## D. & E. MOORE. Hoe.

No. 164,023.

Patented June 1, 1875.



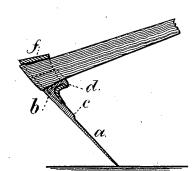


Fig. 3.

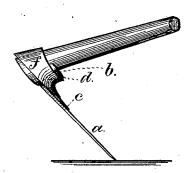
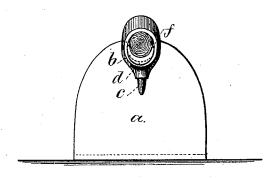


Fig. R.



Inventors

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## UNITED STATES PATENT OFFICE.

DANIEL MOORE AND EDWIN MOORE, OF BROOKLYN, E. D., ASSIGNORS TO THEMSELVES AND RICHARD D. ALLIGER, OF NEW YORK, N. Y.

## IMPROVEMENT IN HOES.

Specification forming part of Letters Patent No. 164,023, dated June 1, 1875; application filed May 3, 1875.

To all whom it may concern:

Be it known that we, DANIEL MOORE and EDWIN MOORE, of Brooklyn, E. D., in the county of Kings and State of New York, have invented an Improvement in Hoes, of which the following is a specification:

Hoes have been made with the blade detachable from the handle-eye; but such means for attachment are liable to injury under strain,

and are costly to manufacture.

Our invention consists in a hoe with a curved trough-shaped tongue upon the blade, in combination with a separate eye, through which the tongue passes, and is secured in place by the handle and by interlocking projections.

By this construction the back of the hoe is smooth and without projections, the eye is changeable from one blade to another, and the handle can be wedged up and tightened whenever necessary.

In the drawing, Figure 1 is a vertical section longitudinally of the handle. Fig. 2 is a front view of the eye and blade, and Fig. 3 is

an edge view of the blade.

The blade a is of any suitable size and shape, and it is made with a trough-shaped tongue, b, forged out of the metal of the blade, and said blade and tongue are strengthened by a rib, c, and upon the tongue is a projection, d. The eye f is of a shape at its inner and lower portion to fit upon the face of the

hoe, and against the under and outer surface of the tongue b, and the handle is passed through such eye after it has been applied to the tongue of the hoe, and said handle secures the parts firmly together. It is either made tapering, or else it is wedged so as to spread the wood and fill the eye.

If desired, the handle and eye can be applied with a different blade or to a new one, the tongues being of uniform size and shape.

The projection d may be a lip at the end of the tongue, as in Figs. 1 and 3, or it may be a projection farther back upon the tongue to enter a notch or cavity in the eye, or it may be a rib upon the eye entering a notch or cavity in the tongue, the object being to prevent the tongue slipping back out of the eye.

We claim as our invention-

The hoe-blade, made with a trough-shaped tongue, in combination with the eye receiving such tongue, and the projection d, to prevent the tongue and eye separating after the handle has been inserted to place, as set forth.

Signed by us this 29th day of April, A. D.

1875.

DANL. MOORE. EDWIN MOORE.

Witnesses:

GEO. T. PINCKNEY, HAROLD SERRELL.