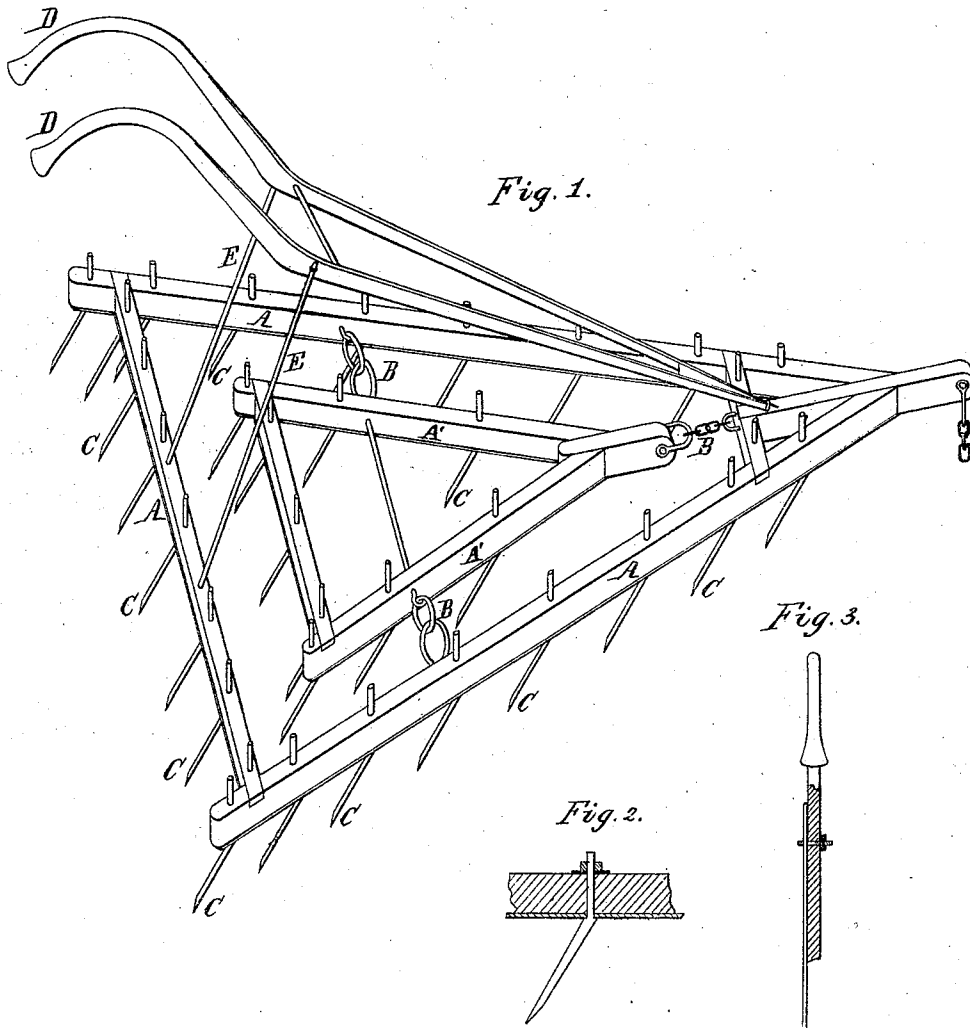


J. N. WAMSLEY.

Harrows.

No. 135,022.

Patented Jan. 21, 1873.



Witnesses.

Geo. D. Patten
W. T. Hutchinson

Inventor.

James N. Wamsley
by
S. M. Pool

UNITED STATES PATENT OFFICE.

JAMES N. WAMSLEY, OF GALENA, OHIO.

IMPROVEMENT IN HARROWS.

Specification forming part of Letters Patent No. 135,022, dated January 21, 1873.

To all whom it may concern:

Be it known that I, JAMES N. WAMSLEY, of Galena, in the county of Scioto and State of Ohio, have invented certain Improvements in Harrows, of which the following is a specification:

My invention relates to the combination of a small harrow within a large one in such a manner that it will vibrate without interfering with the large harrow; and consists of the fastening of two harrows together with open rings at the sides and at the front. The inner one can be taken out and used as a corn-harrow, if desired.

In the drawing, Figure 1 is a plan view of my invention. Fig. 2 is a sectional view, showing the harrow-tooth and its attachment to the frame. Fig. 3 is a sectional view, showing the adjustable attachment of the handles to their supporting-rods.

A A is the frame of the large harrow, and A' A' the frame of the smaller harrow, both

having strip or bar iron on the under side, upon which the frames rest upon the shoulders of the teeth. B B B show the open rings which fasten the small harrow to the large one, allowing abundant vibratory motion. C C C are the teeth, which are sharp, and incline backward from the iron plate or bar to which they are shouldered and upon which the frame rests. D D are the handles, such as are in common use. E E are the supporting-rods upon which the handles are adjusted.

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

The harrow A A', when constructed as described, with a central section suspended by links B B B, both sections having teeth, as shown.

JAMES N. WAMSLEY.

Witnesses:

CHAMBERS J. PENN,
WILLIAM GREEN.