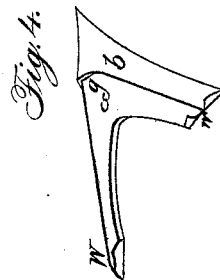
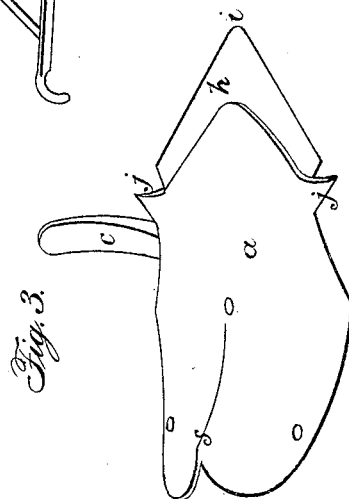
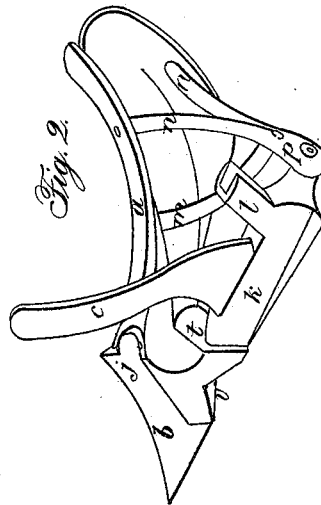
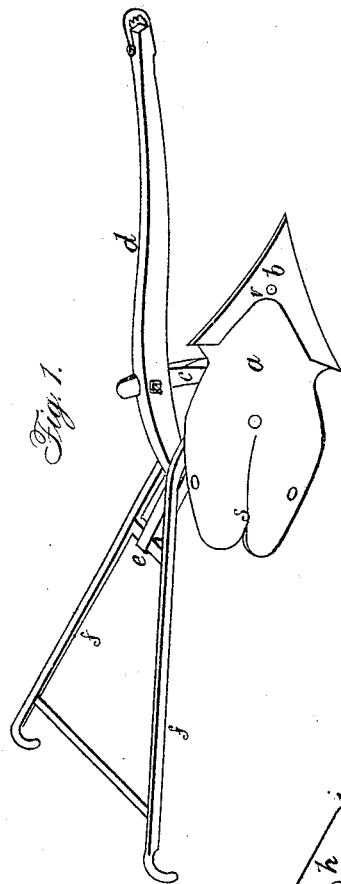


SMITH & GRISWOLD.

Side-Hill Plow.

No. 5,677.

Patented July 25, 1848.



# UNITED STATES PATENT OFFICE.

E. J. SMITH AND HORACE GRISWOLD, OF DELHI, NEW YORK.

## IMPROVEMENT IN HILLSIDE-PLOWS.

Specification forming part of Letters Patent No. 5,677, dated July 25, 1848.

*To all whom it may concern:*

Be it known that we, EDWIN J. SMITH and HORACE GRISWOLD, of Delhi, in the county of Delaware and State of New York, have invented a new and Improved Hillside-Plow; and we do hereby declare the following to be a full, clear, and exact description of the construction and operation thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a plow complete; Fig. 2, a perspective view of the metallic portion of the same detached from the wood-work, and Figs. 3 and 4 detached portions of the same.

Similar letters refer to corresponding parts in all the figures.

The improvements in our hillside-plow that distinguish it from all others are, first, the form of the mold-board. This is of such a shape that it will not only serve for hillside-plowing, but will turn over a furrow on flat land, and make a superior plow for all kinds of plowing.

Our second improvement consists in the peculiar manner of confining the share to the mold-board by means of projecting ears, point and socket, and a single bolt.

*a* is the mold-board. The after portion of the mold-board is divided into two faces by the sharp angle or projecting central edge, *s*, which projection serves to turn over the furrow when our plow is used on flat land.

*b* is the share of our improved plow, serving as a point, share, and colter. The share is secured to the mold-board as follows:

*h* is a recess on the front end of the mold-board for the reception of the share, terminating in the point *i*.

*jj* are ears projecting from the sides of the mold-board at the inner terminations of the sides of the recess *h*.

*g* is a socket on the under side of the forward part of the share. *ww* are ears projecting from the under side of the extremities of the branches of the share. The point *i* on the front end of the mold-board fits into the socket *g* on the under side of the share, and the ears *ww* on the share closely fit under the ears *jj* on the mold-board. The single bolt *v* then, in conjunction with the point *i*, socket *g*, and ears

*jj* and *ww*, holds the share securely in its place, as represented.

*t* is an offset descending from the under side of the front portion of the mold-board. An aperture in the rear side of the offset *t* receives a pivot on the front end of the landside *k* of the plow. The pivot on the rear end of the landside has its bearing in the arm *p*, which is connected to the under side of the mold-board by the branch levers *m* and *n*.

*l* is a socket, cast on the landside *k*, which receives the bottom of the wooden standard *e*. The sides of the socket extend to such a height as to prevent the friction of the earth from wearing away the standard.

*e* is a metallic standard, rising from and cast in one piece with the landside *k*.

*d* is the beam of the plow. The beam *d* is secured to the landside *k* by means of a tenon on its rear end secured in a mortise in the standard *e*, and by the metallic standard *c*, passing through a mortise in the beam, and being secured by a bolt. The handles *ff* are secured to the beam as represented in Fig. 1, or in any convenient manner.

The mold-board is shifted to opposite sides of the landside by elevating the beam and passing the mold-board under the same.

Having thus fully described the construction and operation of our improved hillside-plow, what we claim therein as new, and desire to secure by Letters Patent, is—

1. The central angle or projection, *s*, on the mold-board, dividing the after portion of the same into two faces for the purpose of turning over a furrow, and thereby adapting our hillside-plow to flat-land plowing, substantially as herein set forth.

2. The manner of confining the share *b* to the mold-board by means of the recess *h*, the point *i*, and the ears *jj* on the mold-board, the socket *g* and the ears *ww* on the share, combined with each other and with the bolt *v*, substantially in the manner herein set forth.

E. J. SMITH.  
HORACE GRISWOLD.

Witnesses:

JAMES H. WRIGHT,  
JOHN C. STODDART.