

Cultivator.

Patented Dec. 18, 1860.



Inventor;
Isaac Miers
by Munn & Co
Attys

UNITED STATES PATENT OFFICE.

ISAAC MIERS, OF CLAY LICK, OHIO.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 30,926, dated December 18, 1860.

To all whom it may concern:

Be it known that I, ISAAC MIERS, of Clay Lick, in the county of Licking and State of Ohio, have invented a new and useful Improvement in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan or top view: Fig. 2 is a side elevation.

Similar letters of reference indicate corresponding parts in the both figures.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction, having reference to the drawings.

The shovels or plows E, F, and G are the same as those ordinarily used in cultivators, and are attached to the beams in the usual way.

The side beams, C and D, are suspended between the straps *a* and *a'* and *b* and *b'* by means of the several bolts *n*. Said straps cross at *a* and *b* above and *a'* and *b'* below the center beam, B, to which they are attached by the bolts *o*.

The adjusting-plate *d* is a semicircle, and is attached to the side beams, C and D, by the bolts *a''*, and is adjusted by means of the key *s*, which passes through the plate *v*, the semicircle *d*, and into the beam B. The plate *v* is fixed to the beam by the bolt *u*, which also holds the front shank of the center plow, G.

It will be seen that by removing the key *s* the semicircle is relieved, and either of the side beams may be moved forward, which of course

would carry the opposite one back, and thereby change the adjusting-plate *d*, so as to cause one of the orifices, *c* or *c'*, to register to the key-hole in the center beam, and the key *s* being replaced, the parts are firmly held in that position, the side beams always remaining parallel to the center beam.

By removing the bolts *o* one of the forward bolt *n*, and one of the bolts *a''*, and the key *s*, the side beams, C and D, plows E and F, the cross bars or straps *a* and *b* and *a'* and *b'*, and the adjusting-bar *d* may all be taken off, and a single plow used, which may be necessary in cultivating roots, &c., which are planted in drills or rows but a few inches apart; or, in such cases the three plows may be used in adjusting them to run one in each row.

The handles *h* are attached to the U-shaped piece in front, which is bolted to the beam B, and they are bolted near the other end to the standards *y*, which unite and pass through the beam B as one bolt, receiving a nut underneath. There are several holes, *e*, in the standard, which admit of the handles being raised or lowered, as may be desired, by the operator.

What I claim as new, and desire to secure by Letters Patent, is—

The arrangement of the longitudinally-adjustable side beams, C D, straps *a a' b b'*, and adjusting-plate *d* with the center beam, B, plows E F G, adjustable handles *h h*, and standards *y y*, all as herein shown and described, for the purposes set forth.

ISAAC MIERS.

Witnesses:

SAMUEL B. LAKE,
ASHFORD Z. HENSLEY.