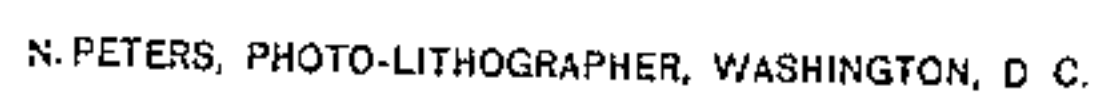


## Shovel-Plow.

Patented Dec. 21, 1852.



# UNITED STATES PATENT OFFICE.

WILLIAM A. GATES, OF MOUNT COMFORT, TENNESSEE.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 9,483, dated December 21, 1852.

*To all whom it may concern:*

Be it known that I, WILLIAM A. GATES, of Mount Comfort, in the county of Fayette and State of Tennessee, have invented a new and useful Improvement in Cotton-Cultivators, called "Gates's Cotton Scraper;" and I do hereby declare the following to be a full, clear, and exact description of the construction thereof, reference being had to the annexed drawings and letters of reference marked thereon, forming part of this specification, in which—

Figure 1 is a perspective view of a left-hand cultivator. Fig. 2 is a detached perspective view of the combined share and colter-plate or landside with the angle-irons for attachment and support of the mold-board. Fig. 3 is a front elevation, showing the mold-board, and edge view of the share and colter-plate or landside.

Where the same letters of reference occur on the several figures they indicate the same parts.

The handles *a* and beam *b* are of the usual construction.

The chief feature of novelty in my cotton-scraper consists in the combined plate *c d*, constituting the share and colter or landside. This plate is made of rhomboidal form, the edges whereof are slightly curved and chamfered on one side, so as to form cutting-edges. This plate is bent at its longest diagonal at an angle slightly greater than a right angle, as shown in Fig. 3, and each leaf thereof is furnished with three holes, *e e e*. The edges of the upright leaf *c* are indicated by 1 2, and those of the leaf *d*, which lies horizontal, by 3 4.

*f g h* is an iron brace, whose two upper limbs, *f g*, are inserted through eyes in the beam *b* and secured by screw-nuts *A A*. Its middle portion, *h*, and its two lower limbs, *i j*, are each perforated with a bolt-hole matching respectively to the three holes *e e e* in the leaf *c*, and in Fig. 1 this leaf *c* is represented as secured to this double bifurcated brace by screw-bolts passing through the three holes both in the brace and landside.

The leaf *d* is provided with three corresponding holes, *e e e*, which serve to receive bolts that secure angle-irons *k l*, by or through which

the mold-board *m* is secured to the share *d* by screw-bolts *n n*. These angle-irons are sufficiently strong to resist the pressure against the mold-board. *o* is a brace extending from the foot of the post *p*, that sustains the handles *a*, to the middle portion, *h*, of the double bifurcated brace, where it is fastened by one of the bolts aforesaid.

It will be seen that in the arrangement above described and shown in Fig. 1 the edges 1 and 3 come into service, the first as a colter or landside-edge and the second as the share-edge, with the mold-board *m* mounted upon the leaf *d*. When these edges 1 and 3 shall have been worn dull the mold-board *m*, with its angle-irons *k l*, is removed from the leaf *d* and the screw-bolts withdrawn from the openings *e e e*. The leaf *d* is then reversed, so as to bring it in the position of the leaf *c*, and secured, and the mold-board placed in its left-hand position on the leaf *c*. The edge 2 will be the working-edge of the share, and the edge 4 that of the colter-plate or landside. By this change the worn edge 1 in Fig. 1 will take the position of the edge 4.

Having thus described my improvement in the cotton-scraper, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The rhomboidal plate *c d*, bent on one of its diagonals and constructed and arranged, substantially as described, so that either leaf can be used as a landside or share at pleasure, the edges of the share becoming, when the plate is reversed, the edges of the landside and those of the landside the edges of the share, in the manner and for the purposes specified.

2. In combination with the plate *c d*, as described, the double bifurcated brace *f g h i j*, for attaching said plate to the beam, substantially as described.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

WM. A. GATES.

Witnesses:

WM. P. ELLIOT,  
LUND WASHINGTON.