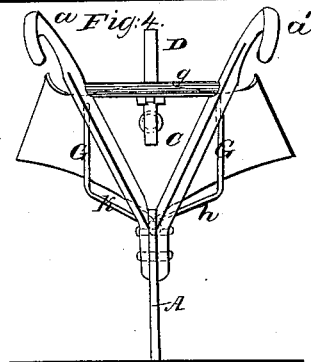
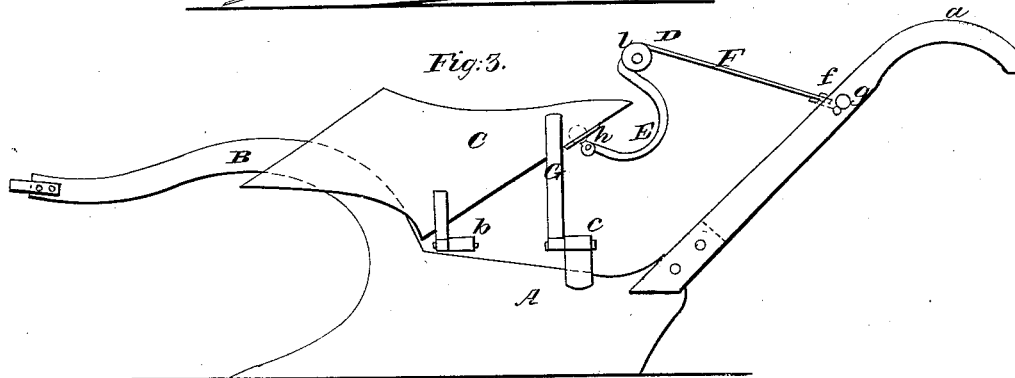
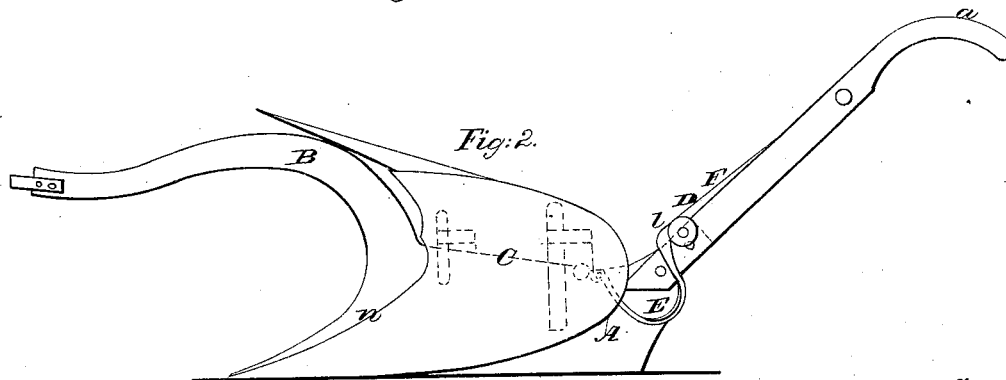
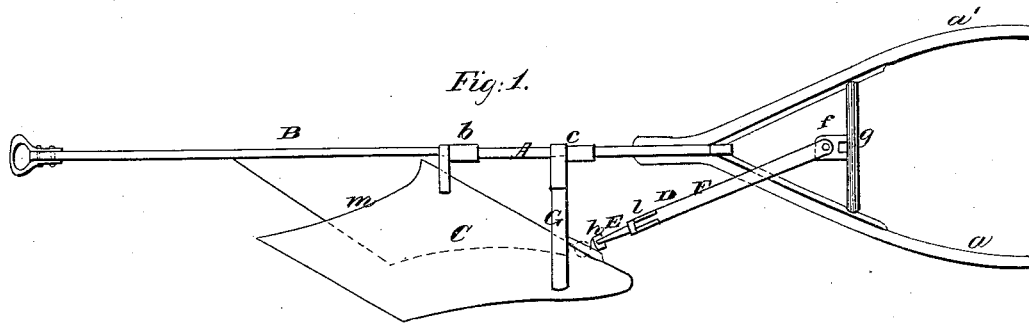


C. W. SYKES.  
Side-Hill Plow.

No. 50,749.

Patented Oct. 31, 1865.



Witnesses  
M. J. Shivers  
J. B. Gardner

Inventor  
Chester W. Sykes

# UNITED STATES PATENT OFFICE.

CHESTER W. SYKES, OF SUFFIELD, CONNECTICUT.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 50,749, dated October 31, 1865.

*To all whom it may concern:*

Be it known that I, CHESTER W. SYKES, of Suffield, Hartford county, State of Connecticut, have invented certain Improvements in Plows; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to letters of reference marked thereon.

In the drawings, Figure 1 is a plan view of my improved plow. Fig. 2 is a side view. Fig. 3 is another side view with the parts differently arranged. Fig. 4 is a rear end view of Fig. 3.

The object of this invention is to obtain a plow which may be readily and easily changed from a right to a left hand plow—that is, the mold-board may be on the right or left hand side in relation to the landside of the share. The advantages arising from such an arrangement are that the land is all turned in one direction, thus avoiding dead furrows, and also in the operation it can be used entirely on one side of the field, for on reaching the end of the furrow the mold-board may be turned to the other side of the share, and a new furrow be cut alongside the one just left. In this manner much time is saved usually occupied in going from one side of the field to the other.

I will now more particularly describe the construction and operation of my invention.

A is the share or land side of the share, formed in one piece with the beam B. To this part A the handles *a a'* are attached at the rear end. To the top of this share A, I hinge the double mold-board C, at *b* and *c*. This mold-board is of peculiar form, which I will hereinafter more fully describe.

D is a brace, attached by the joint *f* at its rear end to the piece *g*, between the handles *a a'*, and at its front end to the mold-board C by the ball-and-socket joint *h*. The part E of this brace is jointed to the ball *h* at one end and at the other is pivoted to the part F of the brace. The reason for making this part E in this form is that it may pass freely from side and not strike the rear end of the mold-board, as shown at Fig. 3, and also when the brace is brought down, as in Fig. 2, it forms a spring, which gives under pressure and allows the knee-joint *l* to be closed, thus straightening the brace and fastening the board in position for entering the furrow.

The upper part, G, of the hinge *c* is of peculiar shape, as shown in Fig. 4, and is formed in this way that when the mold-board is turned to either side the part *k* of this brace G may strike against the share A, and thus form a brace to keep out the rear end of the mold-board.

The operation of this invention is simple. It consists in unfastening the mold-board by raising the brace D, thus allowing the mold-board to be turned to the opposite side. This being done, the brace D is pressed down, fastening it there, as before mentioned.

In order to more easily enter the ground and more effectually turn over the ground raised by the share, I make the mold-board C of peculiar shape, as I before mentioned, which I will now describe. In shape it consists of a segment of the surface of a cone, and it is hung on the share A in such a manner that a center line, which would pass through the center of the base and the apex of the cone, if produced, is not horizontal, but inclines from the front to the rear, and in order to accomplish this I cut the front edge on an angle, as shown at *m*, Fig. 1, so that it may fit up to the share at *n*, which it would not otherwise do if hung in the manner described. The object of this is, as before mentioned, that the plow may more easily enter the ground, and also, by bringing the upper edge of the mold-board lower down, more completely turning the ground thrown up by the share.

I do not wish to confine myself to exactly the form of mold-board before described, but, if desirable, may use a cylindrical one instead of conical, similarly arranged.

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

1. In combination with the other parts of a plow, a mold-board hung on the top of a share in such a manner that it may be moved from side to side and fastened, substantially in the manner and for the purpose described.

2. The peculiar form of the mold-board C, substantially as herein set forth.

CHESTER W. SYKES.

Witnesses:

J. B. GARDINER,  
W. D. STEVENS.