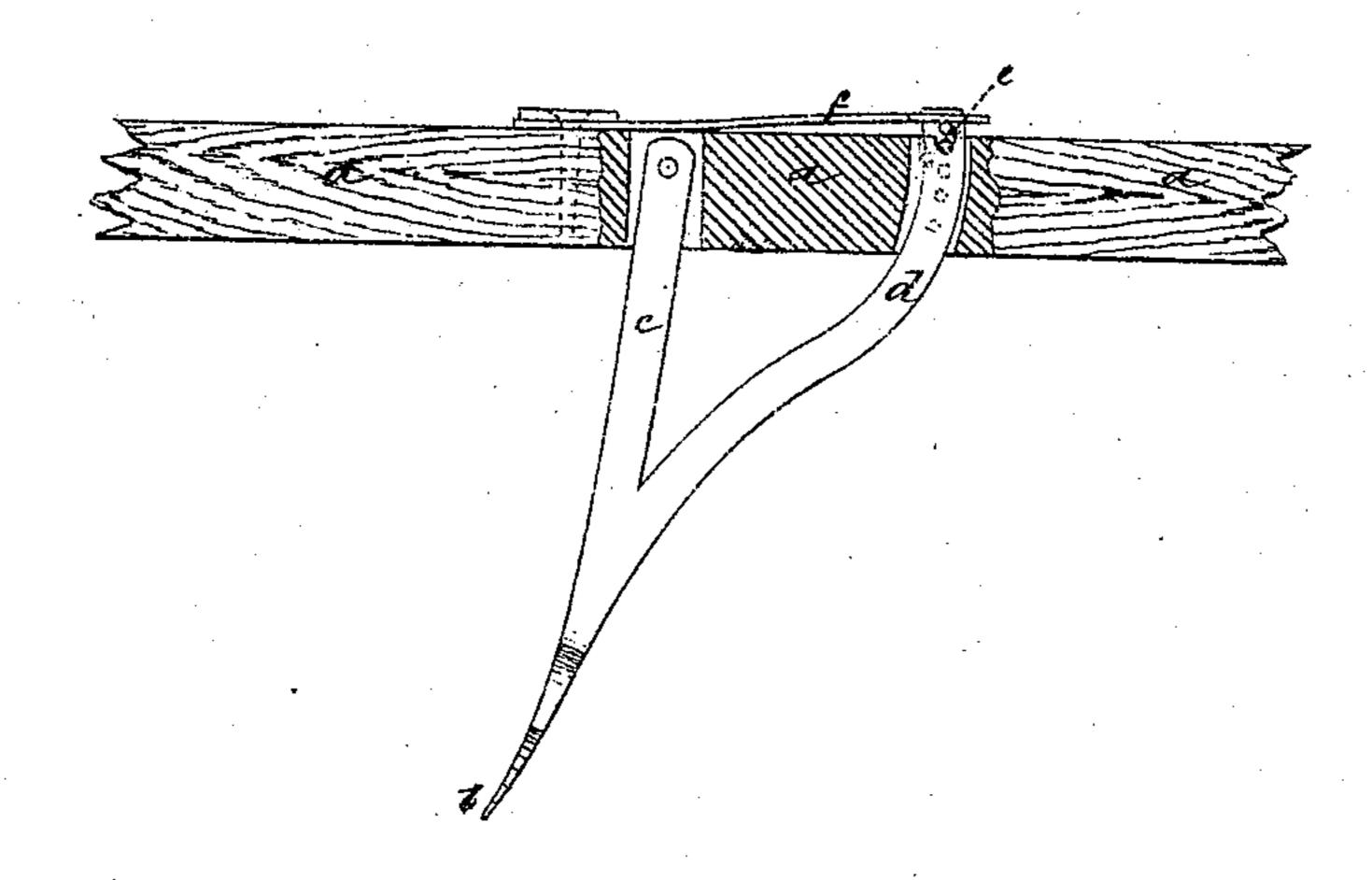
M.F. Lowth and O. H. Porter.

Cultivator-Tooth.

117092

PATENTED JUL 18 1871



Witnesses:

John Fresh

Inventor:

MELoweth.

Attornens.

UNITED STATES PATENT OFFICE.

MICHAEL F. LOWTH AND ORLEAN H. PORTER, OF WABASHA, MINNESOTA.

IMPROVEMENT IN ATTACHING CULTIVATOR-TEETH TO BEAMS.

Specification forming part of Letters Patent No. 117,092, dated July 18, 1871.

To all whom it may concern:

Be it known that we, MICHAEL F. LOWTH and ORLEAN H. PORTER, of Wabasha, in the county of Wabasha and State of Minnesota, have invented a new and Improved Cultivator-Tooth; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which

the figure is a side elevation.

This invention relates to an improvement in the method of pivoting and otherwise arranging cultivator-teeth, with special reference to a spring attachment for enabling them to yield to obstructions when being drawn forward; and the invention consists in providing the rear arm or brace of the cultivator-tooth with a number of perforations for reception of a pin on which rests the free end of a plate-spring, whereby the inclination of the tooth to the beam may be varied according to the condition of the soil, or for other reasons.

Referring to the drawing, a is a cultivatorbeam; b, the point; and c, the shank of the tooth, pivoted at its upper end in the beam. d is the brace, passing upward through the beam and having a series of holes near its upper end through any one of which a pin, e, may be passed, the pin being always above the beam. f is a flat spring secured at one end to the upper side of the

beam, and having in its rear end a slot through which the upper end of the brace d passes, the pin e being always below the spring. When the tooth meets with an immovable obstruction it yields, thrusting the pin against the spring, which returns the tooth to and retains it in its proper position after passing the obstacle. The holes in the brace d permit the adjustment of the pin to vary the inclination of the tooth in a longitudinal direction. The pin e subserves another function. When the cultivator is moved backward the pin meets the beam and prevents the tooth from swinging forward.

We do not claim the application of the spring

for the purpose indicated; but

Having thus described our invention, what we claim as new, and desire to secure by Letters

Patent, is—

The brace d of the cultivator-tooth, provided with a series of holes for reception of a pin on which rests the free end of the plate-spring f, whereby the inclination of the tooth to the beam may be varied without changing the tension of the spring, as herein shown and described.

> M. F. LOWTH. O. H. PORTER.

Witnesses:

F. WINAND, WM. J. ARNOLD.