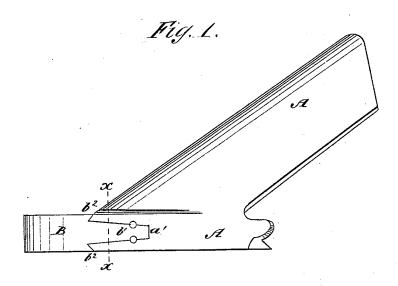
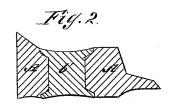
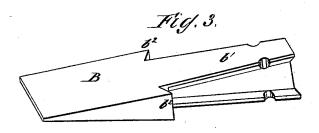
## M. M. BOWERS. Reversible Plow-Points.

No. 165,703.

Patented July 20, 1875.







WITNESSES:

A. F. Tevry

INVENTOR: Marcus M. Browns

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## UNITED STATES PATENT OFFICE.

MARCUS M. BOWERS, OF RICHMOND, VIRGINIA, ASSIGNOR TO HIMSELF AND JOHN P. SCHEMERHORN, OF SAME PLACE.

## IMPROVEMENT IN REVERSIBLE PLOW-POINTS.

Specification forming part of Letters Patent No. **165,703**, dated July 20, 1875; application filed December 19, 1874.

To all whom it may concern:

Be it known that I, MARCUS M. BOWERS, of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Reversible Plow-Point, of which the following is a specification:

Figure 1 is a top view of a plowshare to which my improved reversible point has been applied. Fig. 2 is a cross-section of the same taken through the line x x, Fig. 1. Fig. 3 is a perspective view of the reversible point detached.

Similar letters of reference indicate corre-

sponding parts.

My invention has for its object to furnish an improved detachable and reversible plowpoint, which shall be so constructed that it may be conveniently detached and reversed without changing its line and set, and which may be readily cast without changing the ordinary patterns, and shall be strong, durable, and not liable to become loose or drop out.

The invention consists in a detachable and reversible plow-point, made with lips upon the upper and lower edges of the sides of its shank, whether said shank be made tapering or with

parallel sides.

A is the plowshare, in the forward angle or corner of which is formed a vertical socket, a', which may be made tapering, as shown in Fig. 1, or with parallel sides, as may be desired. The upper and lower edges of the socket a' are beveled off, as shown in Fig. 2, and the outer sides of the angle or corner of the share A are beveled off, as shown in Fig. 2. B is the point, which is made with a shank,  $b^1$ , of such a shape and size as to fit into the socket a', and with lips at the edges of its sides to fit into the bevels of the socket a', and thus keep

the point B in line. The point B is also made with inclined shoulders  $b^2$  upon its sides, at the base of its shank, to fit upon the bevels of the end of the share A, as shown in Fig. 1.

The inclined shoulders  $b^2$  prevent the parts of the share A upon the sides of the socket a' from spreading, and making the point loose.

The points B are made exactly alike upon the upper and lower sides, so that it may have the same line and set whichever side be up.

The points B may be cast or forged, as may be desired.

The sockets a' may be cast in the shares A by using the ordinary share-patterns, by inserting a pattern of the point B in the point of the mold, and casting the share upon it, the said patterns being afterward knocked out.

A notch may be formed in the lips of the shank  $b^1$ , upon each side of the said shank, and a corresponding notch in the side of the socket a', so that the point may be locked in place by driving a pin or a piece of a nail into said notches. This locking will not be required except in special cases, as, for instance, when plowing stumpy ground.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent-

A detachable and reversible plow-point, B, made with lips upon the upper and lower edges of the sides of its shank  $b^1$ , whether said shank be made tapering or with parallel sides, substantially as herein shown and described.

MARCUS M. BOWERS.

Witnesses:

W. L. Cox, John P. Schemerhorn.