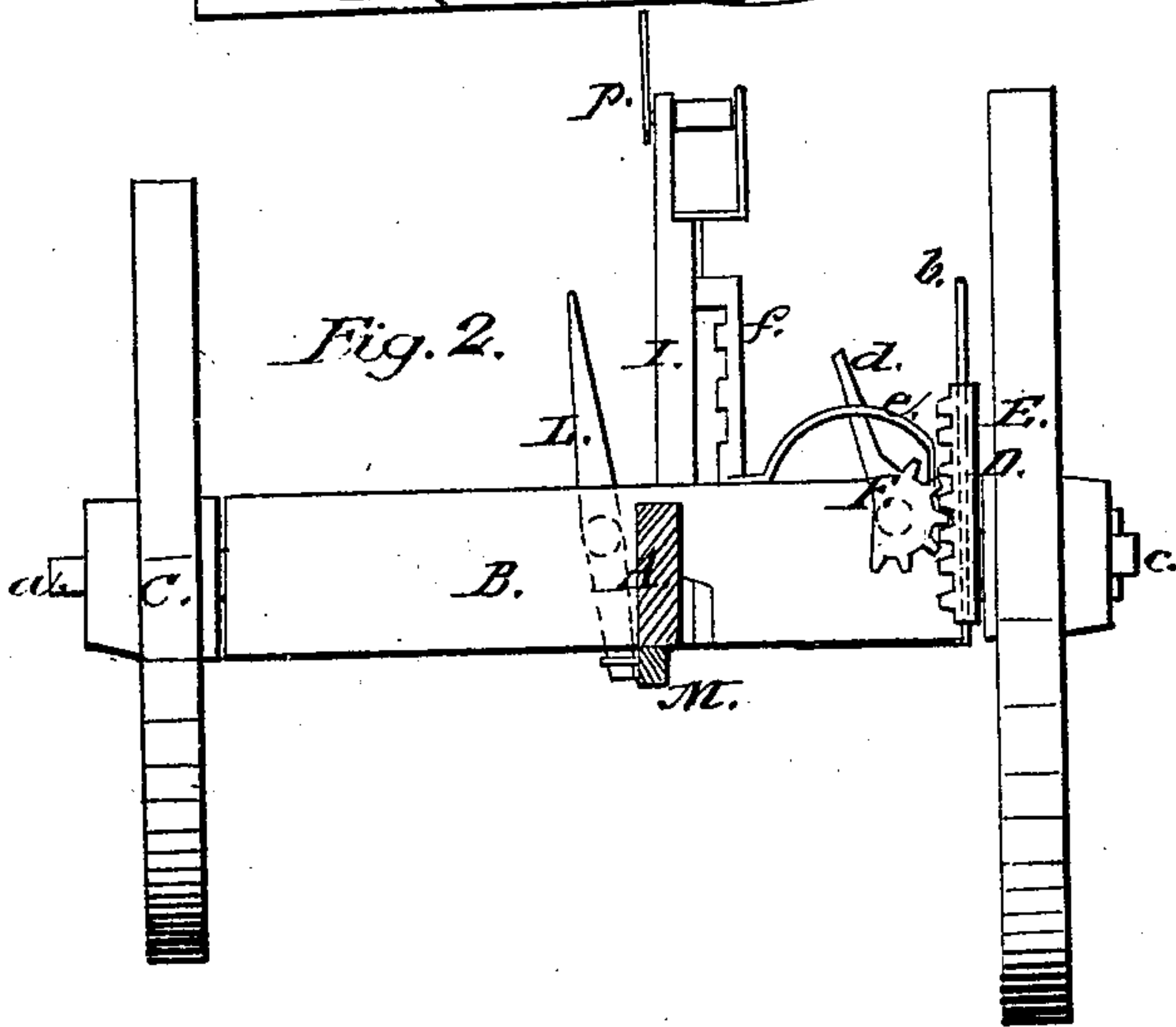
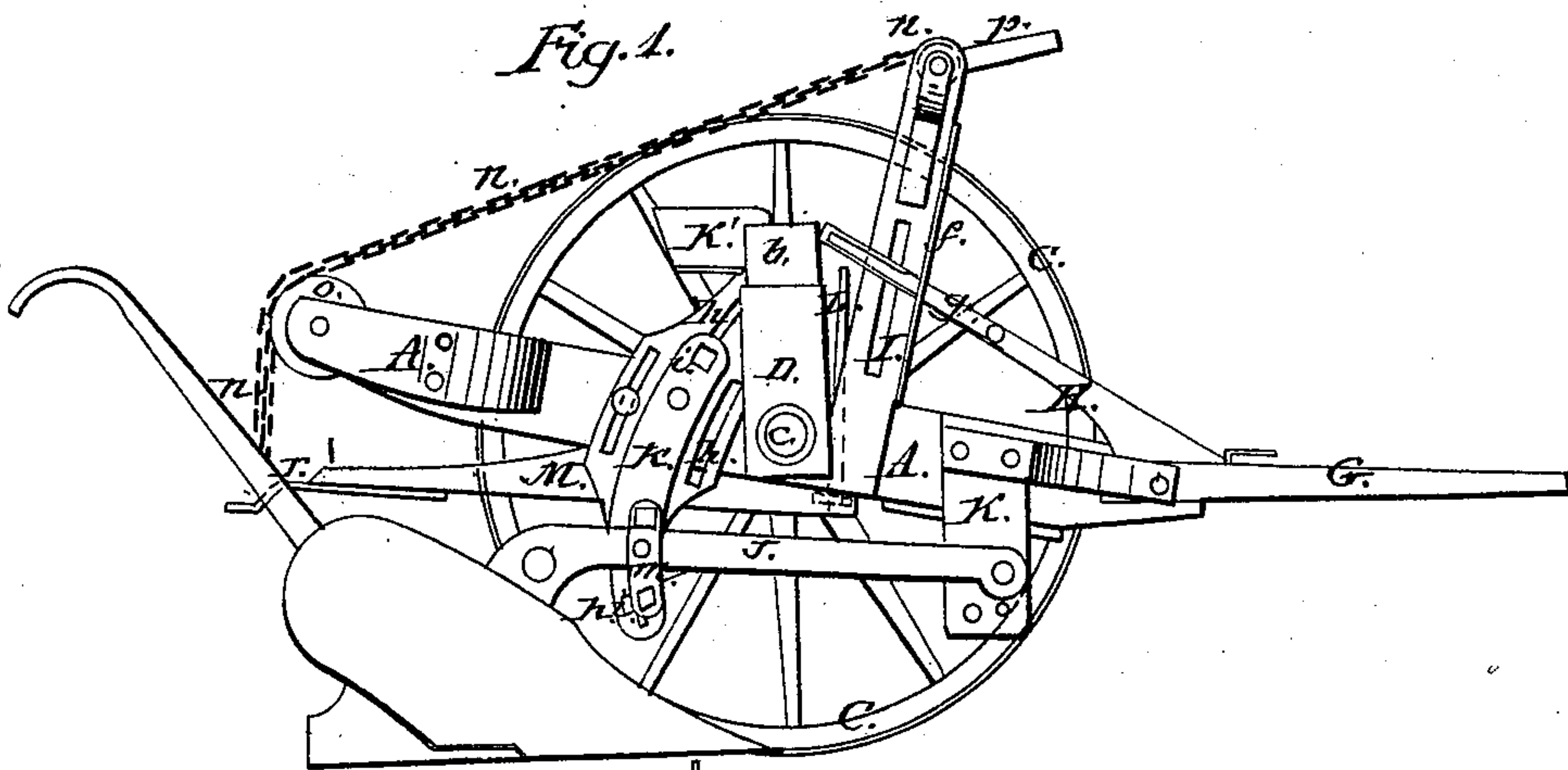


O. Osborn,

Plow.

No. 87,284.

Patented Feb. 23, 1869.



Witnesses:

Leopold Overb.
A. W. Yeatman,

Inventor:

O. Osborn
by Richard Mason
Attorney



O. OSBORN, OF TRUMANSBURG, NEW YORK.

Letters Patent No. 87,284, dated February 23, 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, O. OSBORN, of Trumansburg, in the county of Tompkins, and in the State of New York, have invented certain new and useful Improvements in Plows; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and general arrangement of a plow-carriage, which will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation, with the larger or furrow-wheel removed, and

Figure 2 is a rear view, with the plow removed, showing the mode of raising and lowering the furrow-wheel.

A represents a beam of suitable dimensions, across the centre of which is placed a cross-beam, B.

To one end of this cross-beam is secured the axle *a*, on which the smaller, or land-wheel C, is placed.

To the other end of the cross-beam B is secured a vertical plate, *b*, on or around which a metal box, D, slides, said sliding box being provided with an axle, *c*, on which the larger, or furrow-wheel E, is placed.

The rear side of the box D is provided with cogs, as seen in fig. 2, which gear into a cam, F, having cogs on its periphery; and said cam being provided with a handle or lever, *d*, it will readily be seen that the metal box D, with the axle *c* and large wheel E, can be raised or lowered at will.

The handle *d* passes through a slotted and curved plate, *e*, on the cross-bar B, and may be held, by a suitable device, at any point desired.

The tongue G is pivoted at the front end of the beam A, and has, at its rear end, a handle, or lever, H, placed at suitable angle to the same, extending toward the rear and upward.

The handle, or lever H, passes through a slotted plate, *f*, secured to the front side of the standard I, which is placed at right angles from the beam A, just in front of the cross-beam B.

The plate *f* is notched at intervals, as shown in fig. 2, so that a spring, *g*, which is attached to the handle H, may pass into said notches, and thus hold the tongue G in any position desired, whereby the depth of the furrow is regulated, for it will be seen that, by lowering the lever H, the tongue G is raised, and the plow-carriage lowered, and, by raising the lever, the plow-carriage is raised.

On the side of the beam A, in rear of the cross-beam B, a plate, *h*, is secured.

This plate has three curved slots, the two outer ones of which are used to regulate the position of the plate on the beam, as the plate is secured by screws passing through said slots into the beam.

The centre slot is used to allow a plate, *k*, which supports the plow-beam, to slide up and down, the said plate *k* being held on the outer side of the former plate *h*, by means of screw-bolts *i*, which pass through the centre slot, and nuts placed on the ends of the same.

The plow-beam J passes through a loop, *m*, on the outer side of the plate *k*, and its front end is pivoted to a bar, K, projecting downward from the beam A, a suitable distance in rear of the tongue G.

To the inner handle of the plow is secured a chain, *n*, which passes over a pulley, *o*, in the rear end of the beam A, and up to a crank, *p*, at the upper end of the standard I, so that by turning the crank *p*, the plow may be raised up out of the ground, the plate *k* sliding on the plate *h*.

A seat, K', is placed for the driver, at a suitable point on the cross-beam B, that he may have the lever H, handle *d*, and crank *p*, within his reach.

On the cross-beam B, near the driver's seat, is also pivoted a lever, L, which operates a bar, M.

This bar is pivoted to the under side of the beam A, and has a spring-bar, *r*, attached to its rear end, which can be thrown against the plow-handle, to steady it, and hold the plow down in hard and stony ground.

Having thus fully described my invention,

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

1. Providing the tongue G with a lever, H, having a spring, *g*, and passing through the slotted and notched plate *f*, for the purpose of raising or lowering the tongue, and holding it in any position desired, substantially as shown and described.

2. The arrangement of the plate *b*, cogged sliding box D, with its axle *c*, cogged cam F, and handle *d*, all constructed and operating substantially as and for the purposes herein set forth.

3. The arrangement, on a plow-carriage, of the slotted plate *h*, sliding plate *k*, and loop *m*, for the purpose of holding the plow-beam, substantially as shown and described.

4. The arrangement of the lever L, arm M, and spring-bar *r*, for the purpose of steadying the plow, substantially as herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 5th day of January, 1869.

O. OSBORN.

Witnesses:

J. MILTON LOVELL,
NELSON WIXOM.