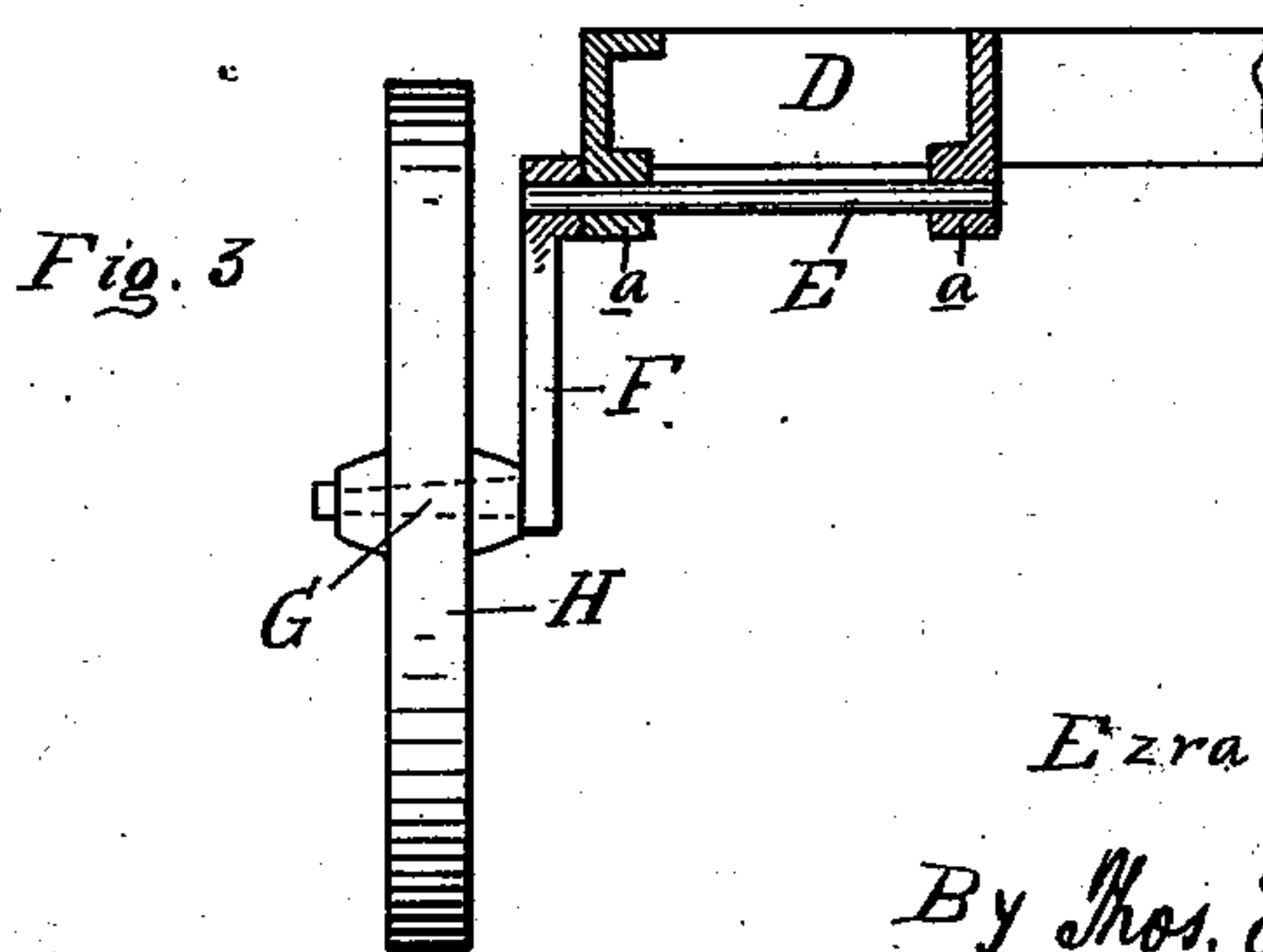
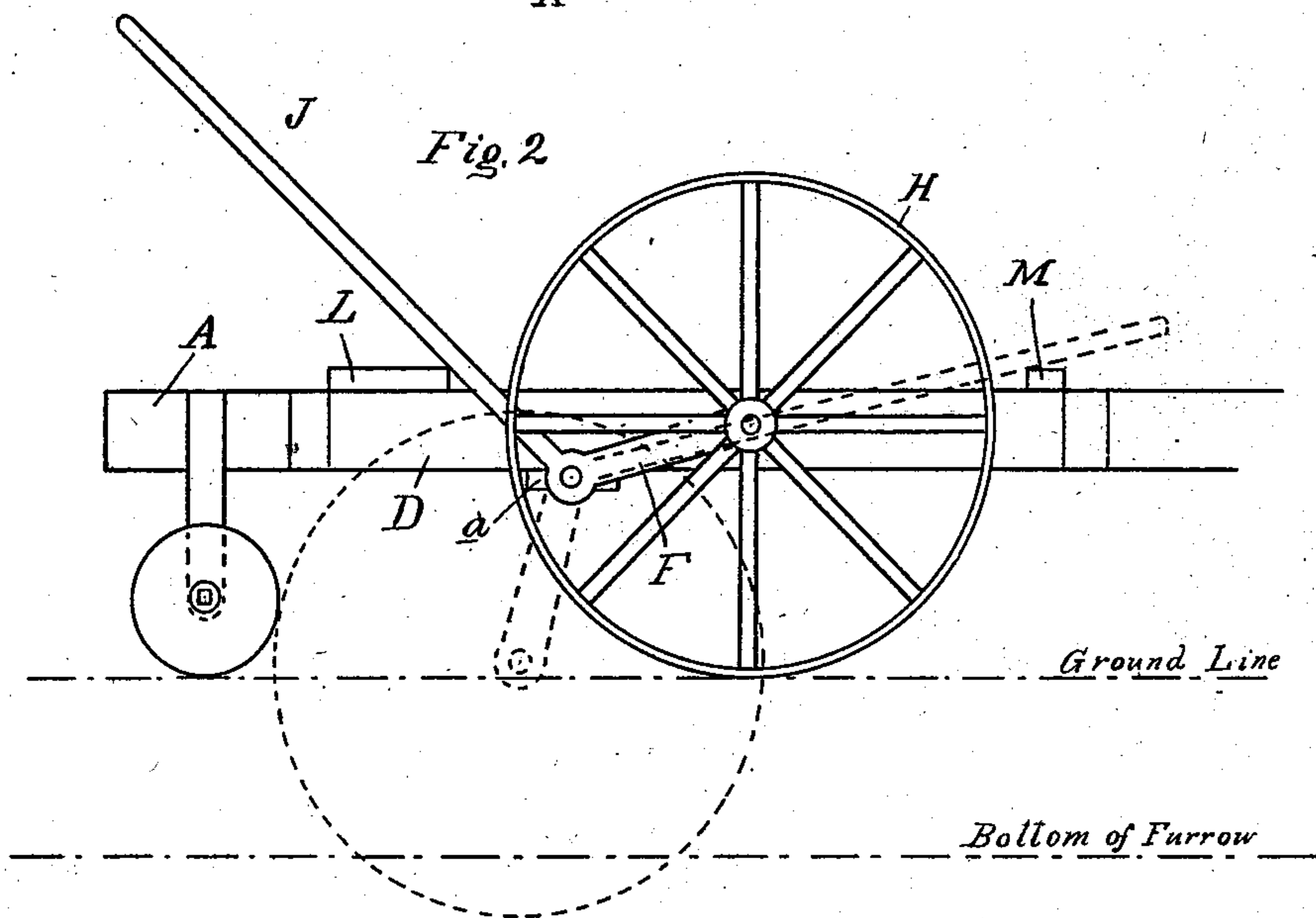
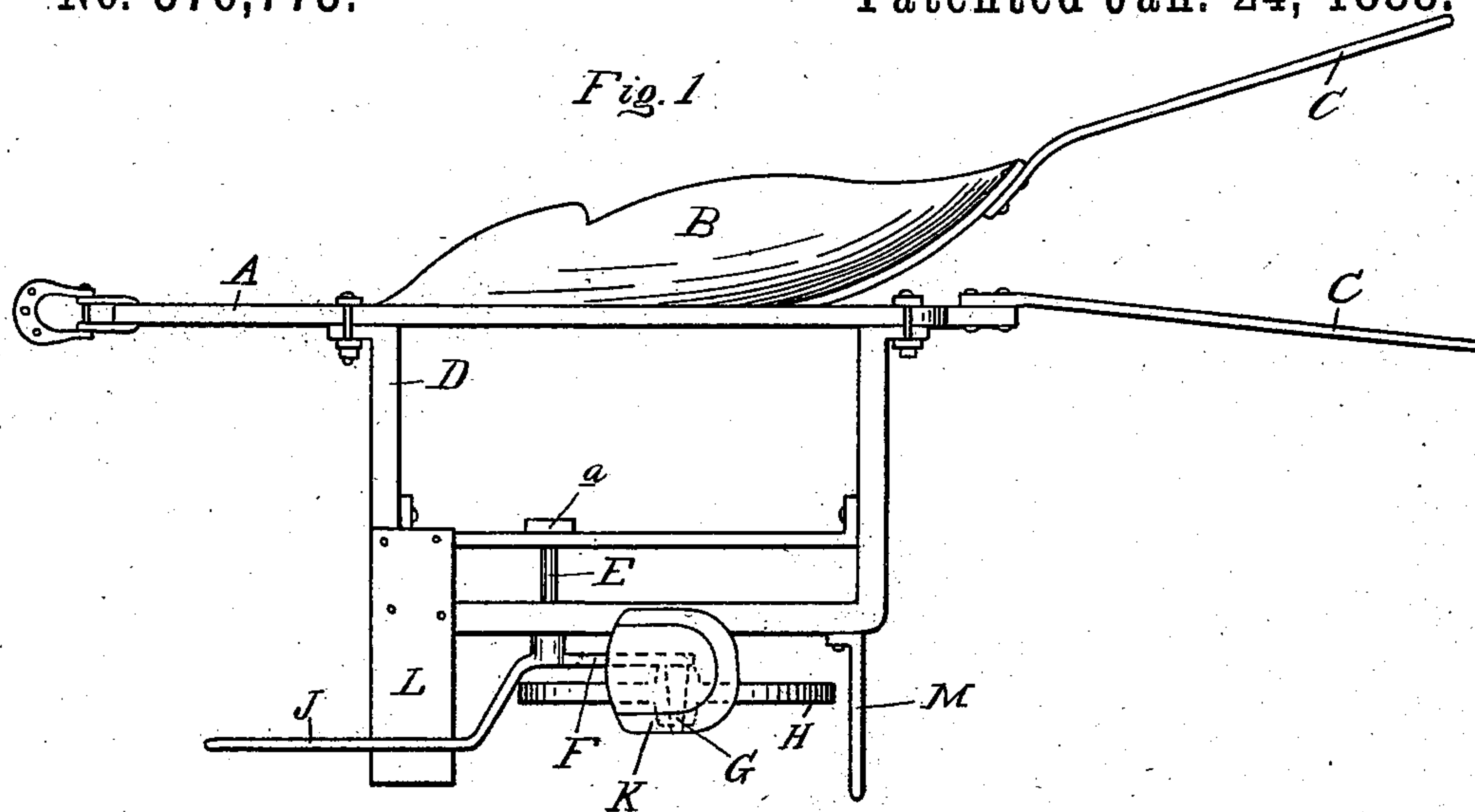


(No Model.)

E. G. GODDARD.
ATTACHMENT FOR PLOWS.

No. 376,773.

Patented Jan. 24, 1888.



Witnesses:

P. M. Hulbert.
N. J. Sprague

Inventor:

Ezra G. Goddard
By Mos. S. Sprague & Son
Att'y.

UNITED STATES PATENT OFFICE.

EZRA G. GODDARD, OF EAST SAGINAW, MICHIGAN.

ATTACHMENT FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 376,773, dated January 24, 1888.

Application filed November 7, 1887. Serial No. 254,504. (No model.)

To all whom it may concern:

Be it known that I, EZRA G. GODDARD, a citizen of the United States, residing at East Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Attachments for Plows, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to new and useful improvements in attachments for plows, and is especially designed as an improvement upon an application on plows, Serial No. 248,937, filed by me on or about the 6th day of September, 1887.

15 The invention consists in the peculiar construction and application to a removable frame of an adjustable wheel, and in the combinations of the various parts, all as more fully herein-
20 after set forth.

Figure 1 is a top plan of a plow provided with my improved attachment. Fig. 2 is a side elevation with the parts adjusted in the act of plowing. Fig. 3 is a sectional detail.

25 In the accompanying drawings, which form a part of this specification, A represents a plow-beam which carries the plow B, and C are the plow-handles.

D represents a frame, preferably rectangular in form, although an angular frame such as is described and shown in my said application hereinbefore referred to may be employed, if desired. This frame is rigidly secured to the plow-beam B upon the land side thereof.

35 E is a rock-shaft properly journaled in bearings *a* transversely across the land side of the frame D and slightly in advance of the heel of the plowshare, as shown. To the outer end of the shaft E is rigidly secured a rock-arm, F, which carries upon its free end a stub-axle, G, upon which is mounted the wheel H. An actuating-lever, J, is also secured to this shaft E at about an angle of one hundred and thirty degrees from the rock-arm, and is curved out-
45 wardly, as shown, so that as it is moved forward and backward to adjust the wheel in relation to the elevation of the frame it will pass upon the outside of the seat K, which is mounted upon suitable standards above the
50 wheel.

L is a foot-board, and M is a stop, both of which project laterally from the land side of the frame at the front and rear of the wheel respectively.

In practice the operation of the parts is as follows: In Fig. 1, and by full lines in Fig. 2, the lever J is shown in its forward position resting upon the foot-board. This compels the wheel H to assume its elevated position, its axis being in the rear and slightly above the axis of the shaft E, thus allowing the plow to turn a furrow as it is drawn forward. At the end of the furrow the driver dismounts and turns the lever J to its rear position, (see dotted lines, Fig. 2,) where it rests upon the stop M. This movement of the lever compels the wheel to assume the position shown in dotted lines in Fig. 2, its axis being in advance of the shaft E and of the heel of the plowshare. This adjustment of parts raises the land side of the frame, and as the plow is then drawn forward it runs out of the ground and tips back, riding upon the heel of the plowshare and the heel of the landside, the frame being supported by the wheel. While the parts are in this last position the plow can readily be turned or drawn from the field without the plow engaging with the ground. Upon returning the lever J to its original position the point of the plow will be lowered, ready for work.

80 If desired, a stop of any suitable construction may be employed, with which the lever J can engage so as to regulate the depth of furrow to be plowed.

What I claim as my invention is—

85 1. In combination with a plow, an adjustable outrigger or frame, D, a rock-shaft, E, journaled transversely across the land side of said frame in advance of the heel of the plowshare, a rock-arm secured to said rock-shaft and carrying a stub-axle, G, a supporting-wheel, H, and an actuating-lever, J, the parts being constructed, arranged, and operating substantially in the manner and for the purposes set forth.

95 2. In combination with a plow, a removable outrigger or frame, D, the rock-shaft E, journaled in bearings *a* in said frame in advance of the heel of the plowshare, rock-arm F on said shaft, stub-axle G, supporting-wheel H, 100

lever J, formed integral with said rock-arm
and bent outward, as shown, foot-board L,
and stop M, at opposite ends of said frame,
the parts being arranged and operating sub-
stantially in the manner and for the purposes
5 specified.

In testimony whereof I affix my signature, in

presence of two witnesses, this 29th day of Sep-
tember, 1887.

EZRA G. GODDARD.

Witnesses:

JAMES A. BOGGS,
JOSEPH K. PERSONS.