D. PATTEE.

Cultivator.

No. 5,639. Patented June 20, 1848.

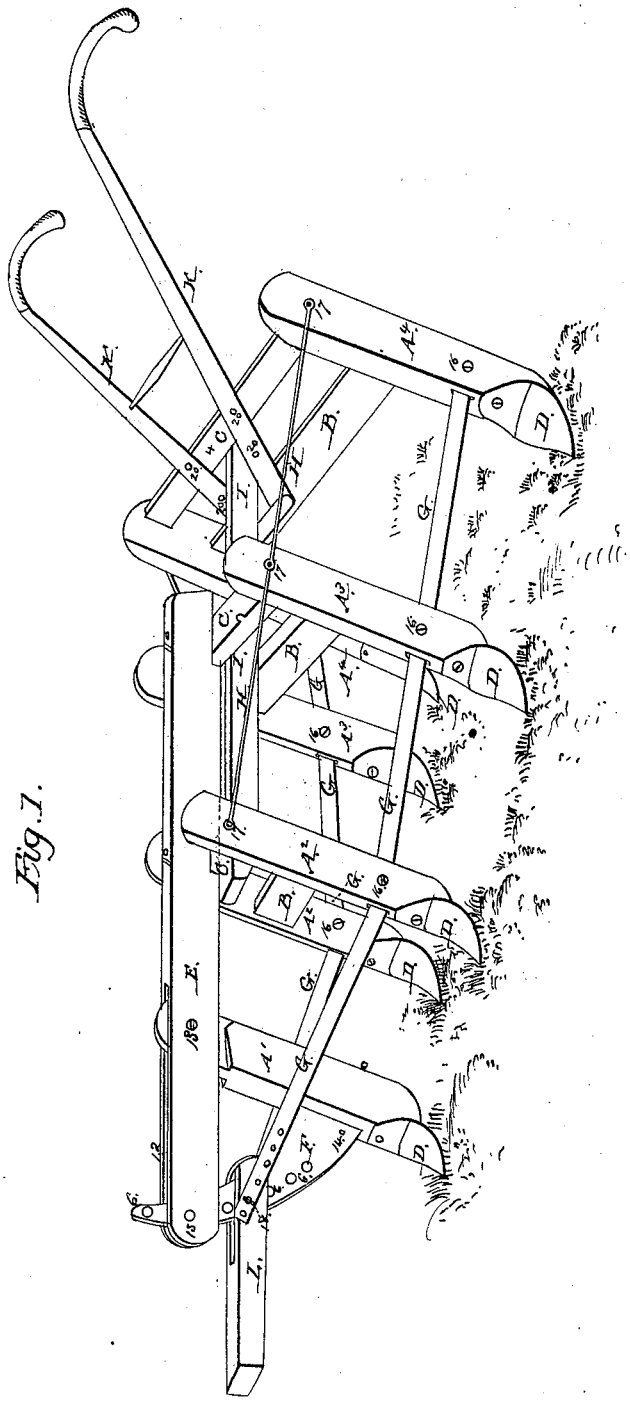

Fig. 1.

UNITED STATES PATENT OFFICE.

DUMMER PATTEE, OF YPSILANTI, MICHIGAN.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **5,639**, dated June 20, 1848.

To all whom it may concern:

Be it known that I, DUMMER PATTEE, of Ypsilanti, county of Washtenaw, and State of Michigan, have invented a new and useful Improvement in Cultivators, which is described as follows, reference being had to the annexed drawing of the same, making part of this specification.

Figure 1 is a perspective view of the cultivator.

E is the main or upper beam, having a slit, 12, in the forward end thereof, into which is inserted a tenon on the upper end of the front sheth, A′, through which a conecting-bolt, 13, is passed, and in which slit is inserted a perforated segment-plate, F, called the "regulator," let into the front sheth, A′, and secured thereto by a bolt, 14, passing through it and the sheth, having its upper end made curved and tapering where it passes through the slit 12, and provided with a segment row of holes, 6, through which and a corresponding hole in the beam E a confining-bolt, 15, is inserted for the purpose of changing the angle of inclination of the sheth A′ and of the other sheths.

A^2 A^3 A^4 are a first, second, and third pair of sheths, each pair being connected together by cross-timbers B C, and the several pairs connected together by train-irons G and connecting brace rods H. The beams B are mortised and tenoned into the sheths near the middle of the same. The beams C are connected to the sheths by round tenons inserted into corresponding apertures in the sheths near their upper ends. The sheths are caused to move on these round tenons in changing their inclination. The beams E and I are fastened to the beams C C C. The upper beam, E, is bolted to the upper sides of the beams C by the bolts 11 11. The under beam, I, is bolted to the under sides of the beams C C C. The shovels D are fastened to the lower ends of the sheths. The handles K K are fastened to the cross-timbers B C of the rear pair of sheths by the bolts 20. The tongue L is attached to the several pairs of sheths by the iron straps or train-irons G, through which and the tongue and regulator is inserted a connecting-bolt, 18, and through the sheths and train-irons the bolts 16.

The straps of iron, G, are made in pieces, lapped at their ends where they enter the mortises in the sheths, through which lapped ends and the sheths the bolts 16 are inserted. The brace-rods H are also made in separate pieces and lapped at their ends, and bolts passed through them into the round tenons of the timbers C. The sheths being thus connected to the main beam E by means of the combined train-irons G, regulator F, and bolts 15 and 18, will cause the several pairs of sheths A^2 A^3 A^4 to assume the same angle of inclination that is imparted to the front sheth. A′, and thus alter the depth of cultivation. The angle of inclination of the sheth from a vertical line will be increased by raising the small end of the regulator F, and will be diminished by lowering it, the sheths moving in the arcs of circles described from the centers of the bolts 13 and 17 as the regulator is moved in the arc of a circle in the slit 12.

The lower beam, I, is added for the purpose of extending the size of the cultivator by adding more pairs of sheths and shovels when required.

Angular braces may be added to the transverse beams, if required, to give additional strength to the cultivator.

What I claim as my invention, and desire to secure by Letters Patent, consists—

In the manner of attaching and regulating the front sheth, and, in combination therewith, the manner of regulating the depth of cultivation, as above set forth.

DUMMER PATTEE.

In presence of—
D. BETHUNE DUFFIELD,
E. HART,
THOS. J. HULBERT.