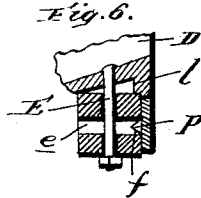
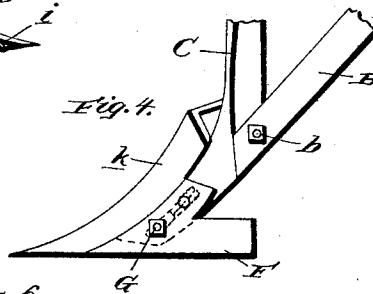
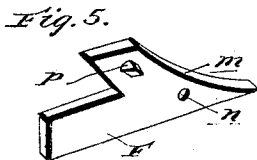
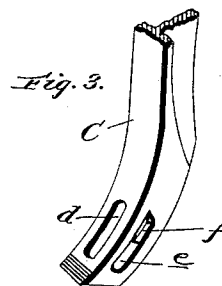
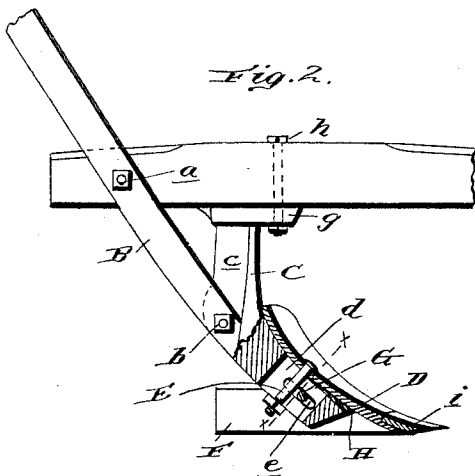
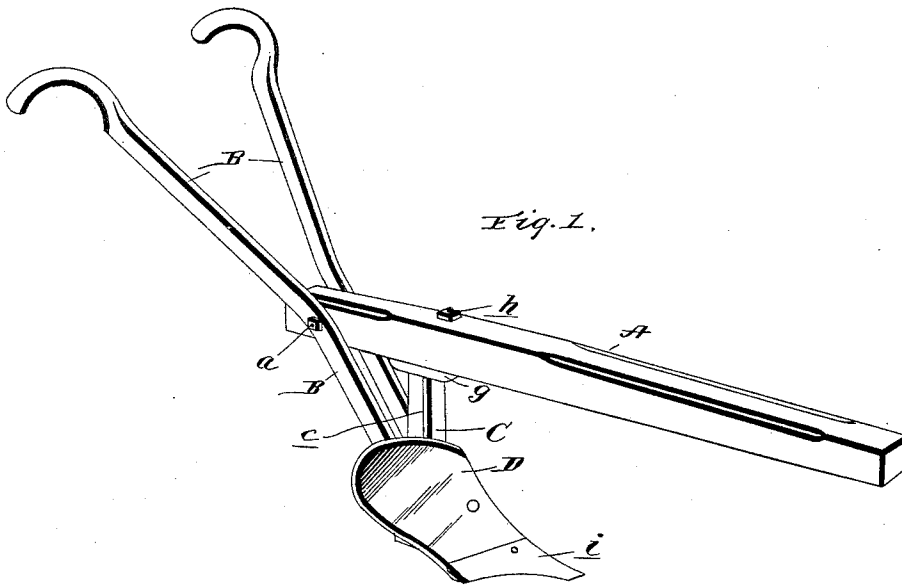


(No Model.)

M. B. SMITH.  
PLOW.

No. 462,780.

Patented Nov. 10, 1891.



Witnesses:  
*C. H. Raeder*  
*N. D. Matthews*

Inventor  
*Matthew B. Smith*  
*James J. Shuey*  
Attorney

# UNITED STATES PATENT OFFICE.

MATTHEW B. SMITH, OF TUSCALOOSA, ALABAMA.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 462,780, dated November 10, 1891.

Application filed May 18, 1891. Serial No. 393,186. (No model.)

*To all whom it may concern:*

Be it known that I, MATTHEW B. SMITH, a citizen of the United States, residing at Tuscaloosa, in the county of Tuscaloosa and State of Alabama, have invented certain new and useful Improvements in Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to an improvement in plows; and it has for its object, together with durability and cheapness of manufacture, to provide a plow which will run a uniform depth and may be adjusted for any depth desired, the parts being so arranged with respect to each other as to make the plow balance and thereby lessen the draft and afford the plowman full control at all times. The invention will be fully understood from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of my improved plow, looking from the furrow side. Fig. 2 is a view of the rear portion of the plow, with parts of the handle and beam broken away and the standard and mold-board and also the point in section. Fig. 3 is a perspective view of the lower part of the standard. Fig. 4 is a side elevation looking from the land side, with the beam, handles, and a part of the standard broken away. Fig. 5 is a perspective view of the shoe removed. Fig. 6 is a sectional detail view taken in the plane indicated by the dotted line *xx* on Fig. 2; and Fig. 7 is a perspective view of a wedge, such as may be used in adjusting the point and mold-board horizontally.

Referring by letter to the accompanying drawings, A indicates the beam, which may be made of wood or other suitable material.

B indicates the handles, and C the standard. The handles are of a length about equal to the length of the beam. These handles diverge upwardly and rearwardly, so as to permit the plowman to come between them, and are secured to the rear end of the beam by a bolt *a*, as shown, and their lower ends extend obliquely downward from said beam and are secured to the lower end of the straight portion of the standard, which is preferably re-

cessed by a bolt *b* and nut or other suitable fastening device.

The standard C, which is preferably formed of cast-iron, is of a curvilinear form and has its vertical rear portion reduced or recessed at *c*, in which the lower ends of the handles are secured, and the opposite side or face is broadened, as better shown in Fig. 3, and slopes or curves downwardly, as shown. The lower end of this standard is provided in its face with an elongated slot *d*, which passes entirely through the standard, and this slot is intersected by a laterally-disposed slot *e*, which is usually of less length than the slot *d*. The slot *e* passes through the standard at right angles to the slot *d* and on one side of the standard, and merging into the slot *e*, is a recess *f* to receive a lug on the shoe, for a purpose which will be presently explained. I have shown the standard as provided at its upper end with a horizontal plate or flange *g* and secured to the beam by a vertical bolt *h*, although it is obvious that other means might be employed for effecting such connection.

D indicates the shovel or mold-board carrying a point *i*. This mold-board is provided on its land side with a rearwardly-disposed flange *k*, which is designed to overlap the forward edge of the landside of the standard, as better shown in Fig. 6, to serve as a guide in adjusting the mold-board and point and also assist in relieving the securing-bolts from undue lateral strain. The rear side of the mold-board and also the point is provided with a step or shoulder *l*, which is designed to bear upon the face of the standard, and while allowing the mold-board and point a firm seat or bearing will afford a space between the face of the standard and the rear side of said mold-board for the introduction of a wedge when it is desirable to adjust the mold-board horizontally. The mold-board and point are secured to the standard by means of a bolt *E*, which is headed in the mold-board and passes through the elongated slot in the face of the standard, being secured at the opposite end on the rear side of the standard by a nut, as shown.

F indicates a shoe, which is of a form substantially as shown in Fig. 5 of the drawings. This shoe has its forward edge curved, as shown at *m*, to bear against the rear edge of

the overlapping flange *k* of the mold-board, and is provided with a transverse aperture *n*, which coincides with the slot *e* of the standard, so as to receive through the latter a bolt *G* for the adjustable attachment of said shoe. The shoe is also provided on its inner side with a lug *p*, which is designed to enter the recess *f* in one side of the standard, so that it may be guided properly while being adjusted.

In operation when it is desirable to adjust the mold-board and point, it is simply necessary to loosen the nut on the bolt *E* when the point and mold-board may be moved to the desired vertical position and by again tightening the nut they may be firmly secured. The shoe may be correspondingly adjusted by loosening the nut on the bolt *G*. To adjust the mold-board horizontally the nut on the bolt *E* should first be loosened, when a wedge, such as *H*, may be driven up between the face of the standard and the rear side of the mold-board.

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

1. In a plow, the combination, with the standard having an elongated longitudinally-disposed slot, an elongated laterally-disposed slot intersecting the longitudinally-disposed slot, and a recess *f* in one side of the standard

merging into the laterally-disposed slot, of the mold-board or blade, a bolt taking through the mold-board and through the longitudinally-disposed slot in the standard, the shoe having the lug on the inner side adapted to engage the recess *f* in the standard, and a bolt taking through the shoe and the laterally-disposed slot of the standard and adapted to adjustably secure said shoe to said standard, substantially as and for the purpose set forth.

2. In a plow, the combination, with the standard having an elongated longitudinally-disposed slot in its face and also a laterally-disposed slot intersecting the longitudinally-disposed slot, of the blade or mold-board having a rearwardly-extending flange on its land-side and a corresponding shoulder on the inner side of said flange, a bolt for securing the blade or mold-board in the face-slot of the standard, the adjustable shoe, and a bolt securing the shoe in the lateral slot of the standard, the mold-board or blade being adapted to receive a wedge beneath it, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

MATTHEW B. SMITH.

Witnesses:

H. P. WALKER,  
W. C. HOOD.