G. S. HAVEN.
Plow.

No. 202,817. Patented April 23, 1878.

Fig. 1.

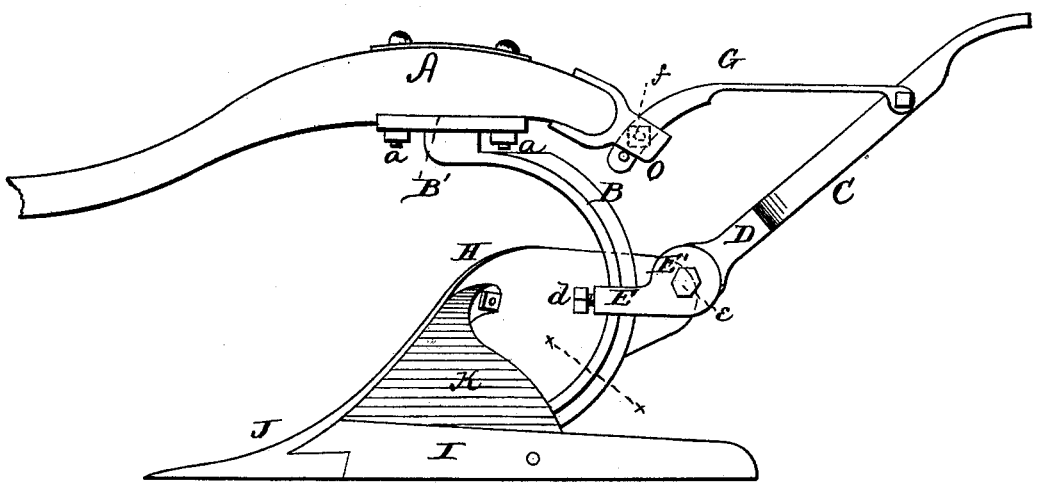


Fig. 3.

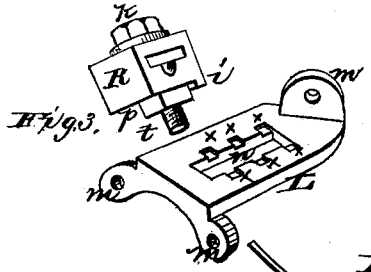


Fig. 4.

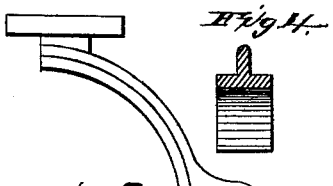


Fig. 5.

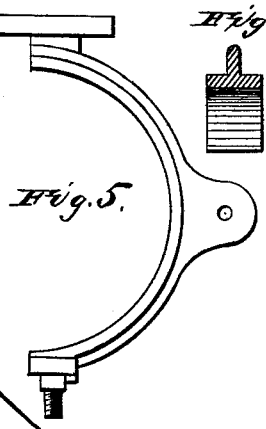
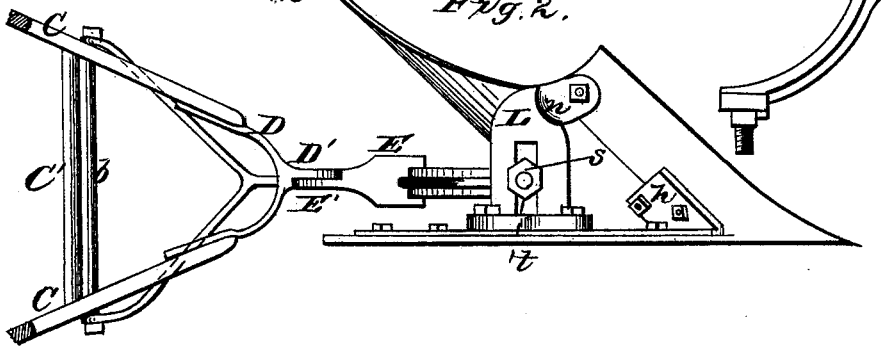


Fig. 2.



WITNESSES

F. L. Emrand.

INVENTOR

George B. Haven

Alexander Mason

ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE S. HAVEN, OF RACINE, WISCONSIN.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **202,817**, dated April 23, 1878; application filed February 16, 1878.

To all whom it may concern:

Be it known that I, GEORGE S. HAVEN, of Racine, in the county of Racine, and in the State of Wisconsin, 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, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a plow, as will be hereinafter more 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 drawing, in which—

Figure 1 is a side elevation of my plow. Fig. 2 is a bottom view of the same. Fig. 3 shows a brace to go between the mold-board and land-side, with a slide-piece to go therein. Fig. 4 is a cross-section of the standard, and Fig. 5 shows a modification in the construction of the standard.

A represents the plow-beam, to which the standard B is secured. This standard is made of iron, substantially in the form of ordinary T-iron, and curved in nearly semicircular form, its upper end being formed with a head, B′, which is secured to the under side of the beam by bolts *a a*, as shown.

The object of making the standard in semicircular form is to keep it well back, so that weeds, &c., will not gather in it and clog the plow.

C C are the handles of the plow, connected together by a round, C′, and a rod, *b*, immediately below said round. The lower ends of the handles are fastened to a forked metal piece, D, which forms a circular plate, D′.

On the standard B is slipped a clip or slide, E, which fits the same, and may be adjusted to any point thereon desired, and held by means of a set-screw, *d*. This clip or slide E forms a circular plate, E′, to which the plate D′ is pivoted by means of a bolt and nut, *e*.

On the ends of the rod *b*, outside (or inside) of the handles, are pivoted the ends of a forked brace, G, the center piece of which passes through a slot in a forked casting, O, secured on the rear end of the beam A. The brace G is held in this casting by means of a set-screw, *f*.

It will readily be seen that by these devices the handles can be raised and lowered, and otherwise adjusted in any suitable manner. The handles are entirely separated from the plow proper, and yet have their connection sufficiently far downward to render the plow easily manipulated by the plowman.

The plow consists, as usual, of a mold-board, H, land-side I, and share J, constructed in any of the known and usual ways. To the inner side of the land-side I is attached a solid metal frame, K, provided with suitable lugs or wings *h h*, to which the mold-board and share are fastened by bolts. The frame K extends upward above the land-side along the inner edge of the mold-board, and is curved inward, whereby it prevents the dirt from falling over the land-side and filling up the inside of the plow.

L represents a slotted brace, provided at its ends with lugs or wings *m m*, for attaching the same in a horizontal position at one end to the mold-board and share, and at the other end to the frame K. In the upper face of this brace L, in the edges of the slot *n* therein, are made notches *x x*, as shown in Fig. 3.

On the lower end of the standard B is, by means of a set-screw, *k*, secured a clip, R, which has upon its under side a flange, *p*, of suitable size to fit in the slot *n* of the brace L, and allow the said clip to move laterally therein, but not back and forth. On the under side of this clip R is also a tooth, *i*, to enter either of the notches *x*, and prevent the plow from slipping sidewise.

A bolt, *t*, projects downward from the clip below the brace, and a nut, *s*, screwed upon the end thereof, secures the plow firmly to the standard.

It will, of course, be understood that the beam can, by these means, be adjusted laterally to the best position for work, and there held firmly in position.

In Fig. 5 I have shown a modification of the standard when the parts E′ and R are formed in one piece with the standard.

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

1. The combination, with the plow H I J, of the brace L, having slot *n* and notches *x*, the standard B, clip R, fastened to the standard with a set-screw, *k*, and provided with the flange *p*, tooth *i*, and bolt *t*, and the nut *s*, substantially as and for the purposes herein set forth.

2. The combination, with a plow-beam, A, of the slotted casting O, handles C C, with rod *b*, the forked brace G, and set-screw *f*, for the purposes set forth.

3. The combination, with the handles C C, of the standard B, clip E, with plate E′ and set-screw *d*, the forked iron D, with plate D′, and the bolt *e*, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of January, 1878.

GEO. S. HAVEN.

Witnesses:
JOHN R. JONES,
JOHN H. PALMETER.