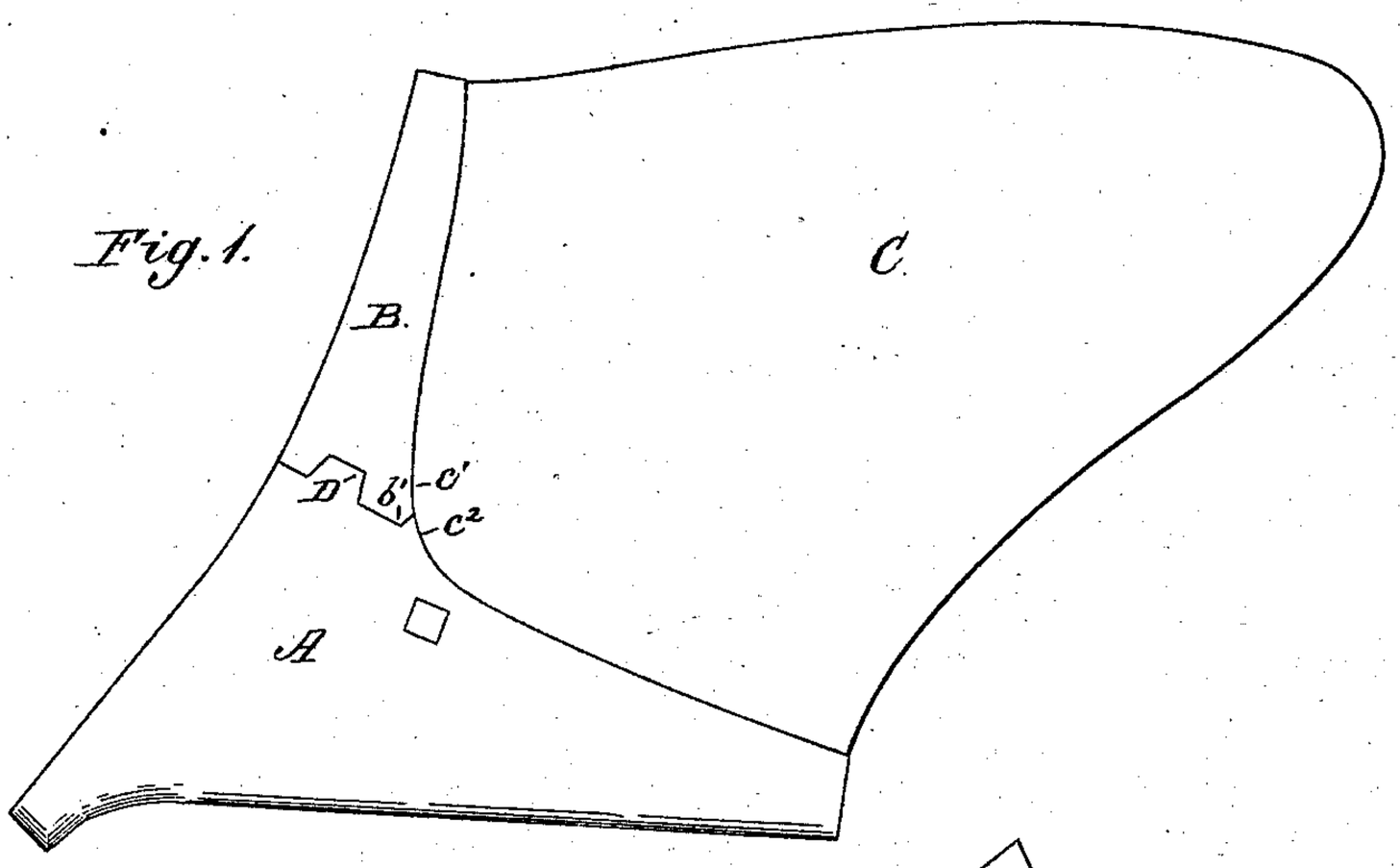

Fig. 1.

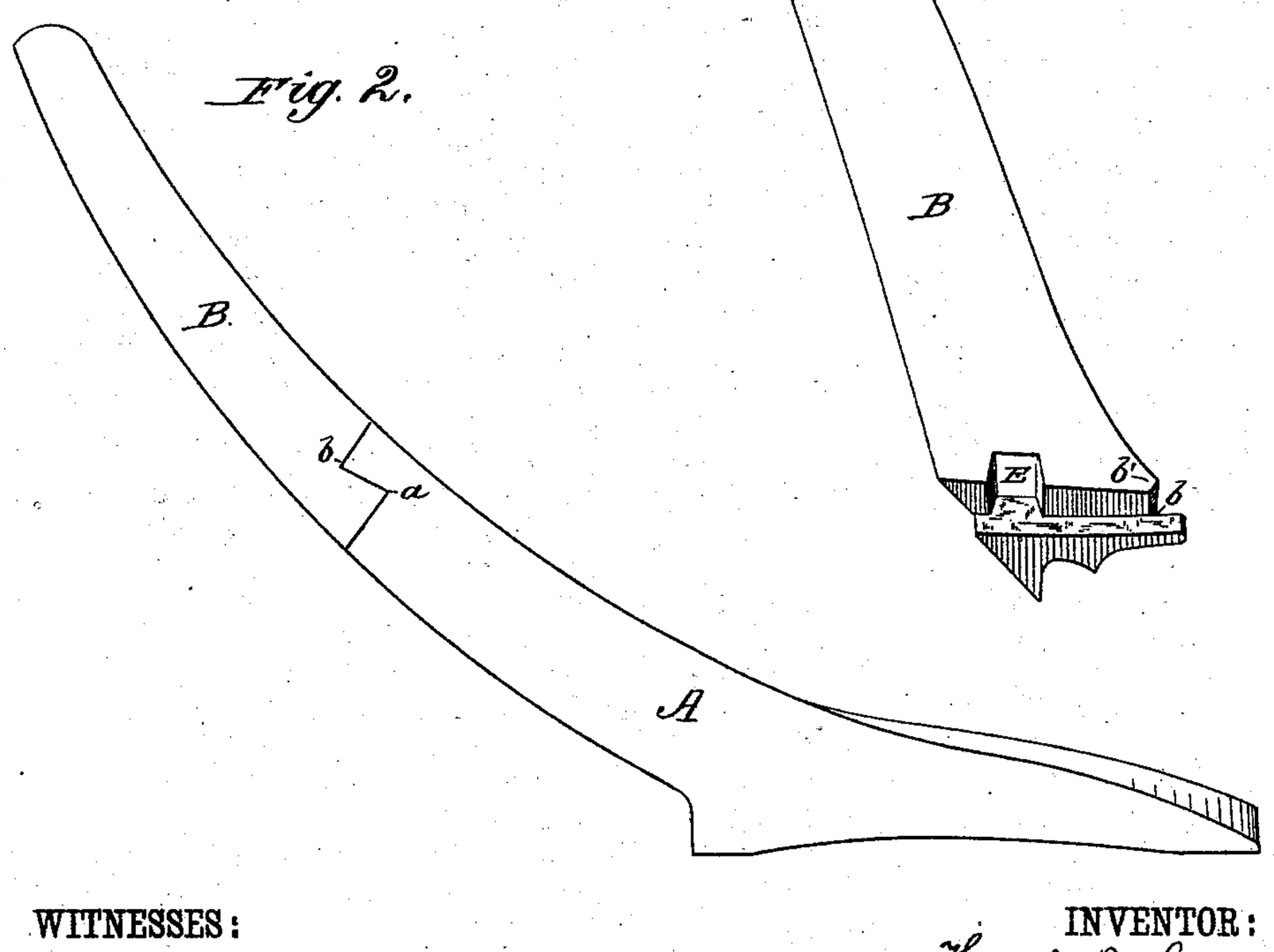

Fig. 2.

Fig. 3.

WITNESSES:

W. W. Hollingsworth

A. G. Lyne.

INVENTOR:

Hugh F. Lyle

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HUGH F. LYLE, OF STAUNTON, ASSIGNOR OF ONE-THIRD TO WILLIAM S. HUMPHRIES, OF VESUVIUS, VIRGINIA.

PLOW-POINT AND COLTER.

SPECIFICATION forming part of Letters Patent No. 272,283, dated February 13, 1883.

Application filed November 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, HUGH F. LYLE, of Staunton, in the county of Augusta and State of Virginia, have invented a new and useful Improvement in Plow-Points and Colters, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

The object of this invention is to provide a detachable colter for a plow, which may be secured in position without any other means than contact with the plow-point; and the invention consists of the novel construction hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of part of a plow, showing my invention as it appears from the mold-board side. Fig. 2 is an elevation of the colter and plow-point, showing the bevel lap-joint connection, the same being partly in section; and Fig. 3 is the colter detached.

Heretofore where points and colters have been made in separate pieces each has been provided with a bolt or other fastening to secure it in position. For instance, the colter has been constructed with a lug which is adapted to be fitted in a recess in the point, and with a flange for connecting it to the bolt of the mold-board, or with a projection to fit in a mortise in the plow-beam. The flange or the projection in such case is provided as a special means for securing the colter in position. Now, in my invention the colter is so constructed that when the plow-point is bolted in position it will overlap the lower end of the colter, and bind it firmly to the breast or standard of the plow in such manner that it cannot be removed without detaching the point. One bolt or fastening is thus made to secure both the colter and plow-point in place.

The plow-point, which is designated by A in the drawings, is recessed at *a* in its under side, and the colter B is likewise recessed at *b* in its upper surface to form a lap-joint. The recesses are formed in such manner that their overlapping surfaces shall be oblique with respect to the line of the colter, whereby a bevel lap-joint shall be provided to prevent any longitudinal movement of the colter. The breast or standard against which the under surface of the colter is fitted will prevent the colter from lateral displacement toward the landside, while the mold-board forms a close joint with the colter on the opposite side. The lower end of the colter, at *b'*, is extended laterally toward the mold-board C, and is provided with a curve, *c'*, in the same continuous line with the curve c^2 in the upper edge of the point A. With this construction the mold-board fits close into the curve *c'*, and, in connection with a lug, D, on the point A, which fits in a recess, E, in the upper surface of the colter, forms a kind of dovetail joint between the three said parts. This joint adds to the strength of the connection formed by the bevel lap-joint, while the projection or lug D on the point A, which is but a continuation, so to speak, of the lap-joint, serves to brace the colter against any accidental or other pressure toward the front.

The projection D is not a necessary feature of my invention, and may be dispensed with, if desired, and the colter may also be formed without the lateral extension *b'*. I prefer, however, to construct the parts as above described, since the connection is thereby rendered exceedingly strong without any appreciable increase of expense over the simple lap-joint.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the breast and mold-board of a plow, of the plow-point A, having the recess *a* in its under side, and the colter B, recessed at *b* in the upper surface and adapted to form a bevel or half-dovetail lap-joint with each other, whereby the colter cannot be removed when the point is bolted to the mold-board, substantially as specified.

2. The combination, with the breast and mold-board of a plow, of the plow-point A, having the lug D, and a recess, *a*, in its under side, and the colter B, having recesses *b* and E in its upper surface, and the lateral extension *b'*, whereby the colter shall form a dovetail joint with the mold-board and plow-point and a half-dovetail joint with the plow-point, substantially as and for the purpose specified.

HUGH F. LYLE.

Witnesses:
A. G. LYNE,
SOLON C. KEMON.