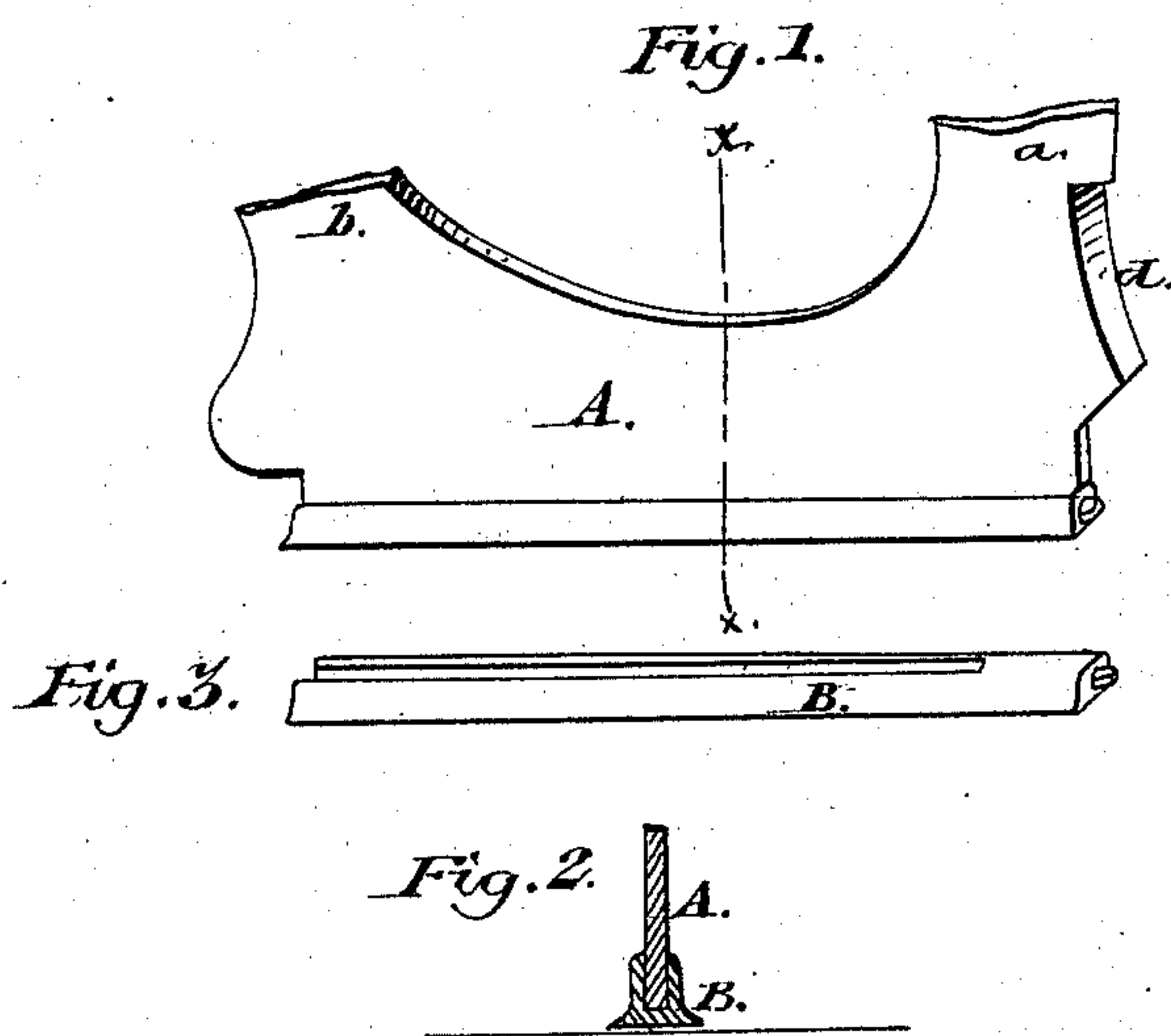


*W. L. Chase.*

*Side Hill Plow.*

*N<sup>o</sup> 7,518.*

*Patented Jul. 22, 1850.*



# UNITED STATES PATENT OFFICE.

WILLIAM L. CHASE, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN FASTENING THE SHOES OF HILLSIDE-PLOWS.

Specification forming part of Letters Patent No. 7,518, dated July 22, 1850.

*To all whom it may concern:*

Be it known that I, WILLIAM L. CHASE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Hillside-Plows, of which the following is a full, clear and exact description, reference being had to the accompanying drawings of the same, making part of this specification, in which

Figure 1 is a view in perspective of the land side of a plow having my improvement applied thereto. Fig. 2 is a section through the line *xx* of Fig. 1, and Fig. 3 is a view in perspective of the shoe or runner detached from its place on the lower edge of the landside.

My invention and improvement consists, first, of a shoe or runner so fitted to the lower edge of the landside that it can readily be removed therefrom to be replaced by another when worn, broken, or for any cause it is required to remove it, this removable shoe being fitted with either sockets or pivots at its ends, to which the mold-board is connected and on which it turns. By this arrangement, when a socket or pivot on the landside is broken or worn the damage can be repaired by merely removing the shoe and replacing it by a new one, constructed in the ordinary manner, with the shoe and handle and beam, and standards cast in one piece with them, without disturbing the other parts of the plow; but the whole landside would have to be thrown away and a new one put in its place in the case of hillside plows as ordinarily constructed, with the standards, shoe, and pivots all cast in one piece. Besides the expense incurred by throwing away so large a piece of casting, the handles and beam have to be disconnected from the standards, which consumes a good deal of time, and is productive of great inconvenience, as the plow has to be taken to pieces and put together by farmers, who are neither conversant with such mechanical operations nor possessed of the requisite tools to perform them with facility.

The second part of my invention consists in making the landside with two faces, but otherwise shaped and proportioned like the landside of the ordinary plow for working the level land, that turns the furrows in one direction only. By thus making the landside with two faces it will work equally well with either side to the land, and by making these faces as wide as the face of the landside of the common plow it will work quite as steadily as the latter in level land, with the advantage that it will

turn the furrow to either the right or left at the option of the plowman.

The ordinary skeleton landside of the hillside-plow is objectionable, because it is constantly becoming clogged with stones, roots, sods, weeds, &c., the lodgment of which it favors, while the construction of my landside is such that it is scarcely possible for any of these obstructions to effect a lodgment on it, and consequently it avoids the great increase of friction that takes place when the rough surface of stones, roots, sods, or earth has to be dragged over the surface of the land instead of the polished metallic surface, which my plow always presents.

In the accompanying drawings, Figure 1 represents the landside *A* with the beam-standard *a* and the standard *b*, to which the handles of the plow are attached, broken off. The lower edge of the landside has a shoe, *B*, fitted to it, and on its front end a cutter, *d*, is placed. To the recess beneath the cutter *d* the share and mold-board are fitted. The lower edge of the mold-board is dovetailed, and it fits in a groove of corresponding shape in the upper side of the shoe, as seen in Figs. 2 and 3, the shoe sliding on the lower edge of the landside from the front end of the latter. The groove in the shoe terminates at a short distance from its front end, the end of the groove shutting up against a shoulder formed on the lower edge of the landside to prevent the shoe from being forced backward by the resistance offered by the earth to the passage of the plow through it. On the front end of the shoe a pivot, *c*, is formed, and at its rear end a socket is formed of corresponding shape. A socket on the rear end of the landside of the share, on the under side of the mold-board, fits over the pivot *C*, and a pivot on the inner end of the main brace of the wing of the mold-board fits into the socket at the rear end of the shoe. By this means the mold-board and share are connected to the landside.

Having thus described my improved landside, what I claim therein as new, and desire to secure by Letters Patent, is—

The device for attaching and detaching the removable shoe, having the mold-board hinged to it and being fastened to the landside, substantially as herein set forth.

In testimony whereof I have hereunto subscribed my name.

Witnesses:

W. L. CHASE.

P. H. WATSON,

WM. D. WASHINGTON.