W. H. DICKEY.
Cultivator.

No. 208,576. Patented Oct. 1, 1878.

Fig. 2.

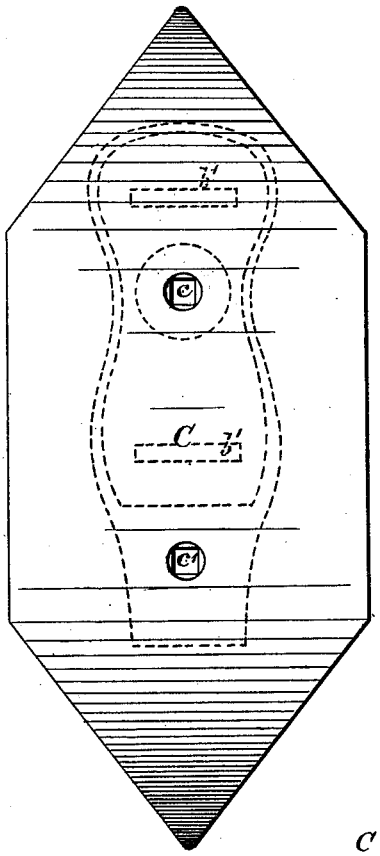
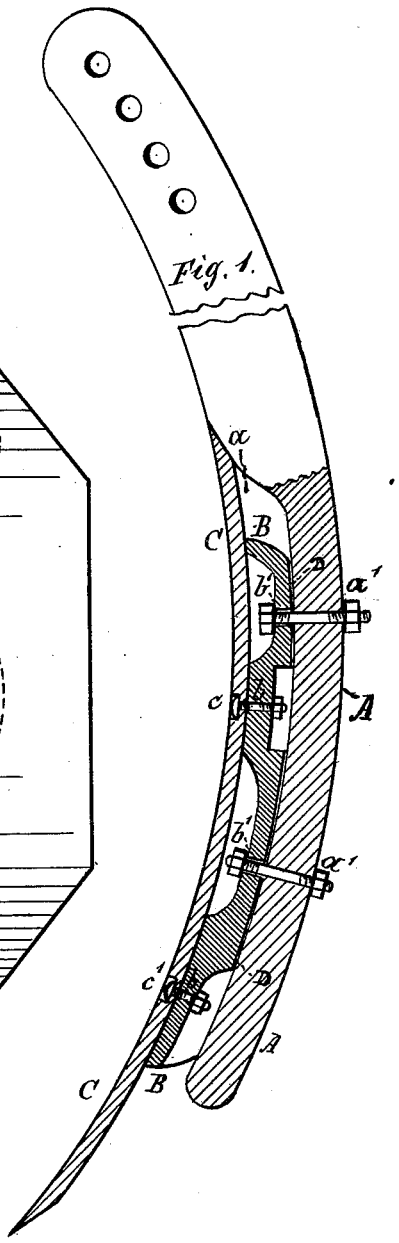


Fig. 1.



Witnesses
Henry Orth
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UNITED STATES PATENT OFFICE.

WILLIAM H. DICKEY, OF JACKSON, MICHIGAN.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. **208,576**, dated October 1, 1878; application filed August 2, 1878.

To all whom it may concern:

Be it known that I, WILLIAM H. DICKEY, of Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in reversible blades for walking and riding cultivators, and in the shoes or blocks with which the blades are attached to and horizontally adjusted upon the standard; and it consists in a novel construction and arrangement of the parts, to be hereinafter fully set forth.

Figure 1 is a vertical section of a cultivator-standard and of my novel blade and attaching devices, and Fig. 2 is a front elevation of the blade.

In the drawings, A represents the lower part of a standard of a cultivator. It is bent or cut away, or cast so as to form a recess, *a*, to be explained hereinafter. It is provided with two bolt-holes, through which pass the bolts that secure the shoe or block. Said block or shoe, which, in manufacturing, is preferably made of cast metal, is represented in the drawings by B. The block has two bolt-holes, *b b*, by means of which the blade is attached to it, and two lateral slots, *b' b'*, by means of which it is secured to the standard. In attaching the block to the standard, the bolts *a' a'* are passed through slots *b' b'*, and then through the bolt-holes in the standard, until the bolt-heads rest against the block, as shown in Fig. 1. They are then clamped together by means of nuts. The block is provided with recesses or depressions to receive the heads of the bolts, as shown in Fig. 1.

By the construction above described a horizontal or lateral adjustment of the block is permitted, for by loosening the nuts on bolts *a' a'* the block B may be moved to the right or the left, according as it is desired to throw the dirt with the blade to the one side or the other.

It will be readily seen that having two slots, *b' b'*, in the block prevents the disabling of it by a breakage. If the block should break at or near one of the slots, as they frequently do, it will nevertheless be securely held to the standard by the other bolt and slot, whereas such a block would be completely ruined if it had but one slot, like those now in use; and in order to insure that the block shall not slip upon or fall away from the standard when such breakage occurs, I provide it (the block) upon its rear side with a longitudinal recess, D, semicircular in cross-section, and conforming to the surface of the standard by means of which it has, throughout its entire length, a bearing against the standard, and can be held firmly thereto by a single bolt.

C represents the blade, constructed with two points and with a uniformly-curved face, so as to be reversible should one of the points wear or be broken off. The blade is bolted to the block B in two places, at *c* and *c'*, one vertically above the other, both to prevent the blade from turning accidentally and also to prevent the loss of the entire blade in the event of a breakage. It frequently happens that the blade breaks off at the line at which it is bolted or otherwise secured to the standard. If a single bolt is used, or if two bolts upon the same horizontal line are used, the blade becomes utterly worthless when a break of the kind described above occurs; but, as will be readily seen, by fastening the blade with two bolts situated in a vertical line, I am enabled to preserve the upper end of the blade, although the lower end be lost. By an examination of Fig. 1 it will be also seen that the upper ends and the lower ends of both blade C and block B are curved forward, and that the line of curvature of the upper ends is substantially the same as that of the lower. This enables me to reverse the blade upon the block, or to reverse both blade and block upon the standard, without altering their positions relative to each other.

In cultivators as heretofore constructed there is an open space between the upper end of the blade and the standard, which space becomes filled with weeds, stubble, and other litter, and causes the cultivator to clog continually. By bending the standard back, or

providing it with a recess at its lower end, as shown in the drawings, I so adjust the standard and the attaching block as to rest the upper end of the double-pointed blade against the standard, thus closing the space and obviating the difficulty mentioned.

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

The reversible block B, having the longitudinal recess D, and attached to the standard at two or more points in the same vertical line, and the double-pointed blade C, secured to the block by two or more bolts in the same vertical line, in combination with the standard A, having the recess *a* to receive the block B, and supporting the upper point of the blade, arranged and operating as specified.

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

WM. H. DICKEY.

Witnesses:

GEO. S. BENNETT,

GEORGE DANIELS.