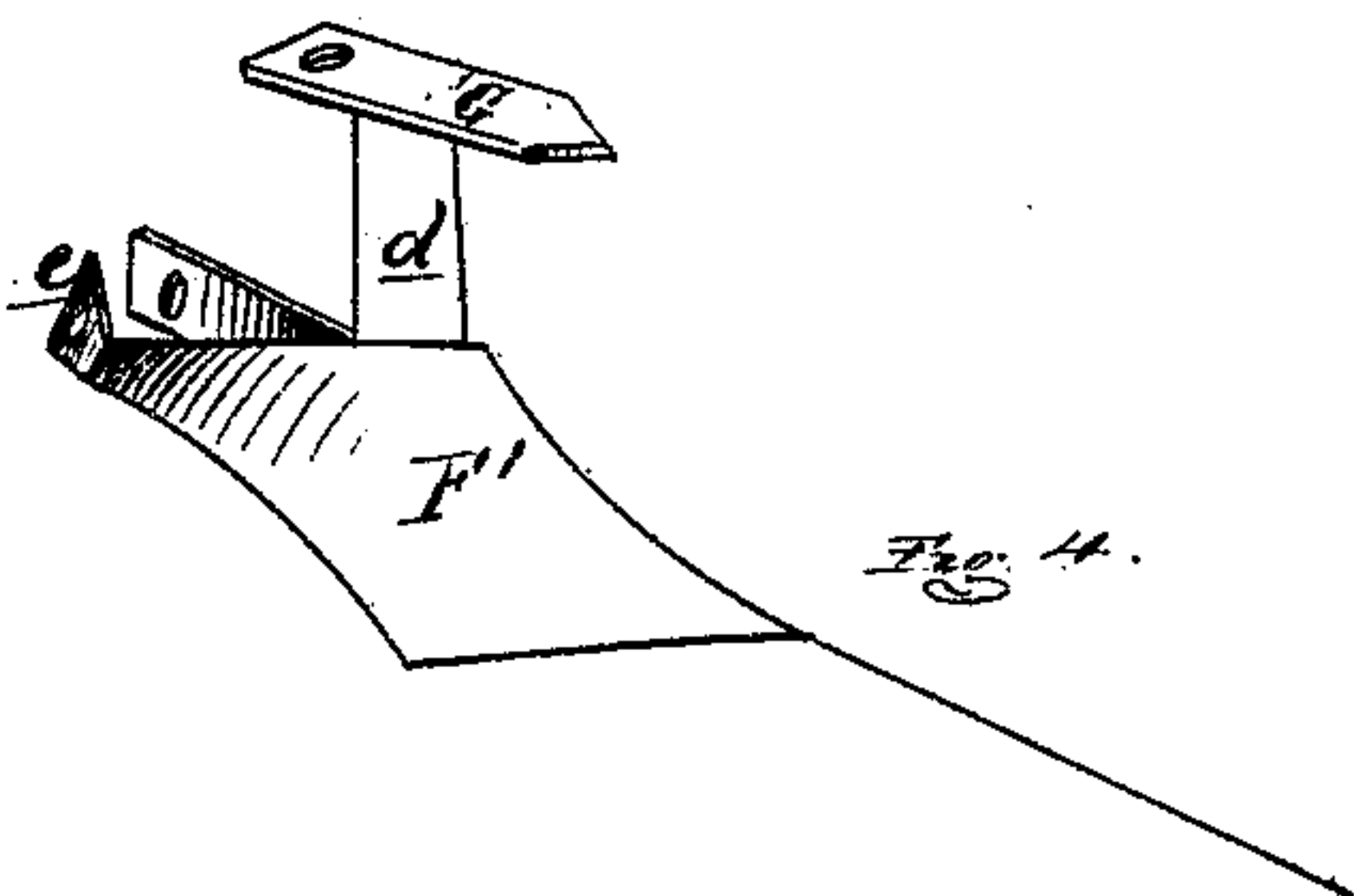
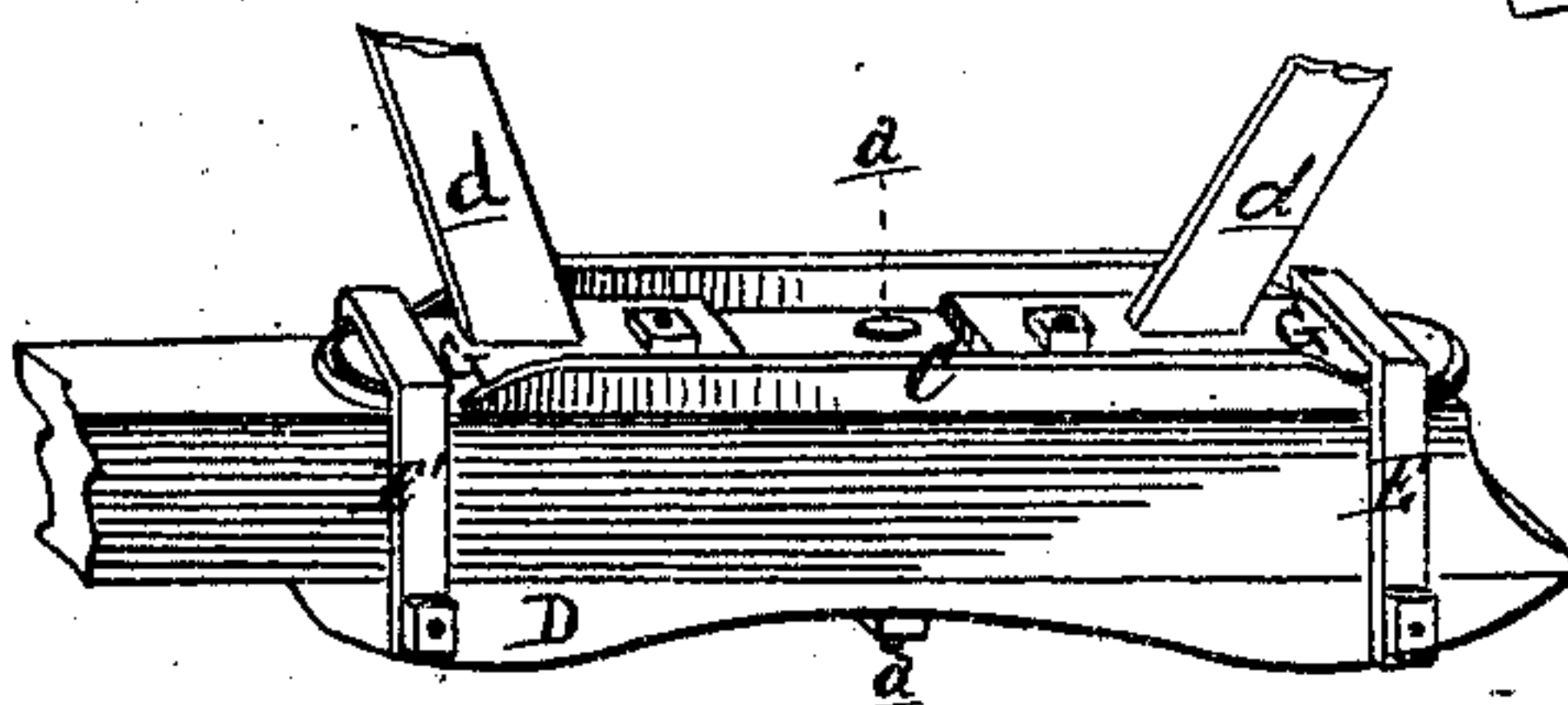
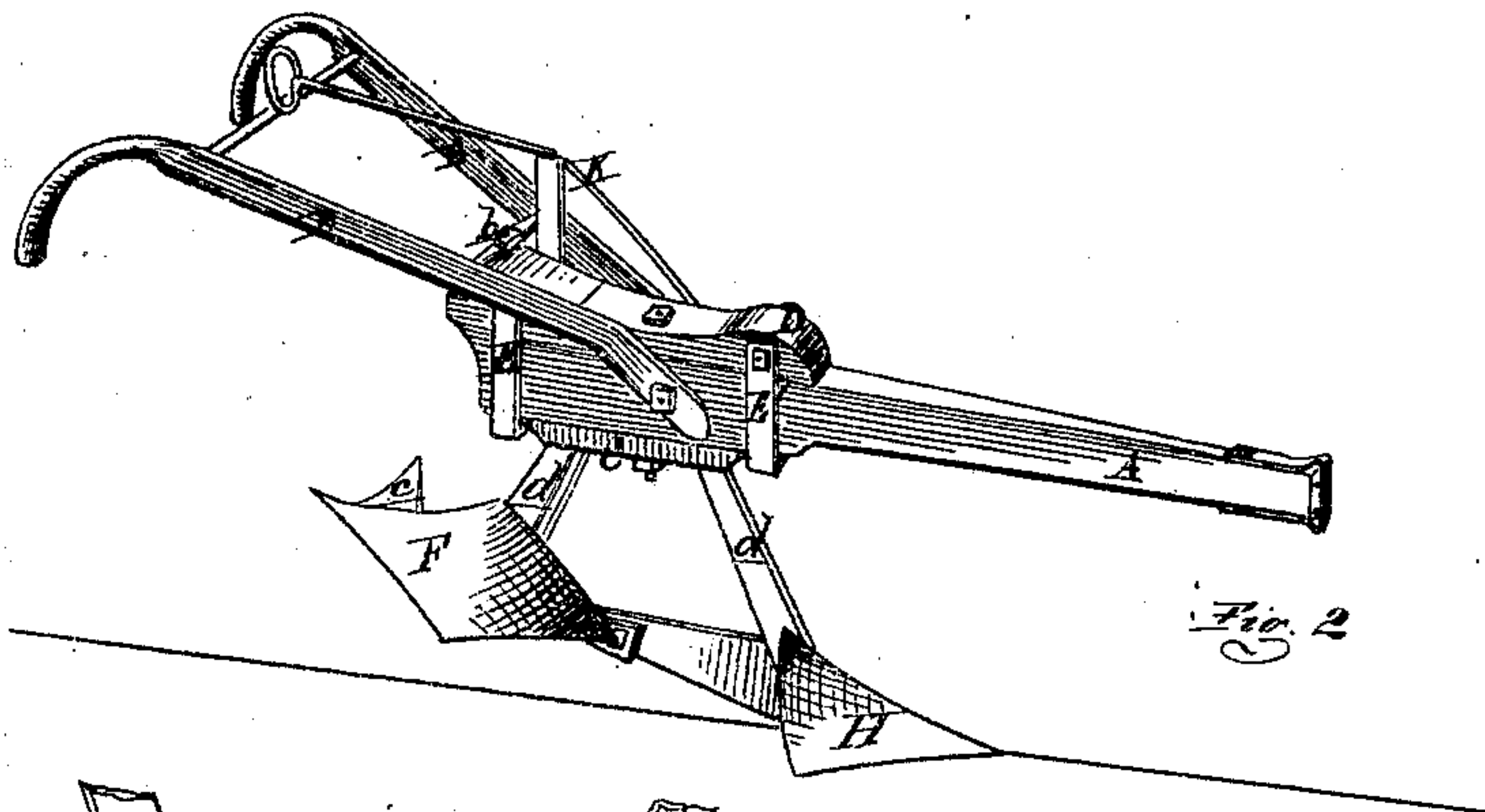
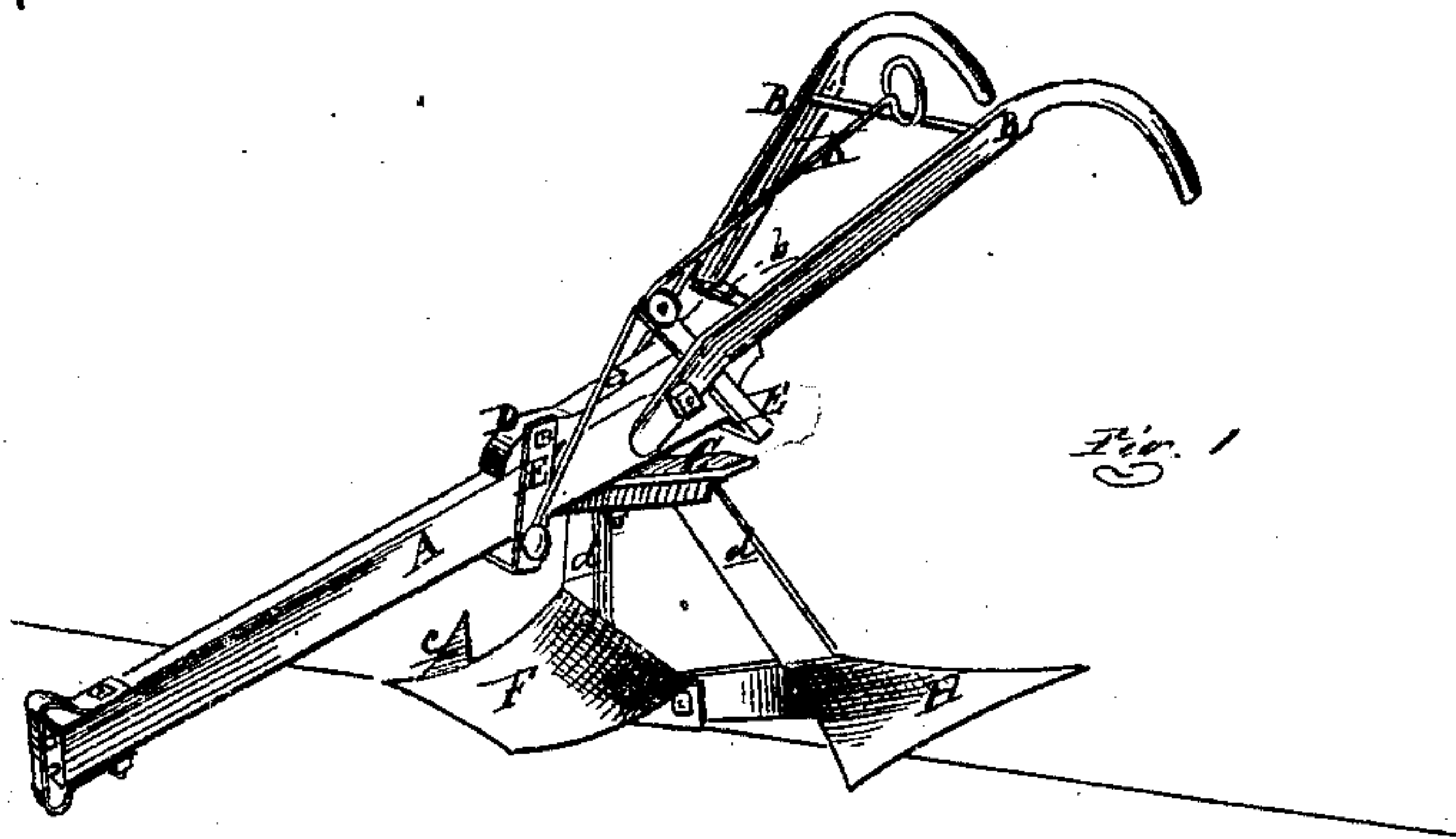


J. BUTLER.

REVERSIBLE DOUBLE PLOW

No. 121,582.

Patented Dec. 5, 1871.



ATTEST:

H. F. Everts.
Myron H. Church

INVENTOR

John Butler
per attorney
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UNITED STATES PATENT OFFICE.

JOHN BUTLER, OF HUFF TOWNSHIP, INDIANA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 121,582, dated December 5, 1871.

To all whom it may concern:

Be it known that I, JOHN BUTLER, of Huff township, in the county of Spencer and State of Indiana, have invented a new and useful Improvement in Reversible Double Plow and Subsoil Attachment; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of my combined turning and subsoil-plow with the beam partially turned. Fig. 2 is a similar view thereof, with the plow fully reversed to return in the furrow made by the turning-plow and loosen up the soil in the bottom with the subsoil attachment. Fig. 3 is a detached inverted view of the devices which attach the plows to the beam, and Fig. 4 is a perspective view of the second turning-plow detached.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of this invention relates to a double-reversible plow, so arranged that the furrows may all be turned in one direction, and, by the replacement of one of the turning-plows with a subsoil attachment, the soil in the bottom of the furrow may be turned up by the subsoil attachment going back in the furrow; also, the construction of a double plow in such a manner that the team and beam may be turned without moving the plows proper. The invention consists in the novel and peculiar construction of the various parts and their arrangement, as more fully hereinafter set forth.

In the drawing, A represents the plow-beam, and B the handles pivoted thereto. C is a metallic plate having a downwardly-turned flange at each side, and pivoted by a bolt, *a*, to the under side of the rear part of the beam. D is a "lift" of wood secured to the top of the beam along its rear end. The front cross-bar of the handles is secured to this lift and the rear end of the beam by a bolt, *b*, passing through the whole. The pitch or inclination of the handles may be changed by addition of wedges or washers of wood between the beam and the lift D. E E' are iron stirrups coming under the beam and pivoted at their upper ends to the lift D, near the rear and front ends thereof. One arm of the stirrup E is carried above the pivot and has pivoted to its extremity the rod F, the front

end of which is pivoted to the lower part of the stirrup E, while the other end of the rod is carried back and rests upon the rear cross-bar between the handles. By drawing back the rod K the stirrups will be caused to embrace the ends of the plate C and thus prevent the beam from rotating on its pivot. F F' are turning-plows, the former a left and the latter a right-hand plow. One or both may be provided with the fin-share *c*. The standards *d* of these plows have secured to their tops a horizontal plate, G, the rear end of which is secured by a bolt to the plate C, the ends of which are provided with a socket for the reception of the front extremity of said plate G, thereby firmly securing the plows to the plate C. One of the plows has the rear upper corner of its mold-board provided with a lug, *e*, Fig. 4, coming inside of the adjoining corner of the other, to which it is secured by a bolt. The land-sides are carried back far enough to overlap and be secured together by one or more bolts.

The above-described arrangement of the plows enables the plowman to turn all the furrows one way for horizontal plowing or for plowing a hill-side. At the completion of a furrow he pushes forward the rod K, which disengages the stirrups from the plate C and turns the team around, turning the plow-beam on its pivot—the bolt *a*—until fully reversed, when he locks the beam again, and by lifting the plow sidewise the width of a furrow-slice he is ready to proceed again.

If desired to loosen up the soil on the bottom of the furrow, I replace one of the turning-plows with a subsoil-plow, H, attached to the other end to the beam-plate, in the manner above described, so that after turning a furrow with the plow F, as shown in Fig. 1, the plowman may reverse the beam and return in the same furrow with the subsoil-plow, as shown in Fig. 2.

In the construction of the plows care should be taken to give them their proper pitch and land.

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

The combination of the standard *d*, the plate G, the reversible plate C, the plows F F' and H, and the beam A, constructed substantially as described, for the purposes set forth.

JOHN BUTLER.

Witnesses:

SAM. K. CONNOR,
FREDERICK CONNOR.

(114)