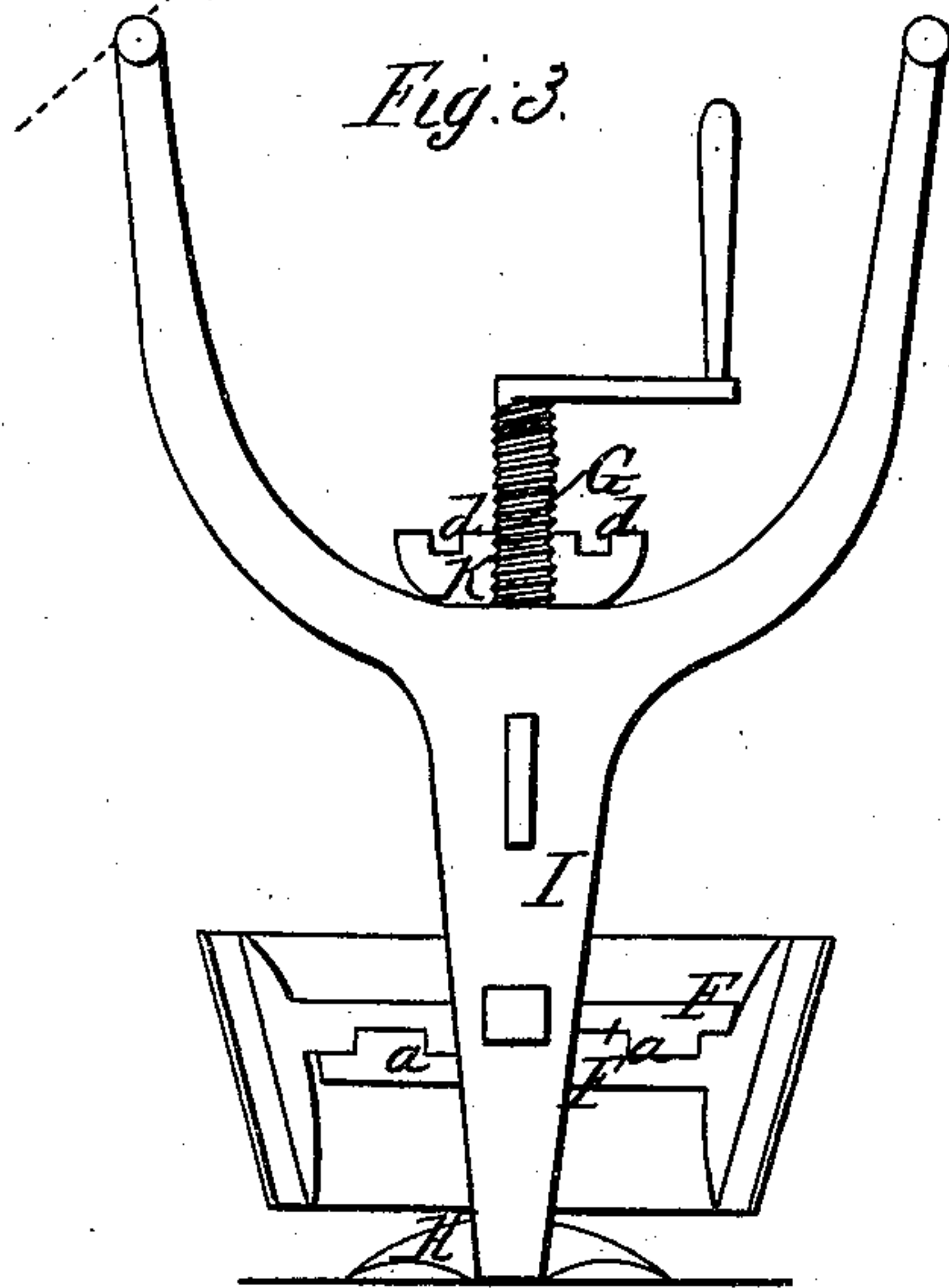
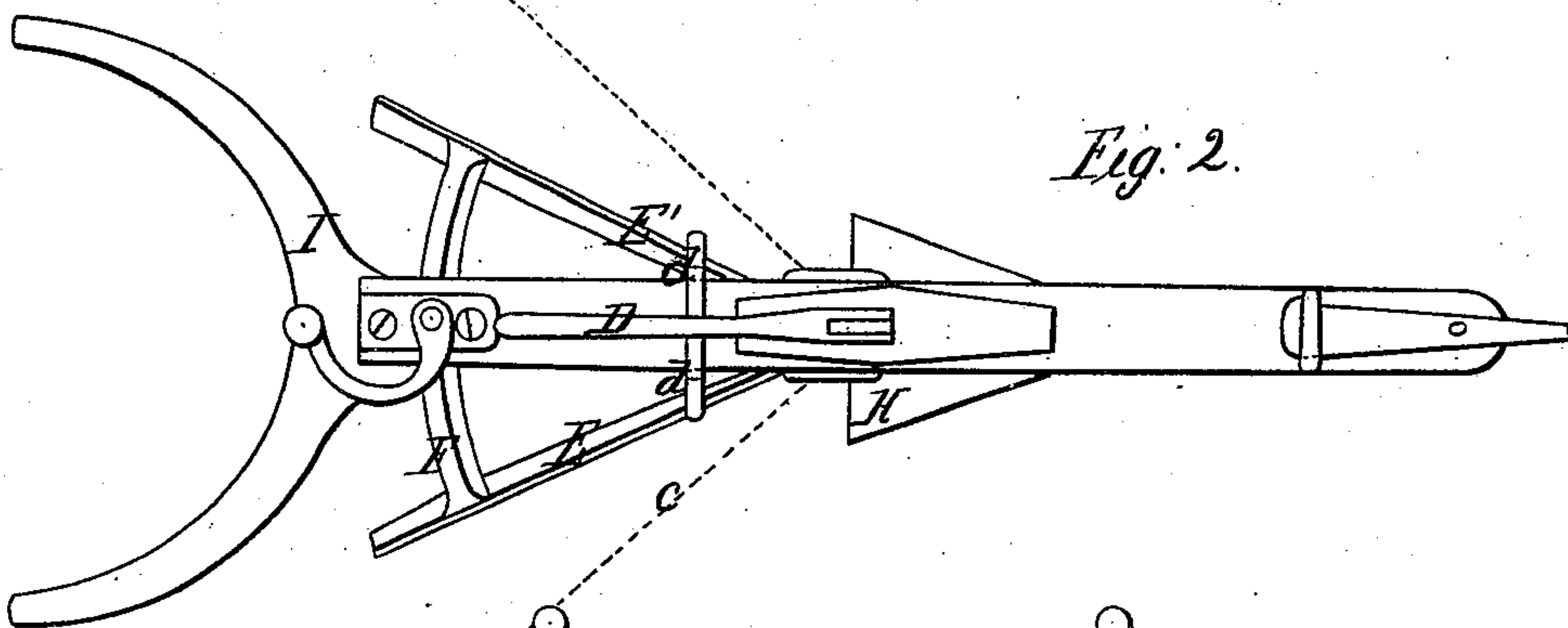
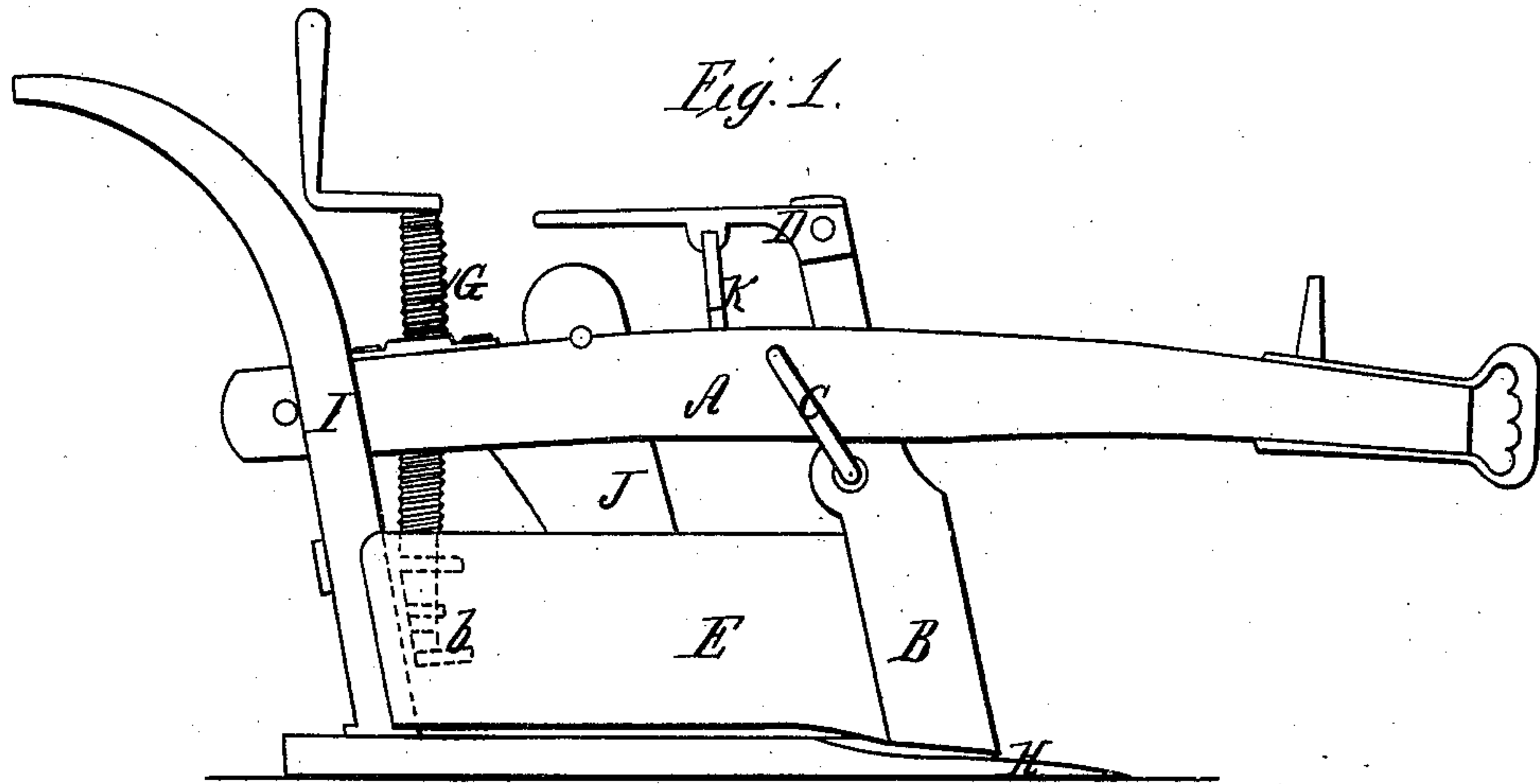


J. Bader, Sr.

Plow

N^o 86,896.

Patented Feb. 16, 1869.



Witnesses;
J. H. Burridge
Frank S. Alden

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JOHANNES BADER, SR., OF PERRYSBURG, OHIO.

Letters Patent No. 86,896, dated February 16, 1869

IMPROVEMENT IN PLOWS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHANNES BADER, Sr., of Perrysburg, in the county of Wood, and State of Ohio, have invented certain new and useful Improvements in Plows; 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 part of this specification, in which—

Figure 1 is a side view of the plow.

Figure 2, a view of the top.

Figure 3, a view of the rear end.

Like letters of reference refer to like parts in the different views.

This invention relates to so constructing a plow that the mould-board or boards can be shifted, thereby making a right or left-handed plow, and which, also, may be used as a subsoiler, ditching-plow, or a cultivator, as may be required.

A, fig. 1, is the beam of the plow.

B is a coulter, secured loosely in said beam by means of the yoke C.

To the upper end of the coulter is pivoted a lever, or handle, D, the purpose of which will hereinafter be shown.

E E', fig. 2, are the mould-boards, one on each side of the plow, and the front ends of which are attached to and secured in a rigid manner to the coulter.

The rear end, or wings of the mould-boards are connected to each other by means of segmental cross-arms, F F', attached rigidly to the inside of the boards, and project inwardly, and lapped upon each other, and secured thus together by the check-lugs *a*, fitting in corresponding recesses provided for their admission. The arms are then clamped together by the screw G, said screw working in a stay, indicated by the dotted lines *b*, between which, and the screw, the arms pass, and are therein secured.

H, fig. 2, is a double-winged cultivator-share, attached to the plow-beam by means of the standards I and J. The upper end of the standard I is branching, forming arms, whereby the machine is held and guided.

This machine, as above said, may be used as a right or left-handed plow by changing the position of the mould-boards from that shown in fig. 2. This change is made by slackening the screw G, and forcing the mould-board E to the right, as indicated by the dotted line *c*, by means of the lever, or handle D. This

movement of the board will bring the mould-board E' close to and parallel with the beam, and which will form the landside of the plow.

The position thus obtained to the mould-boards is secured by the lever being caught in a notch, *d*, of the check-lock K, fig. 3, and the screw G. This position of the mould-boards makes the plow a right-handed one, and which may be used in the ordinary way, and for the ordinary purpose of plowing.

From this right-handed character of the plow, it is easily changed to a left-handed one, by simply reversing the position of the mould-boards, thus extending the E, and which, at the same time, will draw in the board E' close to and parallel with the beam, as was the previous condition of the board E'. In this position, the mould-boards are secured in the same way as when adjusted in the above instance.

The machine, as shown in fig. 2, by a further extension of the wings, may be used as an ordinary double-winged cultivator, both wings, or mould-boards being equally extended on each side of the beam, which will throw the dirt against both rows or hills of corn, potatoes, &c.

For subsoiling and ditching, the mould-boards are constructed as closely as possible, so that, on following the surface, or leading plow, they will not fill the furrow made by it, but allow the loosened dirt to fall back in the furrow.

This plow, for the purpose above specified, is well and properly adapted, and hence, in the point of economy, it saves largely in the expense of this class of implements, as a separate cultivator, subsoiler, and ordinary left and right-handed plows are not required. This plow, as above said, combines all the three or four in one, and which, as above shown, is readily and easily changed from one to the other.

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

1. The adjustable mould-boards E E', coulter B, and share H, combined and arranged to operate in the manner as and for the purpose set forth.

2. The lever D and screw G, as arranged, in combination with the coulter B and mould-boards E and E', for the purpose specified.

JOHANNES BADER, SR.

Witnesses:

W. H. BURRIDGE,

FRANK S. ALDEN.