M. & S. J. MIMS.

Shovel-Plow.

No. 2,399. Patented Dec 23. 1841.

Fig. 2.

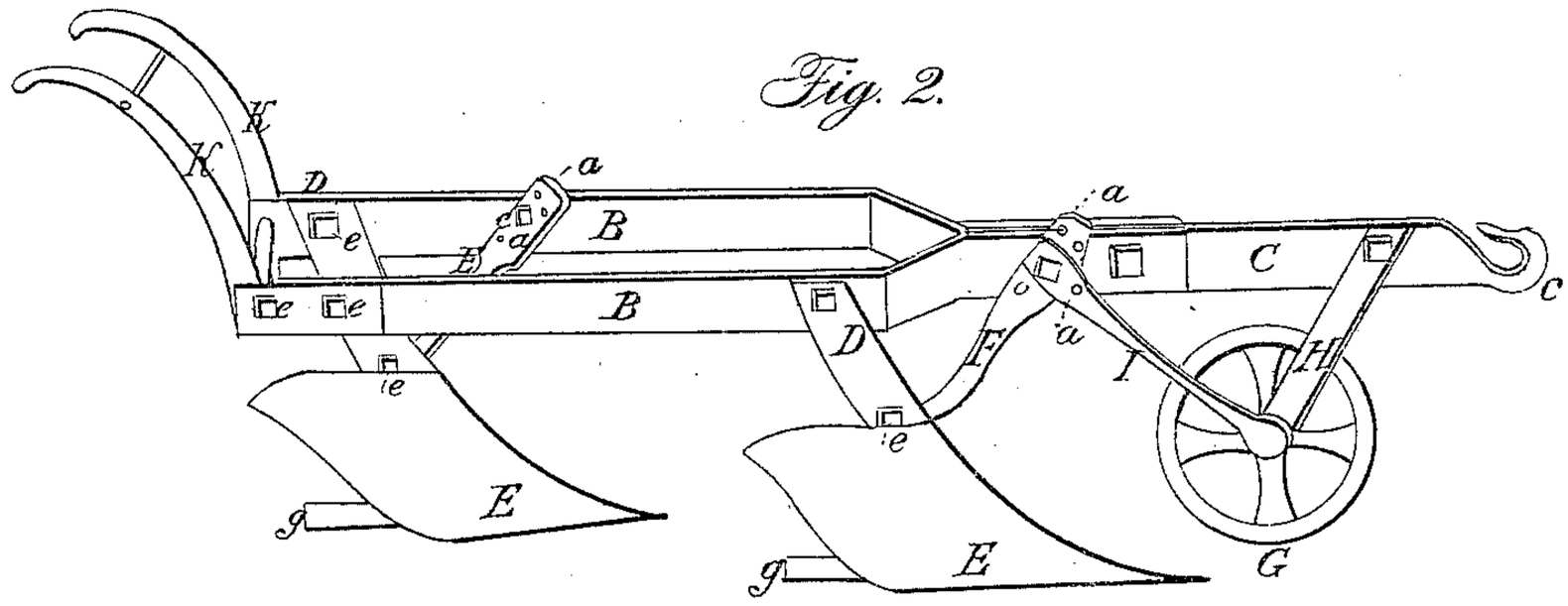


Fig. 3.

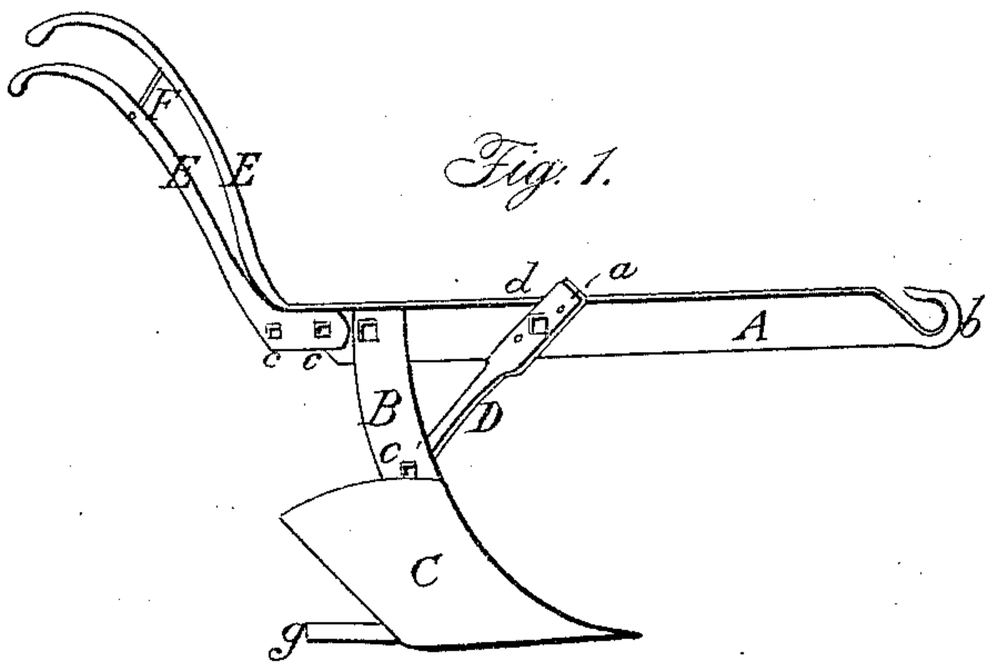


Fig. 1.

Fig. 9.

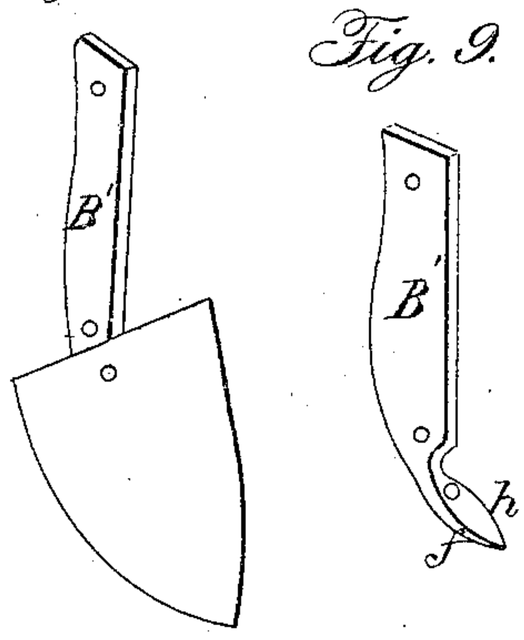


Fig. 5

Fig. 6.

Fig. 4.

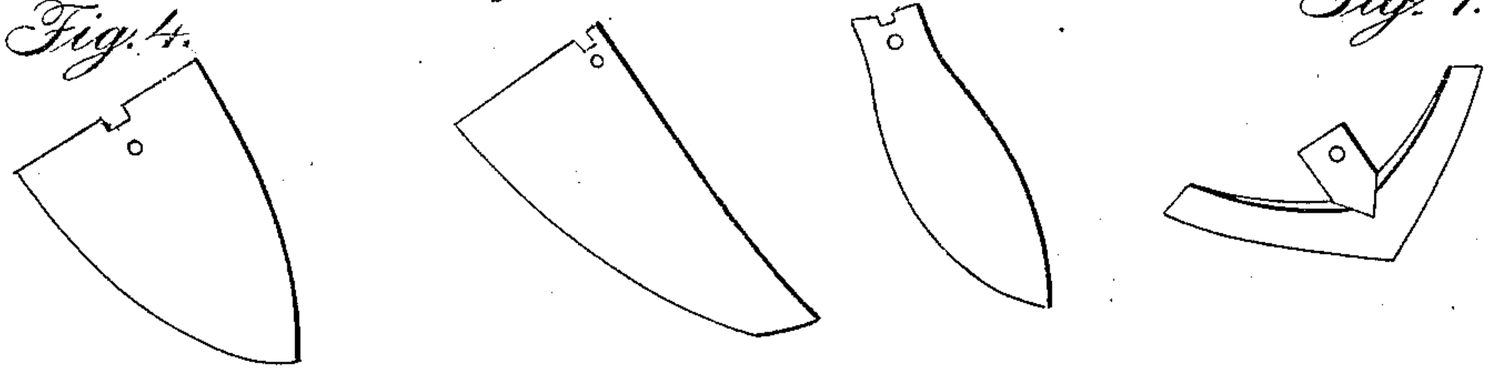
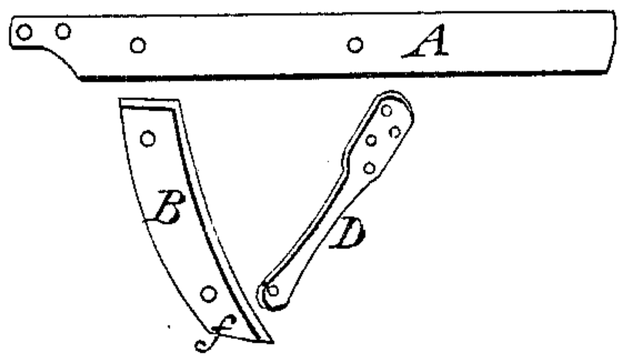


Fig. 7.

Fig. 8.



Inventor:

Marshal & S. J. Mims

UNITED STATES PATENT OFFICE.

MARSHAL MIMS AND S. J. MIMS, OF STARKVILLE, MISSISSIPPI.

IMPROVEMENT IN THE CONSTRUCTION OF PLOWS FOR ALTERING THE SET OF THE SAME.

Specification forming part of Letters Patent No. **2,399,** dated December 23, 1841.

To all whom it may concern:

Be it known that we, MARSHAL MIMS and SEABORN J. MIMS, of Starkville, in the county of Oktibbeha and State of Mississippi, have invented a new and useful Improvement in Plows, which, as improved by us, we denominate the "Single Wrought-Iron Plow;" and we do hereby declare that the following is a full and exact description thereof.

This plow we form entirely of wrought iron; and it consists in general of six principal pieces, the nuts and screws for fastening the same together not being taken into the account.

In the accompanying drawings, Figure 1 represents one of our improved single plows; and Fig. 2, a double plow constructed on the same principle as Fig. 1, but containing necessarily a larger number of pieces of metal.

In Fig. 1, A is a bar of iron constituting the beam. This may be three feet four inches long, two inches and a half wide, and five-eighths of an inch thick. At its fore end it has a hook, *b*, formed upon it, which answers all the purposes of a clevis.

E E are two pieces constituting the handles, and these are attached to the beam by screws *c c*. These handles should be about three feet in length, their general width about an inch and a quarter, and their thickness about three-eighths of an inch. The handles are made to rise from the beam in the manner shown in the drawings, and are bent into the proper shape, so as to be held and guided in a convenient manner, the parts by which they are held being about two feet ten inches from the ground. At about nine inches from their outer ends they are stayed, sixteen inches apart, by an iron rod, F. This rod may be three-eighths of an inch in diameter and attached to the handles by screw-nuts.

B is a bar of iron, which constitutes the helve, hoe-handle, or stem of the mold-board. It may be sixteen inches long, two and a quarter inches wide, and five-eighths of an inch thick. This piece is shown separately at B, Fig. 8. It has a hole near to its upper end, through which passes a bolt, *o*, by which it is secured to the beam at the distance of eight inches from its rear end. At its lower end, as at *f*, Fig. 8, it is so formed and curved as to adapt it to the receiving of a mold-board, as shown at C. This mold-board is in the form of that used in the Dagon plow, and to the lower side of it we attach a bar, *g*, which runs back horizontally to the distance of six inches from the lower end of the turn or curve of said mold-board. This bar forms what may be called the "heel." It may be two inches and a half wide and five-eighths of an inch thick.

The helve B may be removed with its mold-board, and may be replaced by another helve. (Shown in Fig. 9 and marked B′.) This latter helve differs from the former in the shape given to it at its lower end, *h*, by which it is adapted to the receiving of the various hoes, shovels, or mold-boards, which are occasionally used in preparing the ground, such as the shovel-hoe, Fig. 3; the shovel-plow hoe, Fig. 4; the half-shovel, Fig. 5; the bull-tongue or scooter, Fig. 6; or the sweep, Fig. 7, all of which are well known. These are to be furnished with bolt-holes adapted to a bolt-hole in the end *h* of the additional adjustable helve. (Shown in Figs. 3 and 9.

D is what we denominate the "adjustable brace." This consists of a bar of iron, which may be seventeen inches long, an inch and a half wide, and a fourth of an inch thick. Through this we usually make five holes, although this number may be varied. Four of these holes, as *a a*, are in its upper end, distributed over a length of four or five inches, and through either of these and a hole in the beam a bolt, *d*, is to pass, and another bolt, *c′*, through a hole in its lower end, and through the fifth hole in the helve B, at the distance of about eight inches from its upper end. The brace D runs obliquely backward and downward, and is attached to the beam at about eighteen inches from its forward end. By this arrangement the brace D may be raised or lowered at pleasure, and with it the mold-board C or whatever mold-board, hoe, or other instrument may be attached to the helve. The depth of the furrow may consequently be regulated without applying the back-band so far back as to oppress the animal by which the plow is drawn by bearing too heavily on its loins, the toe of the plow being made to point upward in any desired degree.

Our improvement in the adjustable brace and mold-board may be applied to a double wrought-iron plow as well as to that just described, with a single mold-board. In Fig. 2 we have shown a double plow of this kind. In this

plow the fore part of the beam C consists of a single bar with a hook, *c*, at its fore end. The hind part consists of two bars, each of which carries a mold-board, E E, attached to helves D D and regulated by adjustable braces F F, which have holes for that purpose at *a a*. The handles K K rise from the respective side pieces, B B, and the screw-nuts and bolts *e e* serve to confine the respective parts together. On the fore part of the double plow we use a wheel, G, which, as well as the mold-boards, may be regulated in its bearing by means of the arm H and the adjustable brace I.

Having thus fully described the nature of our improvements in the wrought-iron plow, what we claim therein as new, and desire to secure by Letters Patent, is—

1. The particular manner in which we have arranged and combined the helve, brace, and mold-board, so as to adjust the position of the latter by means of the adjustable brace D and the bolt *o*, and thus to determine the depth of the furrow in the manner described, whether applied to a single or a double plow, as set forth.

2. The adapting to the same plow any of the various kinds of hoes, shovels, or other instruments analogous in character and occasionally used in the place of mold-boards, such adaptation being effected by means of the adjustable brace and helve herein described.

MARSHAL MIMS.
SEABORN J. MIMS.

Witnesses:
ALEXANDER W. HINES,
DAVID AMES.