H. Gillet.

Mole Plow.

31,117. Patented Jan. 15, 1861.

Fig. 1.

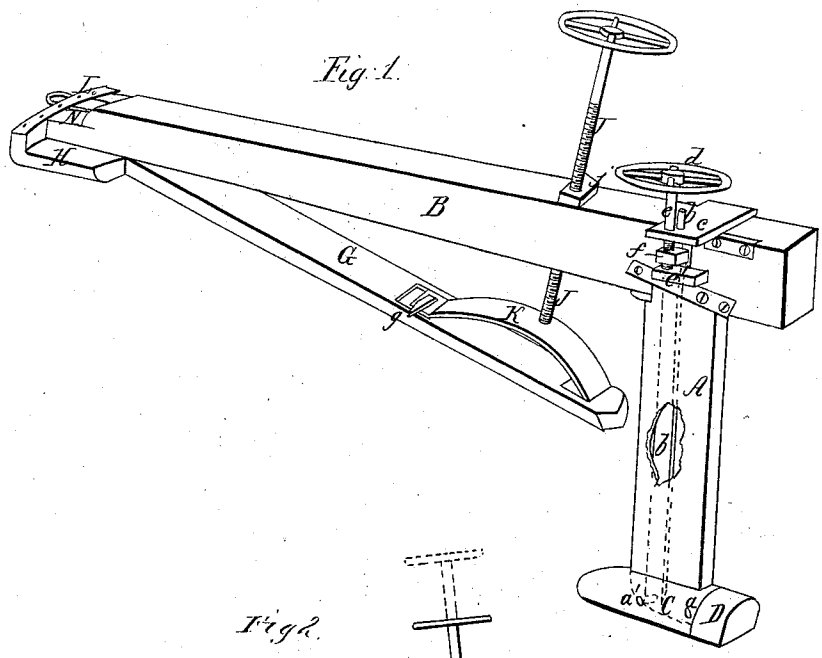
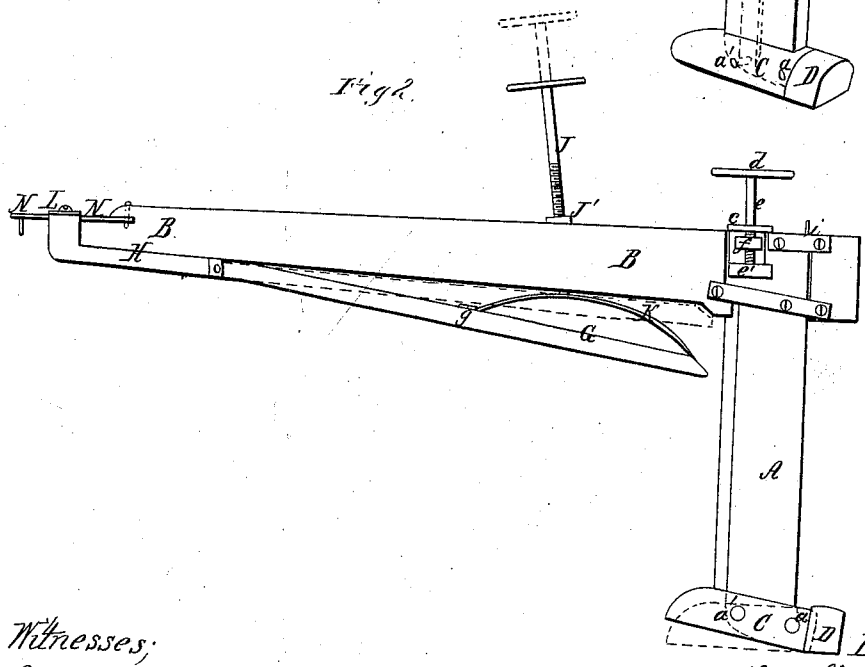


Fig 2.



Witnesses;
W. Coombs
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UNITED STATES PATENT OFFICE.

HOMER GILLET, OF LYNDON, ILLINOIS.

IMPROVEMENT IN MOLE-PLOWS.

Specification forming part of Letters Patent No. **31,117**, dated January 15, 1861.

To all whom it may concern:

Be it known that I, HOMER GILLET, of Lyndon, in the county of Whitesides and State of Illinois, have invented a new and Improved Mole-Plow; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the improved mole-plow. Fig. 2 is a side elevation of the plow, representing the tooth and auxiliary beam in two positions.

Similar letters of reference indicate corresponding parts in both figures.

My invention consists in combining, with an auxiliary beam and main beam and adjustable mole-tooth, a strong semi-elliptic spring and adjustable screw-shaft, as will be hereinafter described, for the purpose of adjusting the auxiliary beam, and at the same time keeping the mole-tooth up with the pressure of the spring against the crown of the channel, as will be hereinafter fully explained.

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

A is a flat, strong plate of metal, brought to a beveled cutting-edge and rigidly secured to the beam B at, or nearly at, a right angle to its top surface. This colter A is secured to the rear end of the beam B, as represented in the drawings, and projects down a suitable distance below the beam. The extreme lower end of this colter has a portion projecting from its back surface, to which the follower D is rigidly secured. This follower is merely an enlarged portion which follows the main part of the tooth C and finishes the channel. The follower D is about the same transverse shape as the portion C, but it is slightly larger in section than the portion C. This portion D has a cavity in its front end, into which the rear end of the tooth portion C fits and is allowed to play up and down. The tooth portion C is pivoted at *a*, its rear end to the colter A, and at *a'* to a bar, *b*, (represented in Fig. 1,) which bar is passed up through a hole, which is formed in any suitable manner through the colter A. This bar *b* is longer somewhat than the colter A, and projects above the upper end of this colter A through a plate, *c*, which is bolted on top of the beam B.

d is a hand-wheel, and *e* is its vertical stem, which stem has a male screw cut on its end. This screw-stem passes through a nut, *f*, projecting from the bar *b*, and its lower end is stepped on a fixed piece, *c'*. Now, by turning the hand-wheel *d* it will raise or depress the bar *b* and the point of tooth C, as represented in Fig. 2 of the drawings. This tooth C, which is adjusted in the manner just described, is made of the shape represented in Fig. 2, its top and bottom surfaces being parallel, except at the front end, which is beveled abruptly to a point. A section taken transversely through this tooth approaches the shape of an arch with a high crown, as represented in Fig. 1

H is a wide shoe, which is secured to the front part of the beam B, underneath the end of this beam. This shoe is common to all mole-plows, and it is used to prevent the front end of the beam from sinking into the wet soil. To the rear end of this shoe H is pivoted an auxiliary beam, G, which extends back under the main beam B to the colter A, and when this beam G is brought up close to the main beam B, as shown in Fig. 2 in red lines, its top surface is parallel with the bottom surface of the beam B.

On the top and near the rear end of the auxiliary beam G a strong semi-elliptic spring, K, is placed, one end of which is secured to this beam G and the other end is allowed to play loosely on this beam. The pointer *g*, which is attached to the end of the spring K, is free to move, and is intended to indicate the amount of downward pressure on the beam B by its moving back or forth with the end of spring K.

J is a screw-bar, with a hand-wheel on its upper end, which bar passes through the rocking-nut J' and down through the beam B. The lower end of this screw J is stepped on the spring K, so that by turning this screw the auxiliary beam G may be brought nearer to or set farther from the beam B. The spring K is allowed to pass up into a space formed in the beam B, so that the beam G may be brought up close to beam B. This lower or auxiliary beam G rests on the surface when the mole-tooth is in the ground, and the shoe H also rests on the ground. The bar N is pivoted at its rear end to the beam B, and its front end may be moved to the right or to the left of a line drawn longitudinally through the center of the beam, for changing the line of draft of

the machine. The perforated sector-plate L, placed over this draft-bar N with a suitable bolt, is used to secure this bar N in any desired position.

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

The spring K, or its equivalent, when used in combination with the beams G and B and adjusting-screw J, as herein set forth, for the purpose described.

HOMER GILLET.

Witnesses:
JOHN WHALLON,
GILBERT BREWER.