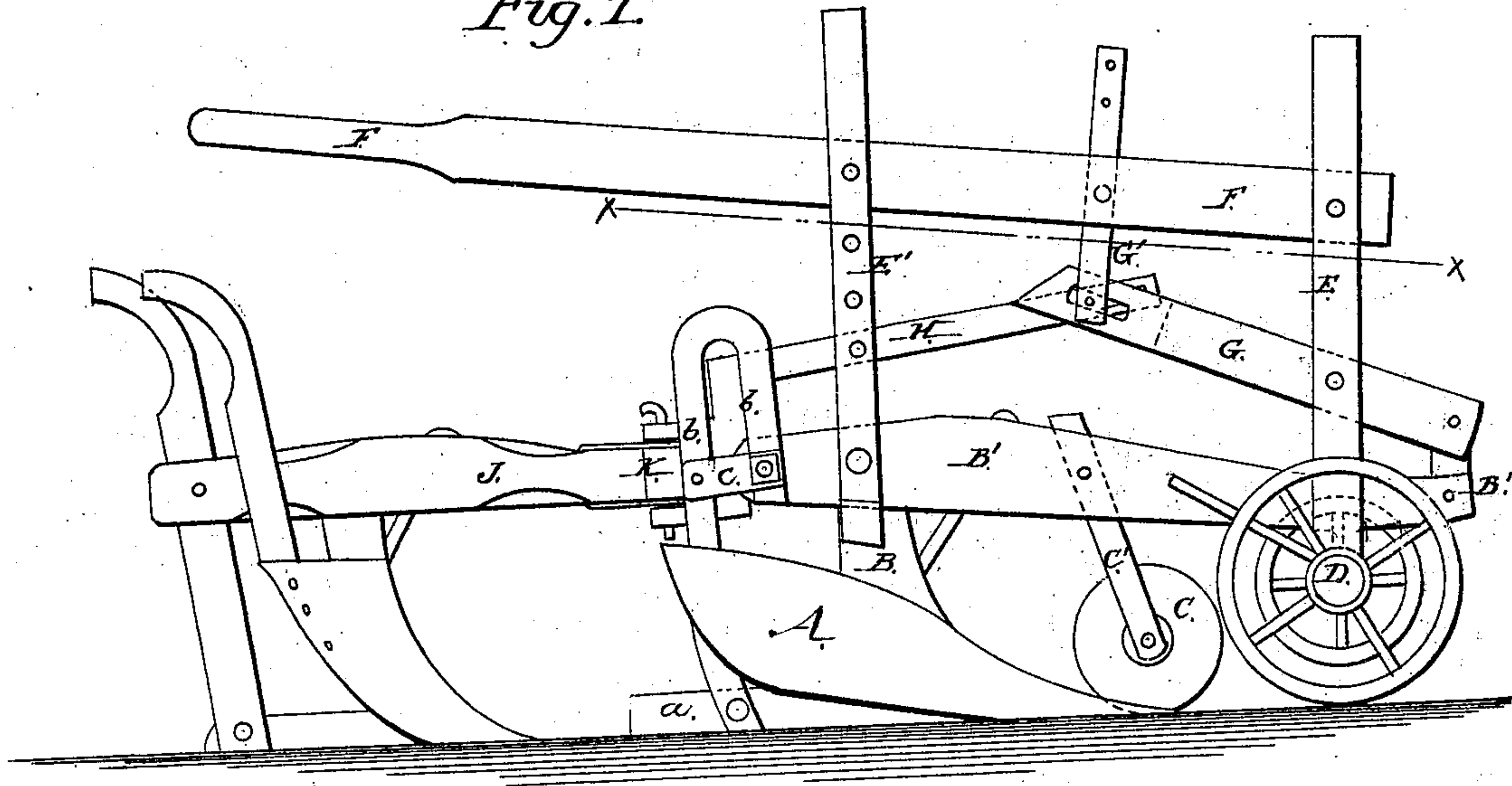


O. SPARKS.  
Wheel Plow.

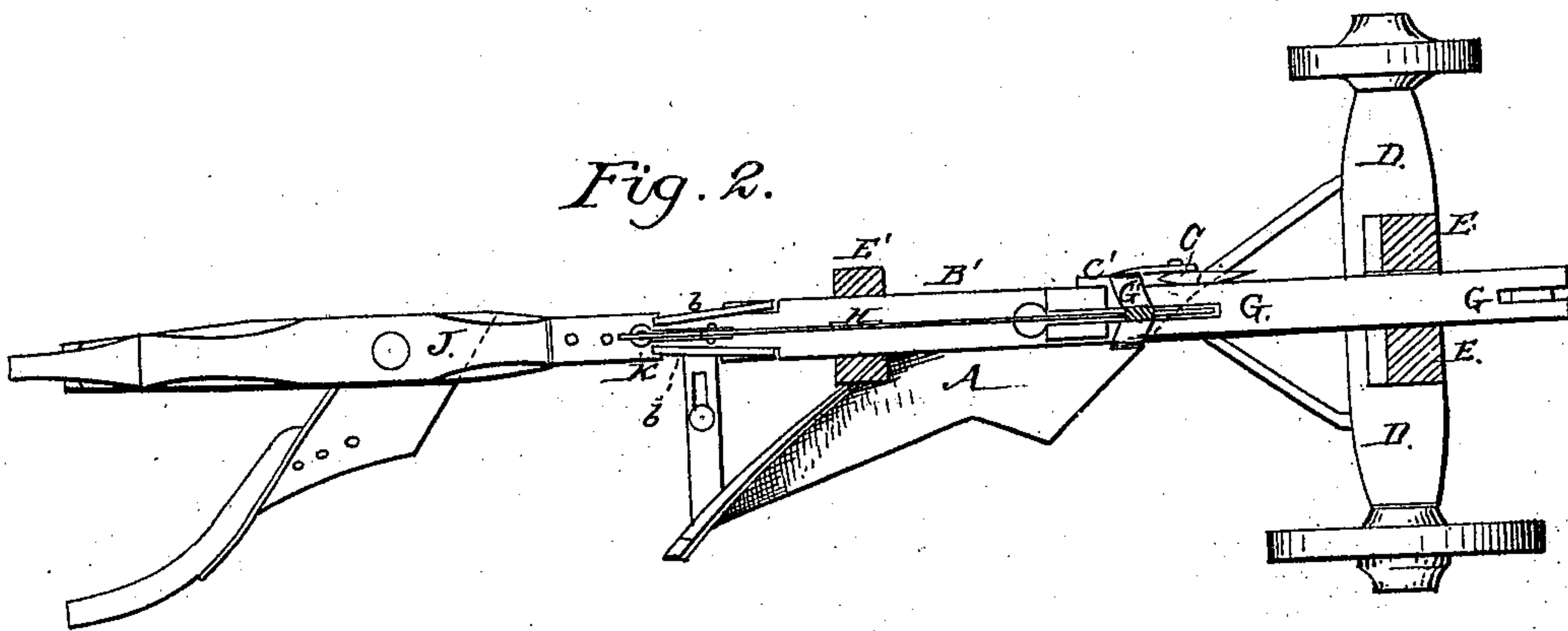
No. 30,892.

Patented Dec. 11, 1860.

*Fig. 1.*



*Fig. 2.*



Witnesses:  
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# UNITED STATES PATENT OFFICE.

OLIVER SPARKS, OF SHELBYNA, MISSOURI.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **30,892**, dated December 11, 1860.

*To all whom it may concern:*

Be it known that I, OLIVER SPARKS, of Shelbina, in the county of Shelby and State of Missouri, have invented a new and Improved Trench-Plow; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of the improved trenching-machine. Fig. 2 is a plan view of the machine with a section taken through the horizontal plane indicated in Fig. 1 by the red line *x x*.

Similar letters of reference indicate corresponding parts in both figures.

This invention is an improvement in trench-plows.

It consists in combining in a novel manner a breaking or sod plow with a trench or subsoil plow, whereby both plows may be thrown into or out of the ground simultaneously.

The principal object of the invention is to more perfectly bring the subsoil to the surface and cover up the sods or surface-soil, as will be hereinafter described and represented.

To enable those skilled in the art to fully understand my invention, I will proceed to describe its construction and operation.

In the drawings, A is the mold-board of an ordinary turn-plow. B is its standard for attaching it to the beam B'; and *a* is the land-side-bar, from which proceeds perpendicularly upward the guide-bars *b b*, which are carried above the rear end of beam B', bent over, and attached securely to the beam each side, and braced by plates *c*, Fig. 1.

In front of the turn-plow is placed a rotary colter, C, attached to the foot of standard C', and in front of this colter are two wheels on an axle-tree, D, on which the front end of the machine rests. One of the wheels is made of a larger diameter than the other, as one runs in the furrows and the other on the unplowed land.

E E are standards which project up from the axle-tree D and support one end of the long hand-lever F and the lever G, to which the front end of the beam B' is jointed.

E' E' are standards attached to and projecting up above the beam B', to which the lever F may be secured by a pin or other means when it is in an elevated or in a depressed state. The lever G has a slot cut in its end in a direction with its length, and through this slot passes a pin that pivots the lever to a pendent rod, G', which is attached to the hand-lever F.

H is a slotted lever, the slotted end of which is attached by the same pivot to the pendent G' and to the lever G. This lever H has its fulcrum in the standard E' E', and its other end works between the guides *b b*, and is attached to the front end of the beam J of a trench-plow by a hinged joint, K, which will allow this plow to swing round from one side to the other of the line of draft of the front plow. This hind plow is an ordinary trench or subsoil plow, differing in no essential respect from those at present in use for subsoiling.

The lever F extends back to the trench-plow, so that it can be operated by the plowman who manages the trench-plow. Its object is to enable the plowman to elevate the points of both plows at the same time or to depress both points simultaneously. He may by this means regulate the depth it is desired the plows should run in the ground. The front plow runs sufficiently deep to cut and turn the sod or surface soil. The rear plow then follows in its furrow and brings up the subsoil and turns it over the sod which has been previously turned, thus completely turning the soil and burying the surface-sod.

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

The two plows arranged one in front of the other, as and for the purposes herein set forth, in combination with the levers F, G', H, and G, arranged, supported, and operating as herein described.

OLIVER SPARKS.

Witnesses:

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