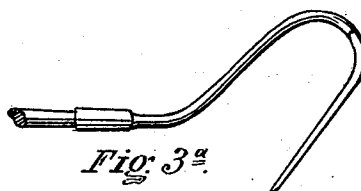
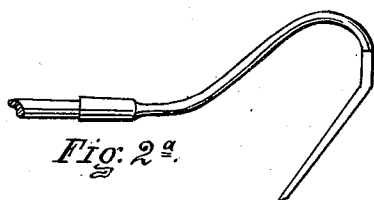
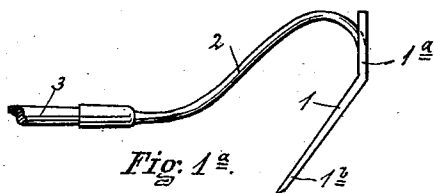
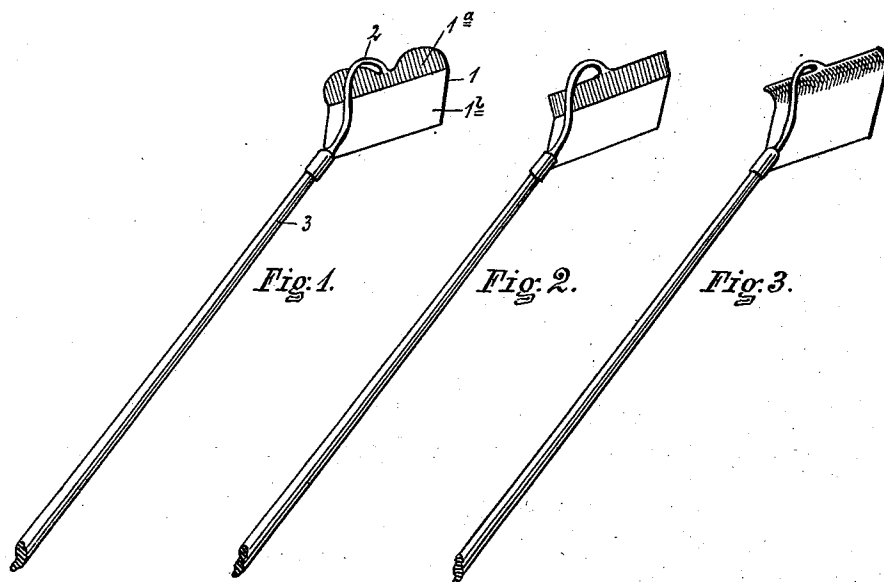


(No Model.)

M. A. SMITH.
HOE.

No. 488,582.

Patented Dec. 27, 1892.



WITNESSES.

Rich. A. George.

James Berry

INVENTOR.

Munz A Smith
By Risley & Robinson
Attys

UNITED STATES PATENT OFFICE.

MENZO A. SMITH, OF COOPERSTOWN, NEW YORK.

HOE.

SPECIFICATION forming part of Letters Patent No. 488,582, dated December 27, 1892.

Application filed May 2, 1892. Serial No. 431,439. (No model.)

To all whom it may concern:

Be it known that I, MENZO A. SMITH, of Cooperstown, in the county of Otsego and State of New York, have invented certain new and useful Improvements in Hoes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

My invention relates to improvements in hoes.

It is the object of my invention to provide by a simple and inexpensive improvement a hoe that will do more work with less power and admit of the use of a hoe that is much smaller in proportion to the work to be performed than those heretofore used.

In the drawings which accompany and form a part of this specification and in which similar figures of reference refer to the same parts in the several views, Figure 1, shows, in perspective, my improved hoe. Figs. 2 and 3 show, in perspective, modified forms of constructions embodying substantially the same principle. Fig. 1^a shows a side elevation of the hoe shown in Fig. 1. Figs. 2^a and 3^a show side views of the devices shown in Figs. 2 and 3, respectively.

Referring more specifically to the reference numerals marked on the drawings in a more particular description of the device, 1 indicates the hoe blade, which is hung by means of a goose-neck shank 2, on a handle 3. The blade 1 consists of parts 1^a and 1^b, the latter portion being straight or plain. The part 1^a is preferably made integral with or welded on to the goose-neck shank of the hoe and is set at about a right angle to the longitudinal axis of the handle, while the part 1^b, which has a plain straight cutting edge, is set at an acute angle to the longitudinal axis of the handle. The part 1^a is wholly or mostly above the line of the handle, the bend joining the two parts, and which may be curved or more or less sharp, being near

the said line. The hoe in the hands of the operator is held so as to bring the part 1^b of the blade at an acute angle to the earth or surface on which it is operated which brings the part 1^b into so nearly a vertical position that it acts as a back and prevents the earth falling over the rear of the blade.

In the operation of hoeing and especially hilling, the earth is cut and loosened by the part 1^b of the blade and carried forward being held thereon by the part 1^a. In other words the upper part 1^a of the blade serves as a stop to prevent the earth, which is being drawn forward in hilling, from escaping from the hoe, so while the hoe is held in such convenient operative position that the forward or lower part 1^b of the blade will cut the earth at an acute angle, the rear or upper part 1^a of the blade will have a good hold on the dirt being drawn toward the operator. The part 1^b of the blade, engaging the earth at a more acute angle than it otherwise could except for the back retaining it, in drawing the hoe forward, loosens it with the application of less force than would otherwise be required and the hoe will feed into the earth without the application of much force in a vertical line.

This hoe will pulverize the earth more thoroughly than the ordinary straight blade, as the loosened earth moving against the upper back portion of the blade is broken up thereby.

What I claim as new and desire to secure by Letters Patent is:—

A hoe consisting of a handle, a goose-neck shank, and a blade consisting of a part 1^a attached to said goose-neck shank and hung at substantially right angles to the longitudinal axis of the handle, and a cutting part 1^b set at an acute angle to the longitudinal axis of the said handle and having a plain straight cutting edge.

In witness whereof I have affixed my signature in presence of two witnesses.

MENZO A. SMITH.

Witnesses:

GEORGE C. CARTER,
JOSIAH PERRY.