

(Model.)

U. WASSMER.

HOE.

No. 255,708.

Patented Mar. 28, 1882.

Fig. 1.

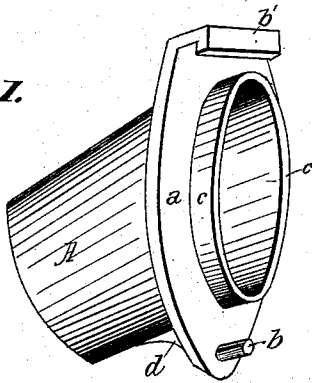


Fig. 2.

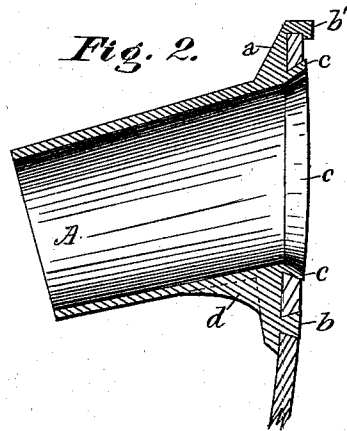


Fig. 3.

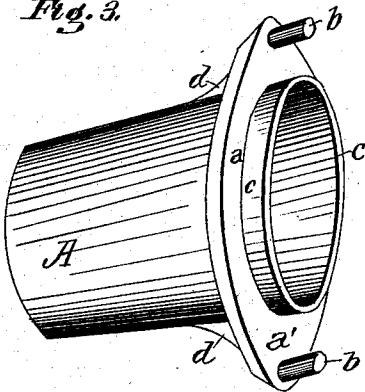
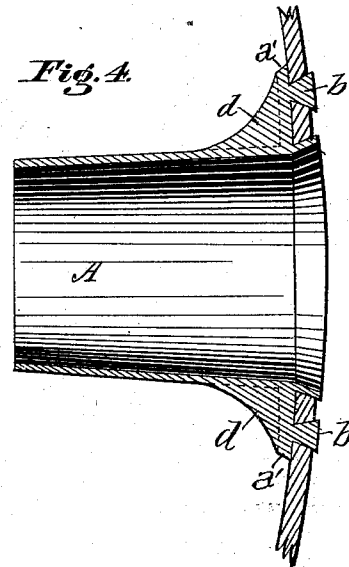


Fig. 4.



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ULRICH WASSMER, OF CINCINNATI, OHIO, ASSIGNOR TO MARTIN BARE,
OF SAME PLACE.

HOE.

SPECIFICATION forming part of Letters Patent No. 255,708, dated March 28, 1882.

Application filed October 27, 1881. (Model.)

To all whom it may concern:

Be it known that I, ULRICH WASSMER, of Cincinnati, Hamilton county, and State of Ohio, have invented certain new and useful Improvements in Hoes, of which the following is a specification.

The object of my invention is to lessen the cost of construction of hoes and at the same time make a stronger hoe than by the methods now employed.

My invention relates to all classes of garden and field hoes, either with single or double blades.

Referring to the drawings forming part of this specification, Figure 1 is a perspective view of the eye to which the blade of a single-bladed hoe is to be attached, and through which the handle is inserted. Fig. 2 is a central section through a single-bladed hoe constructed according to my invention, and Fig. 3 is a perspective view of the eye to be used with a double-bladed hoe. Fig. 4 is a central section through the eye of a double-bladed hoe with the blade attached.

A is the eye through which the handle is inserted. Near one end of this eye A is the flange or shoulder *a*, which is extended at opposite sides of the eye to form the ears *a'*. One of these ears, in the case of a single-bladed hoe, is provided with a rivet, *b*, the other ear being provided with the broad hook *b'*, which, when the blade is secured to the eye, hooks over the upper edge of the blade, as shown in Fig. 2, forming a shield to give additional strength to the hoe. As a further means of strengthening the eye A, a rib or brace, *d*, is formed in the angle between the body of the eye and the ear *a'*. When the eye is to be used with a single-bladed hoe both of the ears are provided with the rivets, as shown in Figs. 3 and 4.

If preferred, more than two rivets may be used. This will be more especially desirable in single-bladed hoes, placing a rivet at either side of the eye and one below, the shield *b'* being above.

At the end of the eye A is an annular flange, *c*, to be inserted through the blade of the hoe. The holes through the blade of the hoe, for reception of the annular flange *c* and the rivets *b*, are larger at the rear face of the blade than at the front face, tapering continuously from

the front to the rear face, so that when the rivets *b* and flange *c* have been inserted into the proper holes in the blade and hammered down the blade will be securely fastened to the eye, and will not become loosened by wear of the rear face of the blade. This eye, with its flanges and rivets, is cast of some malleable metal—as, for example, iron, crucible-steel, &c.—and the blade is stamped or otherwise cut from sheet metal, preferably steel. The holes for the reception of the rivets *b* and flange *c* being punched or drilled, the blade and the eye are put together, and the rivets and the flange *c* hammered down, as shown in the drawings, and the hoe is complete, ready for the handle. The opening through the eye is larger at the end connected to the blade than at the other end, and the handle, which is enlarged at the end to fit the eye, is to be introduced through the eye from this larger end, so that the hoe cannot come off from the handle.

The eye to be used with a single-bladed hoe is made like the eye for a double-bladed hoe, with the exception of the hook or shield *b'*, under which the upper edge of the blade of the hoe is placed, and which in a single-bladed hoe is replaced by a rivet.

By the employment of my invention I am enabled to greatly reduce the cost of manufacture and make a handsomer-finished hoe than is now made by the old method.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. In a hoe, the shank A, provided with surrounding flange *a*, annular flange *c*, ears *d*, and one or more rivets, *b*, all formed of one piece, in combination with the blade of a hoe, substantially as described.

2. The hollow shank or eye A, provided with annular flange *c* and surrounding flange *a*, having one or more rivets *b* and guard *b'*, all formed in one piece, in combination with the blade of a hoe, substantially as described.

3. In combination with the blade of a hoe, the eye A, having annular flange *c*, ears *a'*, rivets *b*, and braces *d*, formed in one piece, substantially as described.

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