

E. G. Matthews,

Plow.

No. 87,420.

Patented Mar. 2, 1869.

Fig. 1.

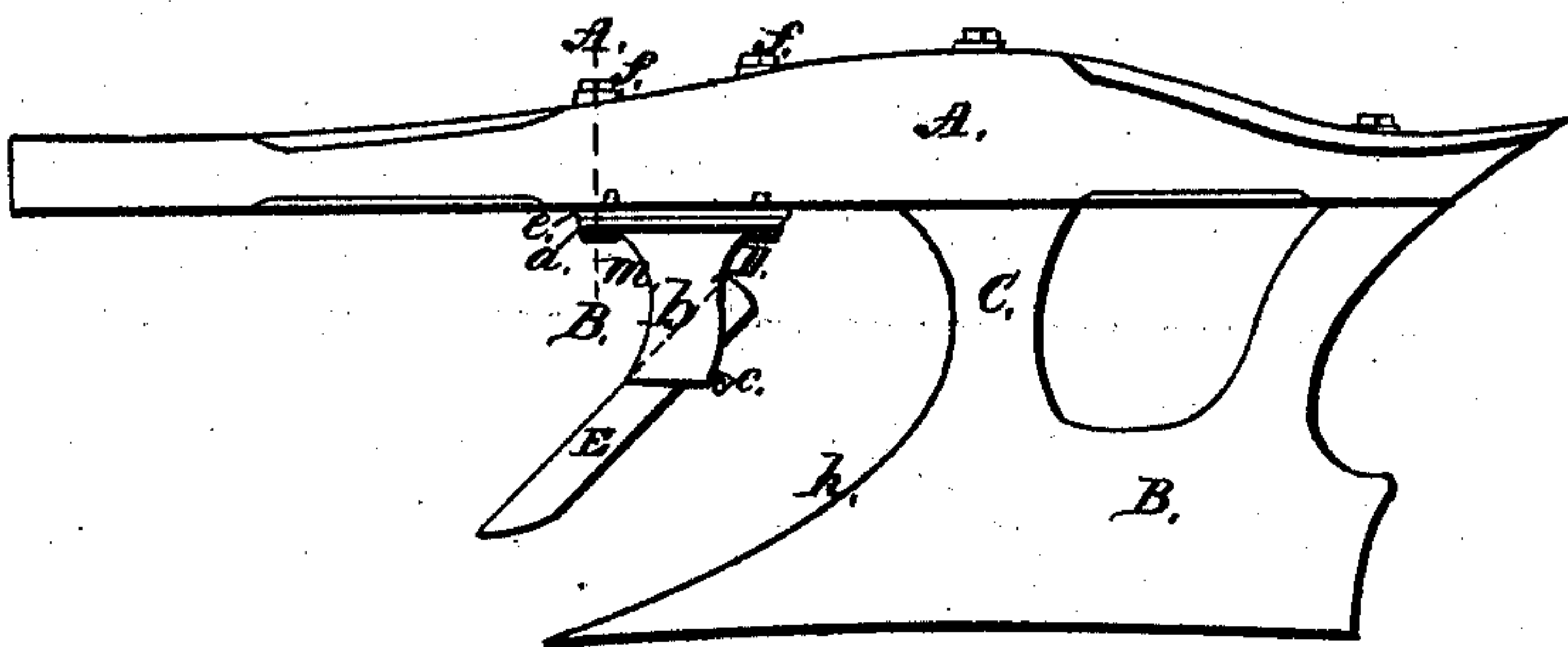


Fig. 2.

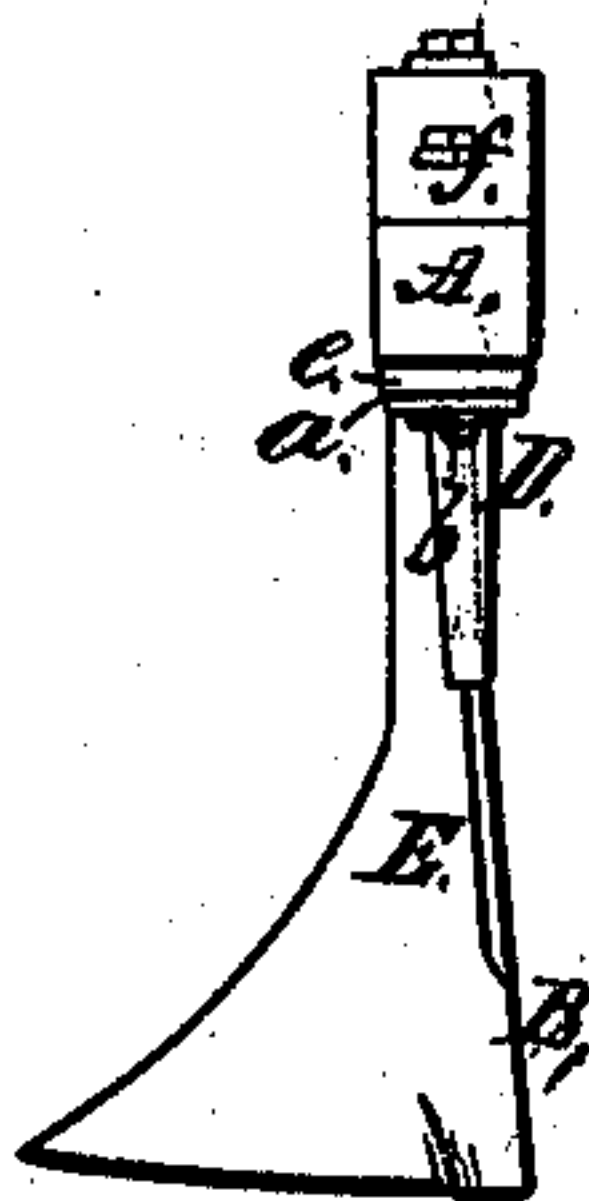
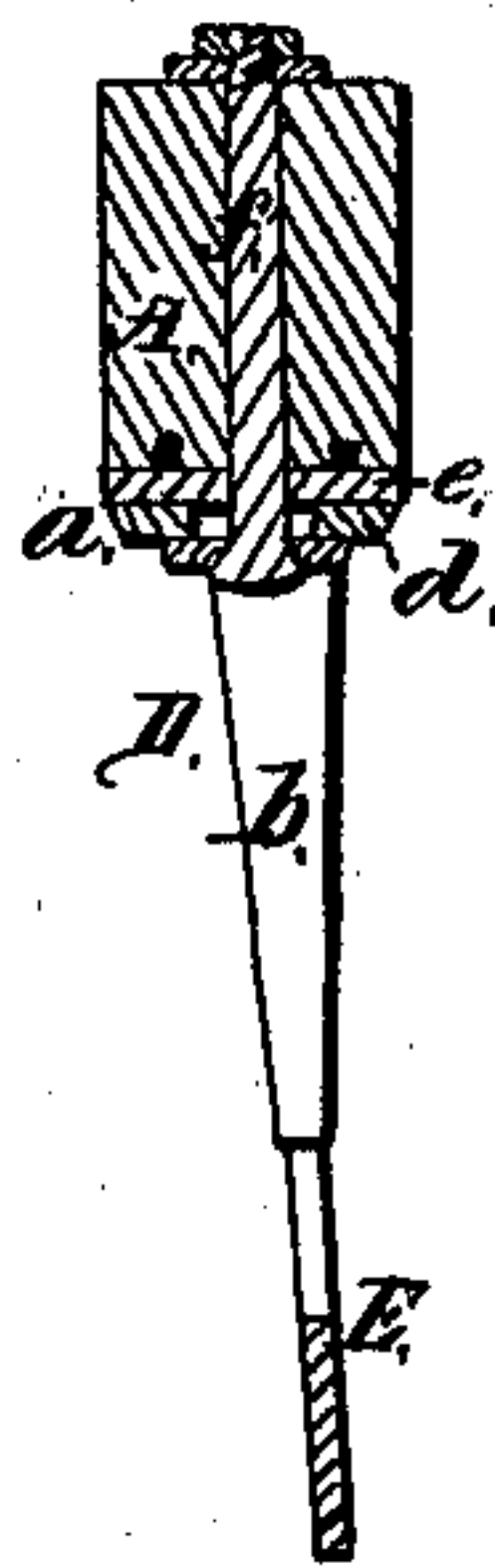


Fig. 3.



Witnesses:

Thos. H. Dodge

Geo. H. Miller

Inventor:

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E. G. MATTHEWS, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO F. F. HOLBROOK.

Letters Patent No. 87,420, dated March 2, 1869.

IMPROVEMENT IN PLOWS.

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

Know all men by these presents:

That I, E. G. MATTHEWS, of Newton, in the county of Middlesex, and Commonwealth of Massachusetts, have 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 accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side view of my improvement in plows;

Figure 2 represents a front view of the same; and

Figure 3 represents a transverse section on line A B, fig. 1.

To enable those skilled in the art to which my invention belongs, to make and use the same, I will proceed to describe it more in detail.

The nature of my invention consists—

First, in the combination, with the beam of the plow, of a cutter-stock, for holding the cutter, whereby the cutter is always retained in line with the landside of the plow, when adjusted at different positions, substantially as hereafter described.

Second, in the combination, with the plow-beam and cutter-stock, of an intermediate shield or guard-plate, as hereafter explained.

In the drawings, the part marked A is the beam of the plow, B, the landside, and C, the standard, constructed in the usual manner.

At the under side of the beam A, forward of the standard C, is arranged a metallic cutter-stock, D, for holding the sward-cutter E.

The stock D is formed with a plate, *a*, in the central part of which is a curved arm, *b*, that projects downward, and has, at its lower end, a mortise or slot, into which the shank of the sward-cutter E is inserted, and there retained by a set-screw, *c*; or it may be secured in place by a key, or in any other suitable manner, if preferred.

At each end of the plate *a* is formed a transverse slot, *d*, through which bolts *f* pass upward, through the beam A, and by means of which the cutter-stock D is secured thereto.

An intermediate metallic shield or guard-plate, *e*, is placed between the plate *a* of the cutter-stock and the beam A, when a wooden beam is used, to prevent injury to the wood, while adjusting the stock.

It is furnished with dowel-pins, that set into the

wood of the beam, for the purpose of holding it in place.

The cutter-stock D may be adjusted laterally, by means of the slots, *d*, in the ends of the plate *a*.

The sward-cutter E is placed directly in line with the landside, B, of the plow, and the mortise in the stock is so arranged that the cutter can be adjusted up or down, without throwing it out of line with the landside B.

The usual way of attaching the sward-cutter is either to clasp it to the side of the plow-beam, or to mortise through the beam, for the purpose of inserting the shank of the cutter, in both of which cases the lower part of the cutter has to be bent, to bring it into line with the landside of the plow, and, when adjusted up or down, it is thrown more or less out of such line, thus rendering the action of the plow imperfect, while, at the same time, increasing the draught of the same, since the shin *h* of the plow does not then follow in the incision made by the sward-cutter.

Then, again, by my improvement, the parts can be more conveniently manufactured, and adjusted in place, while, at the same time, the cutter can be made of much thinner piece of steel, thus saving metal, and also requiring less power to force the cutter through the sward.

The front part of the arm *b* of the cutter-stock D is made with a curve, as shown at *m*, which prevents clogging of the cutters, thus obviating the objections, in this respect, incident to the common mode of attaching the ordinary cutters to the beam.

Having described my improvements in plows,

What I claim therein as new, and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the under side of the plow-beam A, of a slotted stock, D, for supporting the sward-cutter E, substantially as described.

2. The combination, with the stock D and beam A, of the intermediate guard-plate *e*, substantially as and for the purposes set forth.

3. The combination and relative arrangement of the parts marked A, C, D, E, and *e*, as shown and described.

E. G. MATTHEWS.

Witnesses:

THOS. H. DODGE,
GEO. H. MILLER.