

(No Model.)

J. ROBINSON.
GARDEN HOE.

No. 469,359.

Patented Feb. 23, 1892.

Fig. 1.

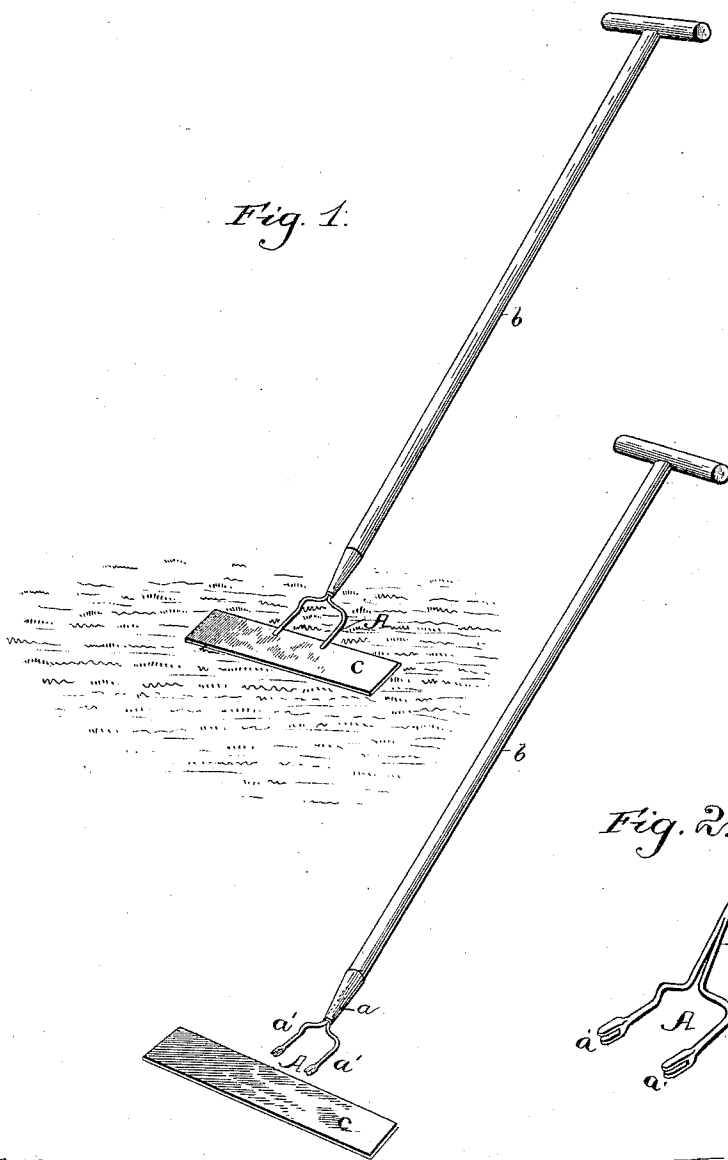


Fig. 2.

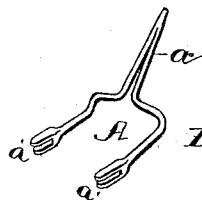
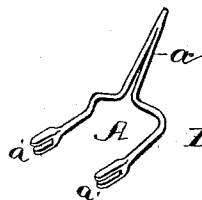


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES ROBINSON, OF IOLA, WISCONSIN.

GARDEN-HOE.

SPECIFICATION forming part of Letters Patent No. 469,359, dated February 23, 1892.

Application filed April 23, 1891. Serial No. 390,133. (No model.)

To all whom it may concern:

Be it known that I, JAMES ROBINSON, a citizen of the United States of America, residing at Iola, in the county of Waupaca and State of Wisconsin, have invented certain new and useful Improvements in Garden-Hoes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has relation to garden-hoes, more particularly that class pushed before the operator, having for its object to readily effect the renewal of the blade and to facilitate the operation of the implement, as well as to promote longevity of use of the same; and it consists in the employment of diverging or branching arms, preferably in a single piece and of malleable iron and having their outer ends split or slitted to receive and hold the blade without the aid of additional fastenings, by hammering or striking the arms where they receive said blade; the blade can be as readily removed by striking it upon the back edge with any suitable instrument, and in its place can be inserted another blade according to the size wanted, all as hereinafter more fully set forth, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of my improved garden-hoe. Fig. 2 is a view of the same, showing the blade detached and removed a short distance from the arms. Fig. 3 is an enlarged detail perspective view of my invention.

In carrying out my invention I employ branching or diverging arms A, made in a single piece and of malleable iron, the point of convergence of said arms terminating in a pointed shank *a*, adapted to be driven into and effect the connection thereof with the handle *b*.

The outer distant ends of the arms A are split or slitted, as at *a'*, whereby they are

adapted to receive the blade *c*, which is held or secured therein simply by hammering or striking the arms where they embrace the blade, thus effecting the holding of the blade without additional fastenings, and whereby the blade is adapted to be readily removed simply by striking against the back edge of the blade with any suitable instrument, as a stick or stone, permitting the ready removal of the blade or its exchange for a smaller or larger blade, as the circumstances may require, as well understood. Furthermore, owing to the absence of additional fastenings between the blade and the arms, the lodgment of dirt thereat is almost wholly prevented as the operator pushes the blade through the dirt. Besides, the arms standing a maximum distance apart and being reduced to a minimum at their points of attachment to the blade, the dirt is allowed to freely or unobstructedly pass from and over the blade and between said arms after having been acted or operated upon by the blade, thus facilitating the operation of the hoe and avoiding the trouble of cleaning it, as would otherwise be required.

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

The hoe having the malleable-iron arms of the handle provided with slots or slits at their outer ends to receive the blade at its back edge and held thereon without rivets or other additional fastenings, the slitted portions of the said ends being hammered or bent down upon said blade, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES ROBINSON.

Witnesses:

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B. L. BIERCE.