

UNITED STATES PATENT OFFICE.

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CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 351,136, dated October 19, 1886.

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To all whom it may concern:

Be it known that I, WILLIAM JACKSON TANNER, a citizen of the United States, residing at Acworth, in the county of Cobb and State of Georgia, have invented a new and useful Improvement in Cultivators, of which the following is a specification.

My invention relates to an improvement in cultivators; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide the cultivator with means for adjusting the shovels or plows laterally, so as to cause the said shovels or plows to work at any desired distance apart, or with one almost immediately in rear of the other, thus adapting the device to be employed either as a single or as a double shovel cultivator.

In the drawings, Figure 1 is a side elevation of a cultivator embodying my improvements. Fig. 2 is a top plan view of the same. Fig. 3 is a detail vertical longitudinal sectional view, taken on the line *xx* of Fig. 2. Fig. 4 is a detail perspective view of one of the plow-feet and the connections.

A represents the beam, and B represents the handles, which are attached to the rear end of the beam in the usual manner.

C represents a pair of parallel bars or arms, which are attached to the under side of the beam by means of bolts D, which extend vertically through the said beam and through the centers of the said bars or arms.

E represents a longitudinal plate, which is secured on the ends of the bolts D and bears against the under sides of the bars C. The front end of the said plate extends forwardly a considerable distance from the front bolt, D, and through the beam, and through the front end of the plate E passes a vertical bolt, F. Nuts G are screwed onto the lower ends of the bolts D, so as to clamp the plate E against the lower side of the centers of the bars C, and a clamp-nut, H, is screwed onto the lower end of the bolt F, and bears against the under side of the front end of the plate E. In the outer ends of the bars C are made vertical openings C'.

I represents a pair of plow-feet, each of which is wrought or cast from a single piece of metal,

and is provided with a curved standard, K, and a horizontal bar or plate, L. In each of the said bars or plates, at the extremities thereof, are made vertical openings M. The standards K are provided with vertical slots N, and in the upper ends of the said slots are bolted the lower ends of braces O. A bolt, P, passes through an opening made in the rear end of each brace O, and through the opening in the rear end of each of the plates L, and also through the opening C' in the outer end of the rearward parallel bar C, thus pivoting the said plates L to the said bars, and also securing the rear upper end of the braces O firmly to the rear end of the said plates. A bolt, R, passes through the opening in the front end of each plate L, and also through the opening in the outer ends of the front bar C, thus pivoting the front ends of the plates L to the outer ends of the front bar C.

The plows or shovels S are attached to the front sides of the slotted standards by means of bolts which pass through the slots in the standards in the usual manner, as shown.

From the foregoing it will be understood that the bars C are free to turn on the under side of the plow-beam, so as to move the plows or shovels laterally and thus adapt them to work at any desired distance apart, thus adapting the cultivator to be used in cultivating rows of plants at any distance apart, and also adapting the cultivator to be used either as a single or as a double shovel cultivator. The arms C are secured at any desired adjustment by tightening the nuts G and H, and thus causing the plate E to bear firmly against the said arms, and thus clamp them rigidly to the under side of the plow-beam. In order to change the adjustment of the plows or shovels it is only necessary to first loosen the nuts G and H, when the bars C may be readily swung to any desired position.

By providing the plow-feet with the braces O great strength and durability is obtained.

Having thus described my invention, I claim—

1. The cultivator-frame comprising the beam, the parallel bars C, the clamping-plate E, the bolts extending through the plow-beam, the bars C, and the plate E, in combination with the plow-feet comprising the curved standards K, having the horizontal rearwardly-

extending arms or plates L, and the braces O, and the pivotal bolts connecting the plates or arms to the ends of the bars C.

2. The plow - feet comprising the curved
5 standard K, having the horizontal rearwardly-
extending arm or plate L, and the opening N
in the standard for the attachment of the shovel,
in combination with the brace O, having its
lower end bolted in the opening N above the

shovel, and its upper end connected to the rear
end of the arm or plate L by a bolt, as set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
presence of two witnesses.

WILLIAM JACKSON TANNER.

Witnesses:

JOHN D. WHITE,
CICERO C. WINN.