

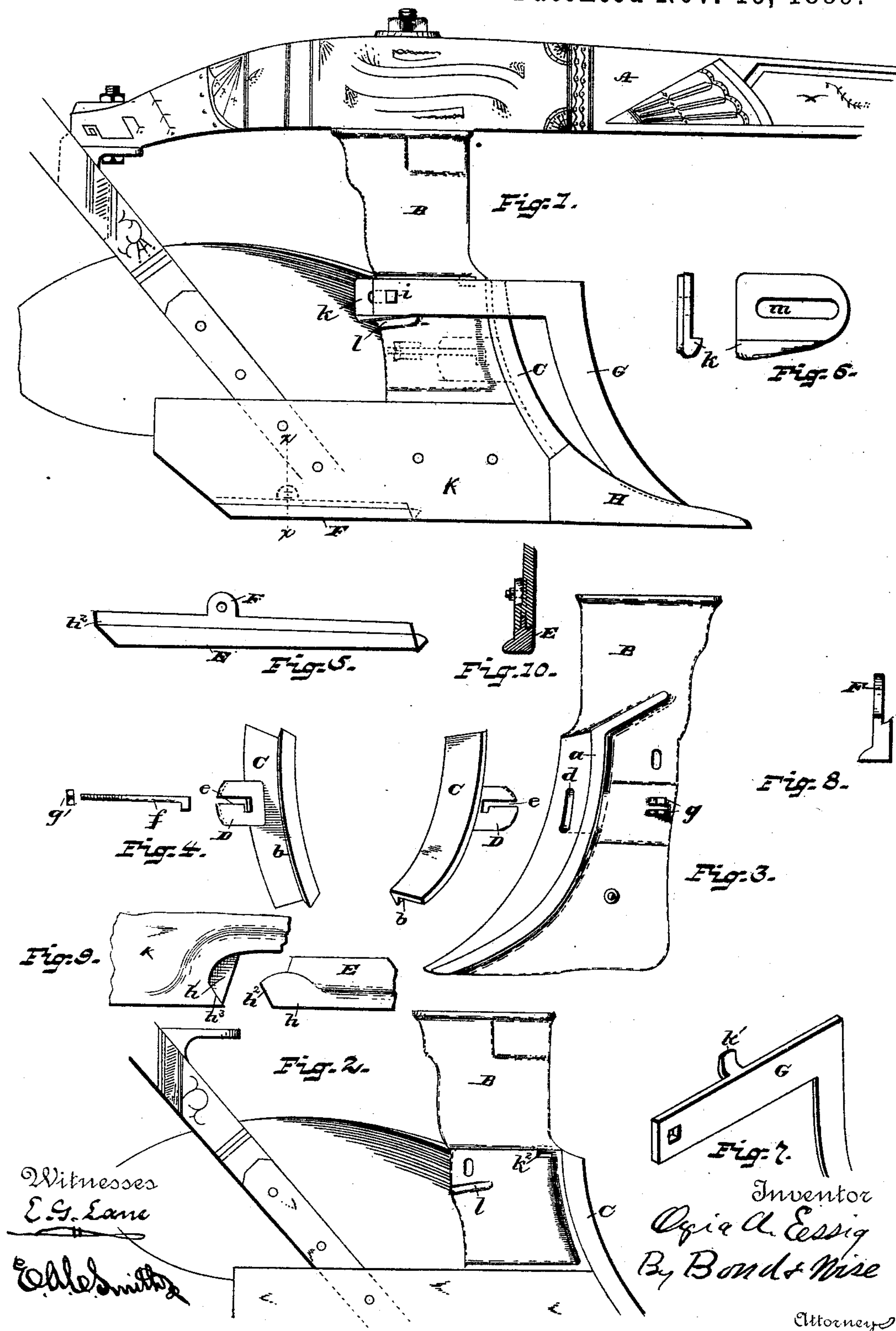
(No Model.)

2 Sheets—Sheet 1.

O. A. ESSIG.
PLOW.

No. 415,244.

Patented Nov. 19, 1889.



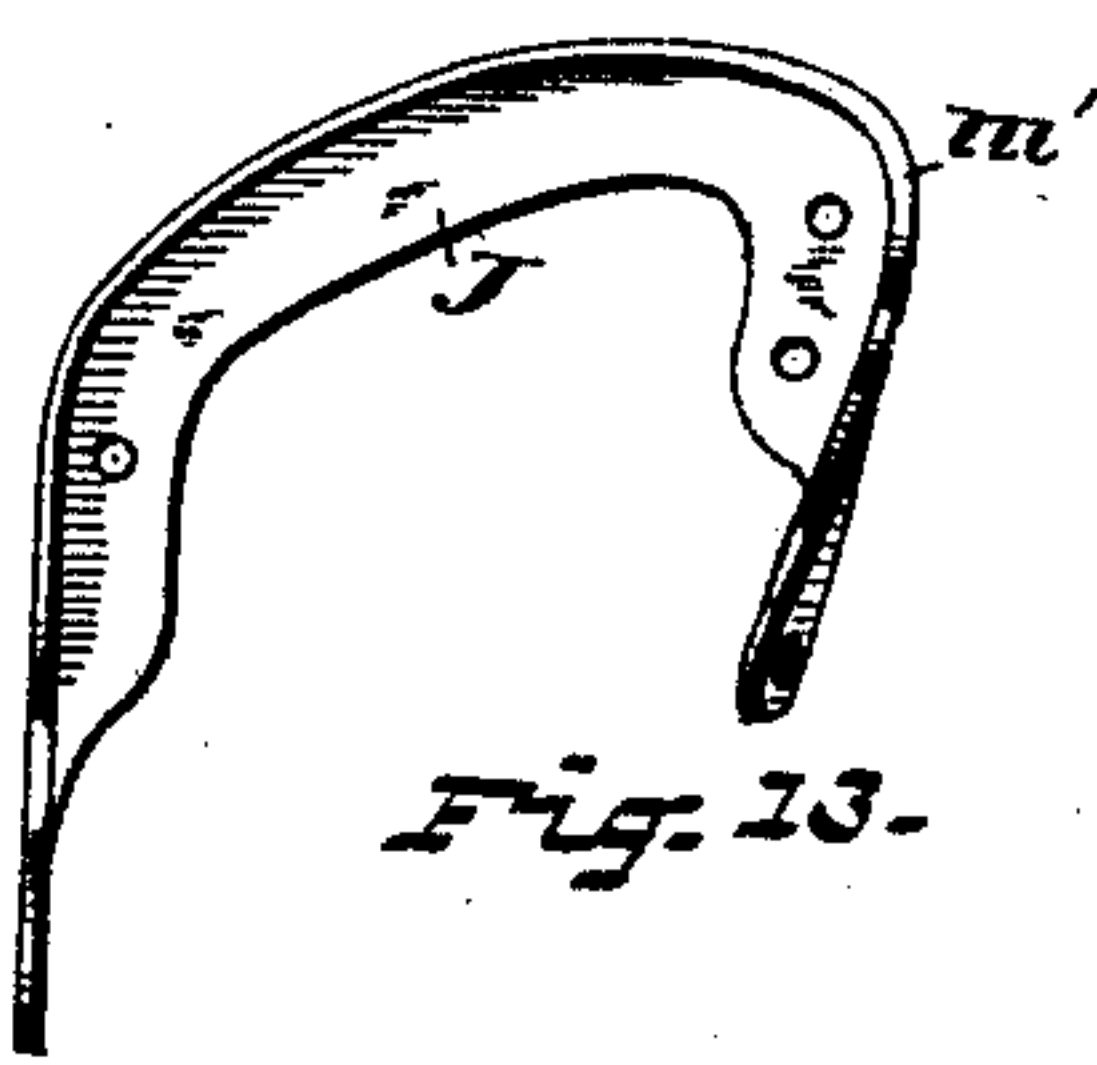
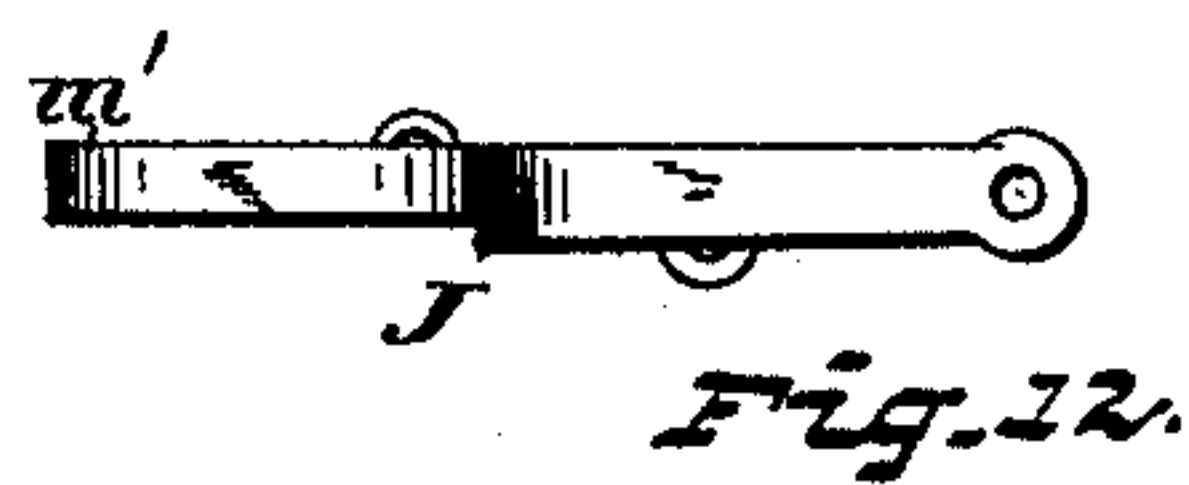
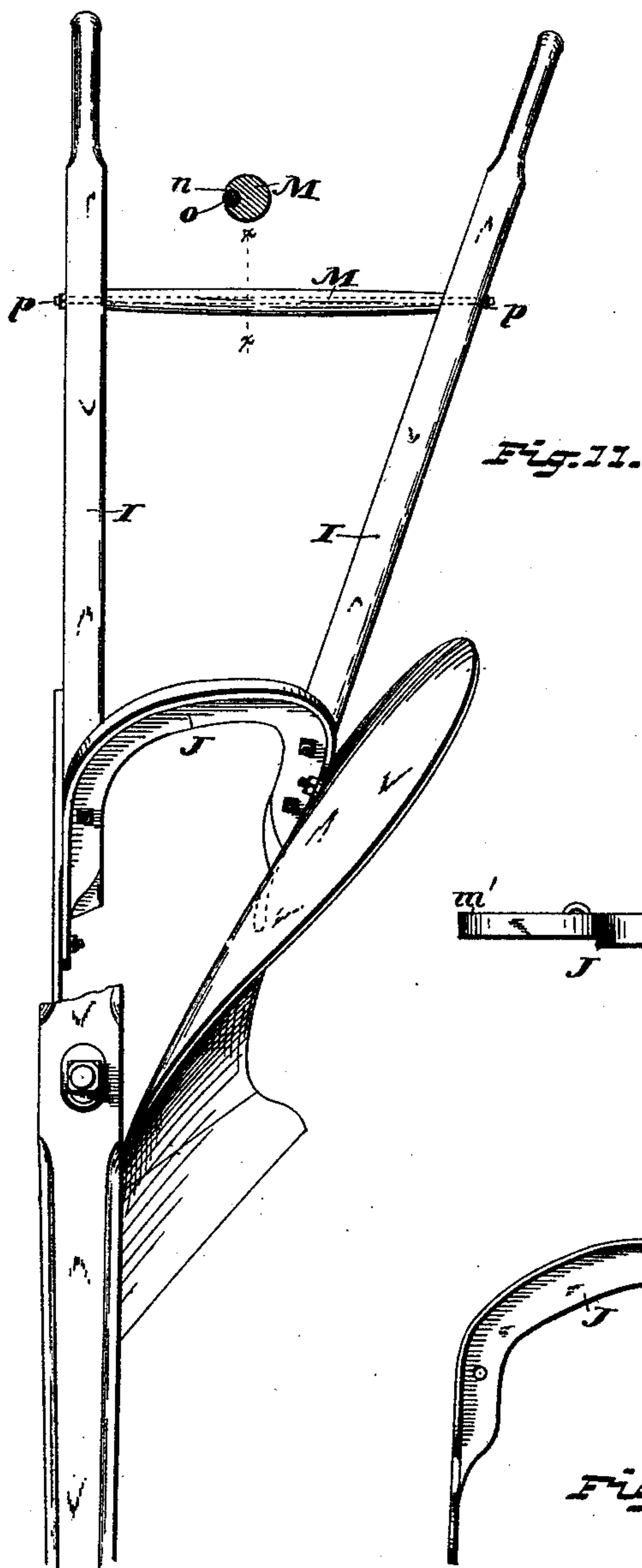
(No Model.)

2 Sheets—Sheet 2.

O. A. ESSIG.
PLOW.

No. 415,244.

Patented Nov. 19, 1889.



Witnesses
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E. S. Smith

Inventor
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UNITED STATES PATENT OFFICE.

OZIA A. ESSIG, OF CANTON, OHIO.

PLOW.

SPECIFICATION forming part of Letters Patent No. 415,244, dated November 19, 1889.

Application filed February 21, 1889. Serial No. 300,734. (No model.)

To all whom it may concern:

Be it known that I, OZIA A. ESSIG, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have
5 invented certain new and useful Improvements in Plows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this
10 specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is a side view looking toward the landside. Fig. 2 is a side view showing the beam and knee-cutter removed. Fig. 3 is a
15 detached view of the post or standard, showing the cutter removed. Fig. 4 is a detached view of the shin-cutter, showing the clamping-bolt. Fig. 5 is a detached view of the landside-heel. Fig. 6 are detached views of
20 the knee-cutter and key or wedge. Fig. 7 is a detached view of a portion of the knee-cutter. Fig. 8 is an end view of the landside-heel. Fig. 9 is a view showing the heel-socket. Fig. 10 is a transverse section through line x
25 x , Fig. 1. Fig. 11 is a top view showing brace properly located. Fig. 12 is a side view of the brace. Fig. 13 is a detached view of the brace.

The present invention has relation to plows; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the beam, which is constructed and attached in the ordinary manner.

The post or standard B is substantially of the form illustrated in the drawings, and is provided with the flange a , which forms a seat for the shin-cutter C.

The shin-cutter C is substantially of the form shown in the drawings, and is provided
45 with the groove b , which is for the purpose of receiving the front edge of the post or standard B. This shin-cutter C is also provided with the arm D, which enters the elongated slot d . The arm D is provided with the
50 L-shaped recess e , which is for the purpose of receiving the L-shaped end of the clamp-

ing-bolt f . Said clamping-bolt extends back between the lugs g , as illustrated by the dotted lines in Fig. 1. For the purpose of securely and firmly seating the shin-cutter C
55 against or on the standard B the screw-threaded nut g' is provided.

The landside-heel E is substantially of the form shown in the drawings and is located substantially as illustrated in Fig. 1. This landside-heel is provided with the extension F,
60 which is for the purpose of providing a means for attaching the heel to the landside proper by means of a suitable clamping-bolt. The front or forward end of the landside-heel E is provided with the lip h , which enters the socket
65 h' . This lip is located upon the inner side of the landside-heel, and is so formed that it will securely hold the front or forward end of said heel in proper position by means of the
70 socket h' . It will be seen that as this heel is made separate from the landside that a new one can be easily attached when the original heel has become worn out from use.

The knee-cutter G is substantially of the form shown in the drawings, and is securely
75 attached to the post or standard B by means of the clamping-bolt i , the key or wedge k , and the lug k' . In use the lug k' is entered in the aperture k^2 , and the key or wedge
80 k placed in the position shown in Fig. 1, when the clamping-bolt i is placed through the knee-cutter G, the key or wedge k , and the post or standard B, when the key or wedge is driven forward, thereby securely seating
85 said knee-cutter into a recess in the shear H. It will be seen that by providing the inclined flange l , and placing the key or wedge upon the top or upper side of said inclined flange,
90 as said key is driven forward it will slightly elevate the rear end of the knee-cutter and at the same time depress the front or forward end of said knee-cutter. For the purpose of preventing the key or wedge from becoming detached the slot m is provided.

For the purpose of securely and firmly
95 bracing the handles I the brace J is provided, said brace being bent or curved substantially as illustrated in the drawings. This brace is provided with the flange m' , which is for the
100 purpose of providing a means for seating the mold-board and landside to said brace. This

flange m' is bent or curved to correspond with the curvature of the mold-board. For the purpose of securely attaching the rung M to the handles the groove n is provided and is located as illustrated in Fig. 11. This groove is for the purpose of receiving the rod o . Said rod passes through the handles and is provided at its ends with the nuts p . It will be seen that by placing the rod o as illustrated the rung M will be securely held in position, and at the same time will be out of the way and at the same time present a continuous circle. The lip h is provided at its front end with the inclined shoulder h^2 , which abuts against the inclined shoulder h^3 , thereby securely holding the front end of the heel to the proper position. It will be seen that by this peculiar manner of attaching the heel to the landside no rivet or bolt is required to hold the front end of the heel.

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

1. The combination of the post or standard B, provided with the flange a , having the slot d , the shin-cutter C, provided with the groove b , and the arm D, provided with the L-shaped recess e , the clamping-bolt f , provided with the L-shaped head, and the lugs g , substantially as and for the purpose specified.

2. The combination of the post or standard B, provided with the aperture k^2 , adapted to receive and hold the lug k' , the key or wedge k , provided with the elongated slot m , and the inclined flange located upon the post or standard and adapted to elevate the key or wedge k and the rear end of the knee-cutter G, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

OZIA A. ESSIG.

Witnesses:

E. A. C. SMITH,
ELI ADLER.