

J. H. COLE.

COMBINED CULTIVATOR AND SULKY-FLOW.

No. 183,251.

Patented Oct. 17, 1876.

Fig. 1.

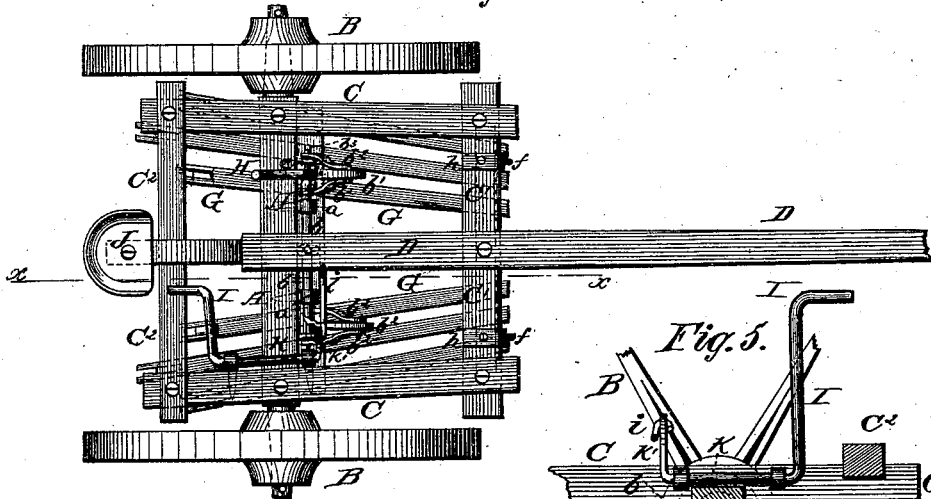


Fig. 2.

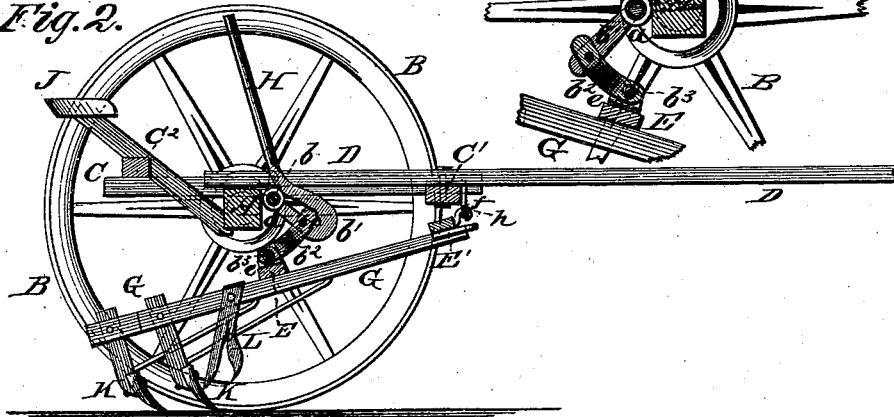


Fig. 5.

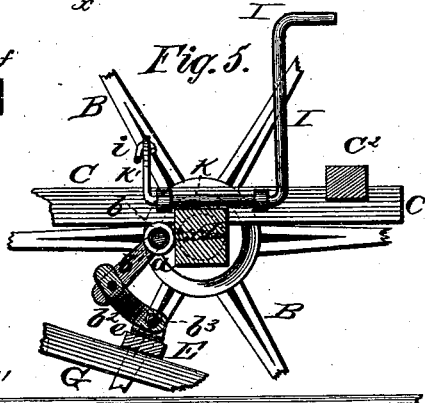


Fig. 3.

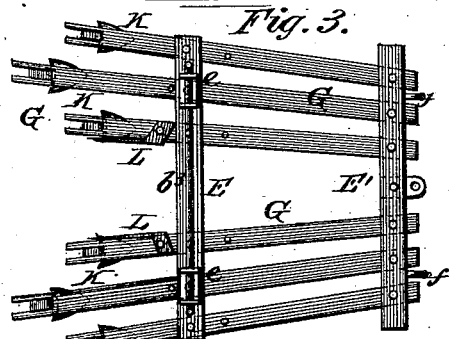
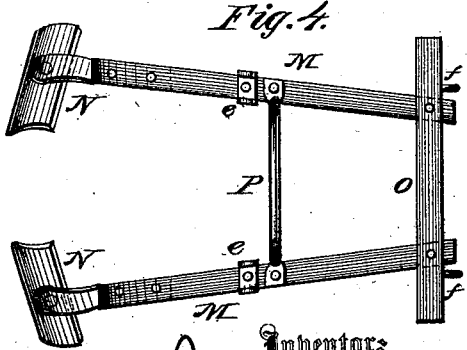


Fig. 4.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN COMBINED CULTIVATOR AND SULKY-PLOW.

Specification forming part of Letters Patent No. **183,251**, dated October 17, 1876; application filed September 5, 1876.

*To all whom it may concern:*

Be it known that I, JACOB H. COLE, of Danville, in the county of Montour and State of Pennsylvania, have invented certain new and useful Improvements in Combined Cultivator and Sulky - Plow; and I do hereby declare that the following is a full, clear, and exact description thereof, 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 letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a combined cultivator and sulky-plow, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a plan view. Fig. 2 is a central vertical section on line *x x*, Fig. 1. Figs. 3, 4, and 5 represent various details of my invention.

A represents the axle with the wheels B B on its ends. On the axle A are secured two parallel side beams, C C, which are connected at their front ends by a cross-bar, C<sup>1</sup>, underneath them, and at their rear ends by a top cross-bar, C<sup>2</sup>. On the top of the center of the front cross-bar C<sup>1</sup> is pivoted the tongue D, the rear end of which rests upon the axle A. In boxes *a a*, on the front of the axle A, is placed a shaft, *b*, which is held to the under side of the tongue D by means of a clip, eyebolt, or other similar device, *d*. The shaft *b* is, at each end, provided with an arm, *b*<sup>1</sup>, and to each of these arms are pivoted two links, *b*<sup>2</sup> *b*<sup>2</sup>. The four links *b*<sup>2</sup> are, by means of a rod, *b*<sup>3</sup>, pivoted to ears *e e* on a cross-bar, E, which connects two sets of cultivator - beams, G, three in each set. The front ends of these beams are connected by a cross-bar, E', which is provided with hooks *f f*, and these hooks are attached in perforated ears *h h* on the front cross - bar *c'* of the frame. The same pivot that connects one of the arms *b*<sup>1</sup> to its links *b*<sup>2</sup> also pivots a bent lever, H, by the use of which the shaft *b* may be rocked in its bearings, so as to raise or lower the cultivators, as may be required. The rear end of the tongue D is, by a rod, *i*, connected with an arm, *k'*, projecting from a shaft, *k*, which shaft is provided with a lever, I, as shown.

By means of this lever the driver can move the cultivators from side to side, as required, to avoid obstructions, the shaft *b* for that purpose sliding in its boxes *a a*. The two levers H and I are located, one on each side, and in close proximity to the driver's seat J, which is supported upon the rear cross-bar C<sup>2</sup> of the frame. K K represent the cultivator-shovels, secured to standards attached to the beams in any of the known and usual ways. On the inner side of the inner shovel in each set is a fender, L, consisting of a blade with two prongs, as shown, to roll away clods and stones.

The machine can easily be converted into a sulky - plow, for which purpose I have two plow-beams, M M, with plows N N, the front ends of said beams being connected by a cross-bar, O, having also hooks *f f*. These beams are further connected by a brace, P, and are provided with ears *e e*, as shown.

To change the machine from a cultivator to a plow, the machine is turned on the left side, the right wheel taken off, when the rod *b*<sup>3</sup> can be taken out. The gang is then moved forward, and they will become unhooked. The plow attachment is then hooked in the place thereof, and the rod *b*<sup>3</sup> put in again, and the machine will be complete.

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

1. The combination of the pivoted tongue D, the sliding and rotating shaft *b*, connected to the tongue and to the beams, the lever I, shaft *k*, with arm *k'*, and link *i*, substantially as and for the purposes herein set forth.

2. In a cultivator or sulky - plow, a single shaft, *b*, sliding and rocking in boxes *a a*, and connected to the plow-beams, in combination with two separate and independent levers, whereby the plows may be raised and lowered and moved laterally, substantially as herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JACOB HENRY COLE.

Witnesses:

JOHN SPERRING,  
JOHN W. MILES.