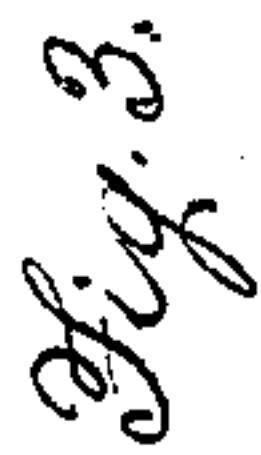
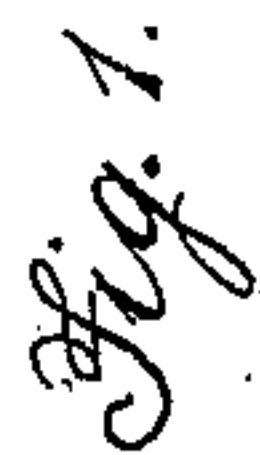
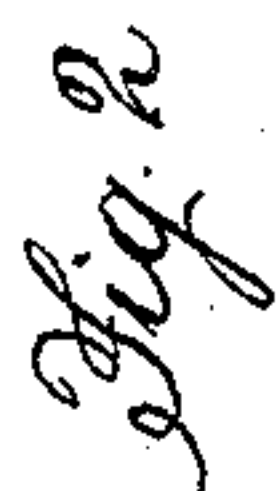
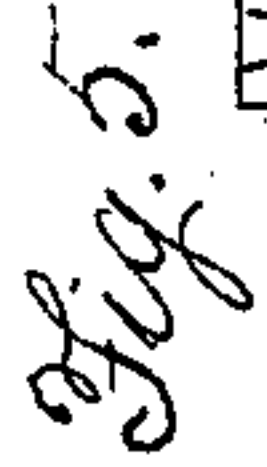


Plow.

Patented May 17, 1859.



Inventor:  
Asa Preston

# UNITED STATES PATENT OFFICE.

ASA PRESTON, OF UNIONVILLE, OHIO.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **24,053**, dated May 17, 1859.

*To all whom it may concern:*

Be it known that I, ASA PRESTON, of Unionville, in the county of Lake and State of Ohio, have invented new and useful Improvements in Combined Plow-Cultivator; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a side view with the wings removed. Fig. 3 is a side view showing the left-hand mold-board removed, and Fig. 4 is a side view showing both mold-boards removed.

Like letters refer to like parts in the several figures.

The nature of my invention consists in a peculiar construction of plow which can be readily changed from one form to another by simply adding or removing some of its parts, making it successively a subsoil-plow, a right or left hand mold-plow, a shovel-plow, and cultivator.

In the several figures, A represents the beam of the implement, and B represents the standard, into which the back end of the beam is framed.

C represents the handles. These are attached at their forward end to the beam A at D. From this point they extend upward and backward, and are secured to a pin, E, that passes through the upper end of the standard B, which extends above the beam for this purpose.

The colter-bars F F' are two in number. These pass through the beam A at a point a little forward of the handles D, and are secured by a nut or nuts at the top, as seen at G. After passing through the beam they curve downward and forward until they reach a point nearly upon a level with the lower end of the standard B. The colter-bars F F' are bolted to the mold-boards H and I and to the blades J K.

In Figs. 2, 3, and 4 are seen the horizontal bars L M. These are both seen in the section Fig. 5, being secured by a bolt to the lower end of the standard B.

Braces O P extend from the colter-bars F F' to the bars L M, to which they are secured by bolts, the brace O connecting F with L and the brace P connecting F' with M.

The wings J and K are supported at about the middle by short braces, placed a little forward of the brace O P and extending horizontally at nearly right angles to the bars L

M. These braces are not shown in the drawings; but the bolts that secure them to the wings J and K are seen at S S and R R in Fig. 1. The wings J and K are secured by bolts to the bars L M at their forward end, as seen at R R and S S in Fig. 1. The mold-boards H I are in like manner secured to the colter-bars by bolts, (seen at T T and U U in the several figures,) and also by straps connecting the mold-boards with the wings, the bolts which hold them being seen at V V, &c., in Figs. 1 and 2.

The wings W are attached to their respective mold-boards by a hinge-joint, as seen at X in Figs. 1, 2, and 3. These are supported latterly by the braces Y. (Seen in Figs 1 and 5.) These braces are secured to the standard B by a bolt, and for the purpose of spreading the wings to a greater distance or contracting them in their width, two or three holes are provided at the inner end of the braces, through either of which the bolt is made to pass, thus bringing the wings nearer together or crowding them farther apart.

The manner in which this implement operates is as follows: When the whole implement is used as arranged in Fig. 1 it is a combined plow-cultivator. By a detachment of the wings it forms a double shovel-plow. By detaching the whole of the right-hand section I have a simple one-horse plow, and vice versa. By detaching both the mold-boards I have a double subsoil-plow, or by removing either of the blades I have a right or left hand narrow subsoil-plow. All these changes can be easily made by removing or introducing the screw-bolts which hold the implement together.

I do not broadly claim hinged wings or detachable mold-boards, but confine myself to the peculiar arrangement and combinations herein set forth, for special purposes, as described.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The construction of a combined plow-cultivator having the several parts so arranged that they can be easily attached or detached, as herein described, when said plow has the hinged wings W, mold-board H, bars L M, and blades J K arranged and operated substantially as set forth.

ASA PRESTON.

Witnesses:

J. BRAINERD,  
W. H. BURRIDGE.