

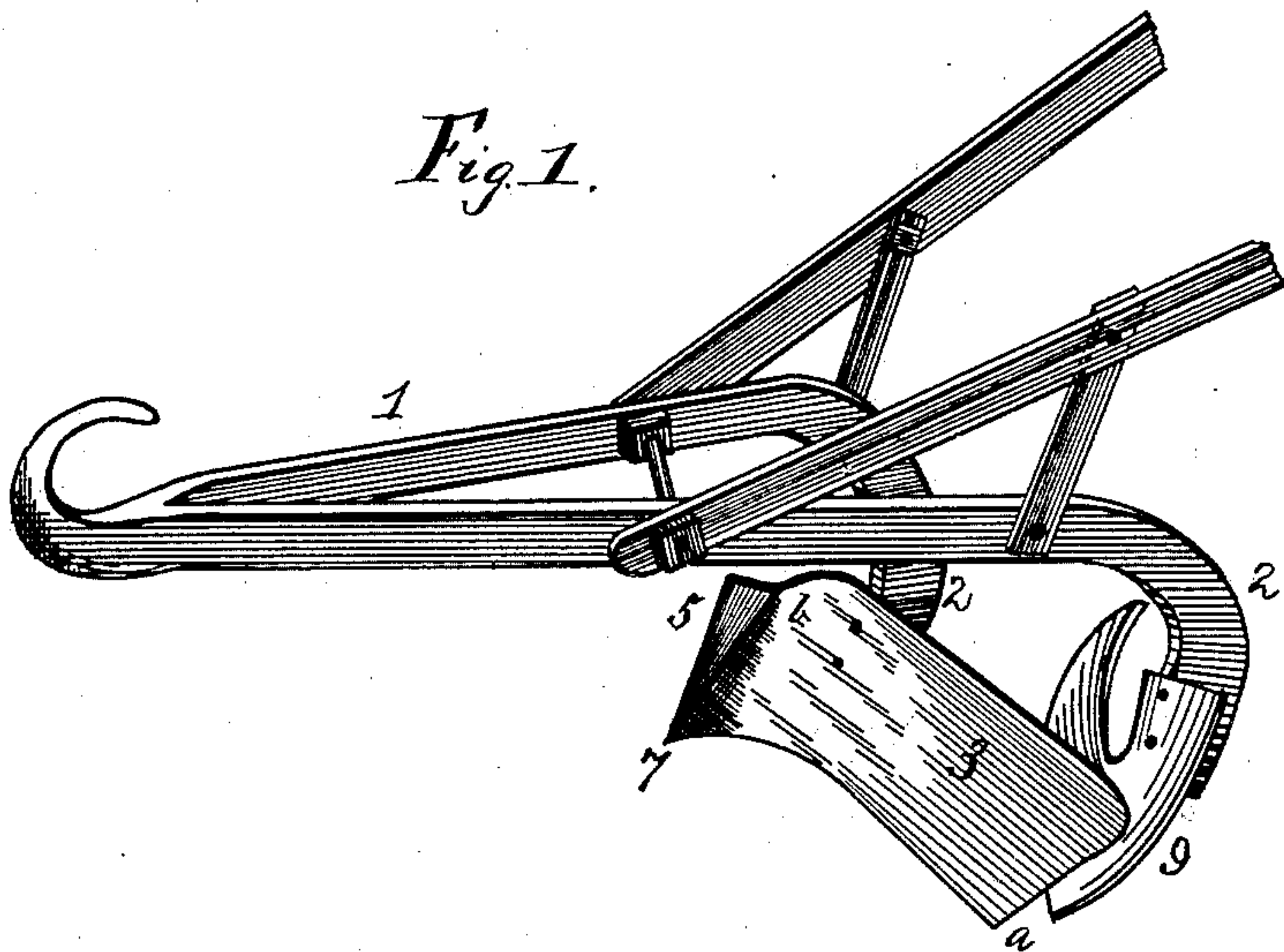
(No Model.)

W. Y. OLIVER.  
COMBINATION PLOW.

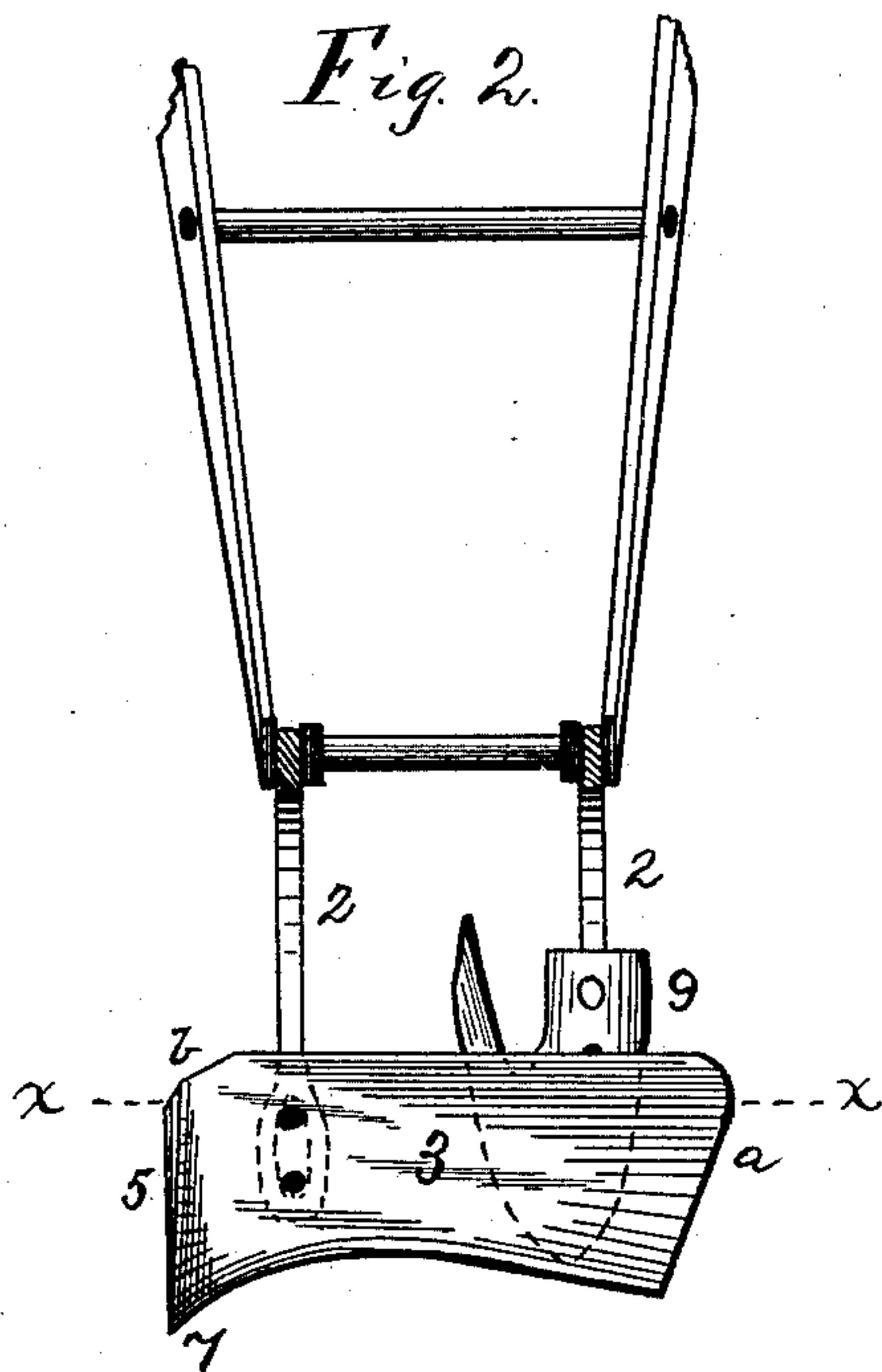
No. 338,289.

Patented Mar. 23, 1886.

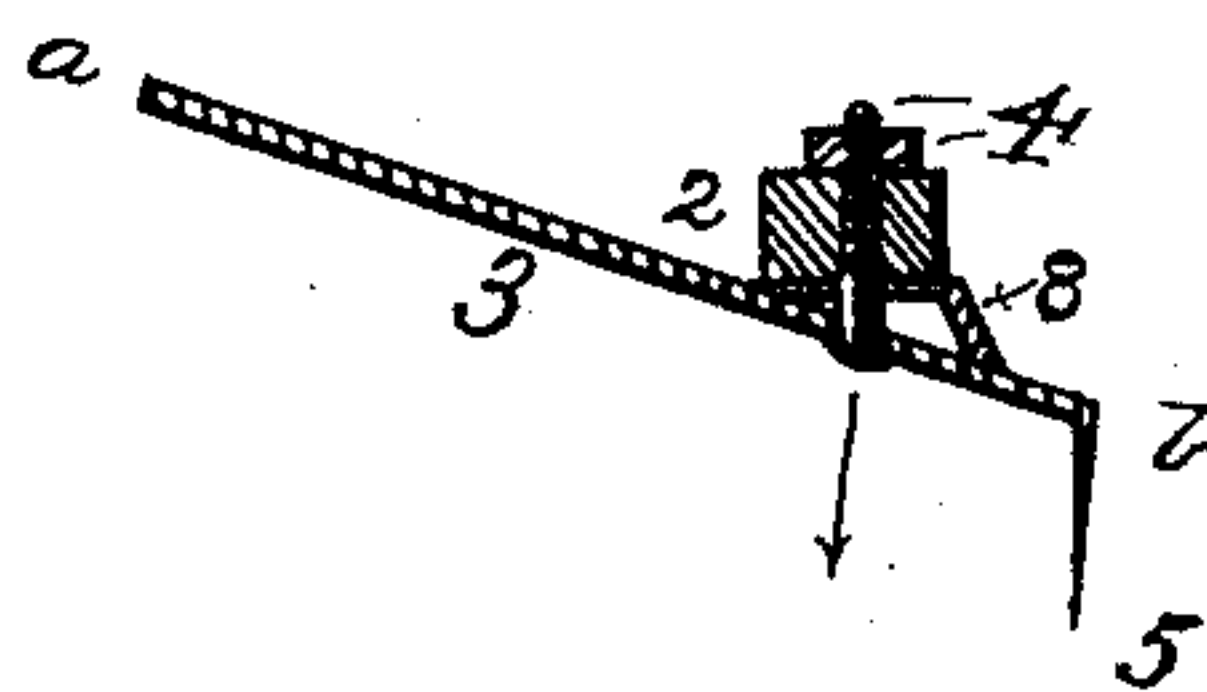
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses.  
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L. Bingham

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# UNITED STATES PATENT OFFICE.

WILLIAM YELL OLIVER, OF FRANKLIN COUNTY, ARKANSAS.

## COMBINATION-PLOW.

SPECIFICATION forming part of Letters Patent No. 338,289, dated March 23, 1886.

Application filed July 24, 1885. Serial No. 172,574. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM YELL OLIVER, a citizen of the United States, residing in the county of Franklin and State of Arkansas, have invented certain new and useful Improvements in a certain Combination-Plow, being a left-hand scraper and dirter; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to cultivators; and it consists in the scraper of new and improved shape, and of the combination of the scraper, the angle-bar support, the dirter, and double-shovel-plow stock, and also of the position of each piece in relation to the other piece.

In the accompanying drawings, Figure 1 is a perspective view of the cultivator. Fig. 2 is a front view of the scraper, dirter, and feet. Fig. 3 is a sectional view of the scraper, angle-bar, and foot, cut through Fig. 2 at the line *x x*.

My invention is described as follows:

1 represents an ordinary double-shovel-plow stock, with the heels 2 slotted long enough to carry two bolts instead of one, so that the scraper and plows attached thereto may be held more firmly.

3 represents the scraper, which is attached to the front foot by means of bolts and nuts 4. The scraper is secured to the foot in such manner that its left-hand end inclines backward at an angle of about twenty degrees and throws the dirt to the left. It has its right-hand end, which runs next to the cotton, turned up sharply to the front to form a blade, 5. The edge of this blade points to the front on the same line with the arrow, and guides the scraper straight to the front. It also enables me to run very close to the cotton without tearing it up. This blade also prevents the clods and grass from falling over on the young cotton, but turns them off to the left.

Said right-hand end also extends downward a little, terminating in a point, 7, and the blade 5 also extends downward to this. This also aids in directing the course of the scraper. This blade 5 is so turned up that it forms a perpendicular line, as will be seen by reference to Fig. 2. The scraper is given its angle by means of a light angle-bar, 8, which is nearly as long as the scraper is wide, its edges resting on the rear face of the same and its flat side against the front face of the foot. The said angle-bar 8 is nearly as long as the said scraper is deep, and is so constructed that when secured to the face of the foot its short arm 10 is of such length in relation to the blade 5, with its angle in relation to the scraper, that when the said scraper is placed against the two edges of said angle-bar it will bring the edge of the blade 5 directly to the front and on a line parallel with the row. Thus it will be seen that the more obtuse the angle of the scraper and blade the greater must be the length of the short arm 10. So, in order to have the said blade point directly to the front, as above described, it is necessary that the said two pieces be made for and adapted to each other. To the rear foot is attached a one-winged sweep or dirter, 9. It has in its body four holes, that it may be made to run deep or shallow, as desired. The foot to which it is attached has a long slot instead of one hole, for the purpose above mentioned. The scraper scrapes one side of the row perfectly clean, throwing the clods and grass to the left and beyond the range of the dirter. The dirter is on the inside of the outside line of the path of the scraper, and comes after the scraper and throws the clean dirt to the crop, thus giving me a perfectly clean row.

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

1. A scraper, 3, of the form shown and described, having the outer half, *a*, nearly straight horizontally, its inner side, *b*, curved forward and to a greater degree at the bottom, said end and cutting-edge being curved sharply downward to the point 7, and having the cutting-flange 5 bent forward for a colter, the



face of the scraper being twisted, substantially as set forth.

2. The scraper 3, in combination with the seat or block 8, the sweep or hilling plow 9, and the V-shaped frame 1, said frame having a short drag-bar to carry the scraper in front of the hilling-plow, substantially as shown and described.

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

WILLIAM YELL <sup>his</sup> X OLIVER.  
mark.

Witnesses:

J. B. MARRS,  
THOMAS CARTY.