

I. MILLER.
Cultivator.

No. 105,828.

Patented July 26, 1870.

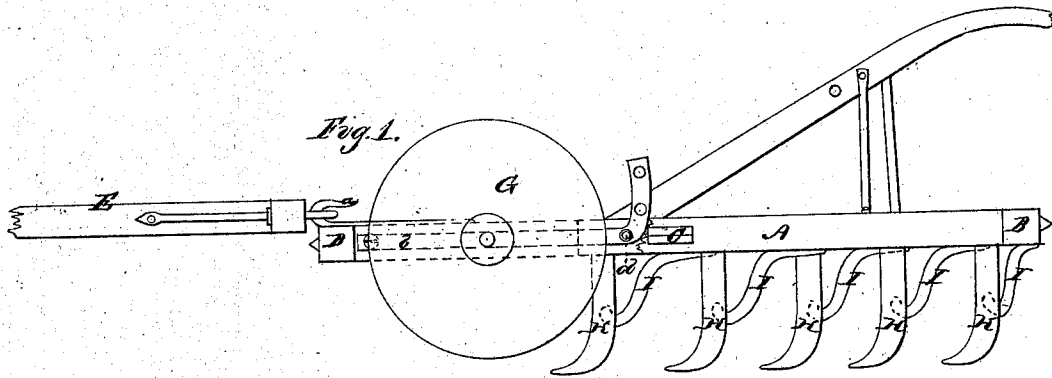
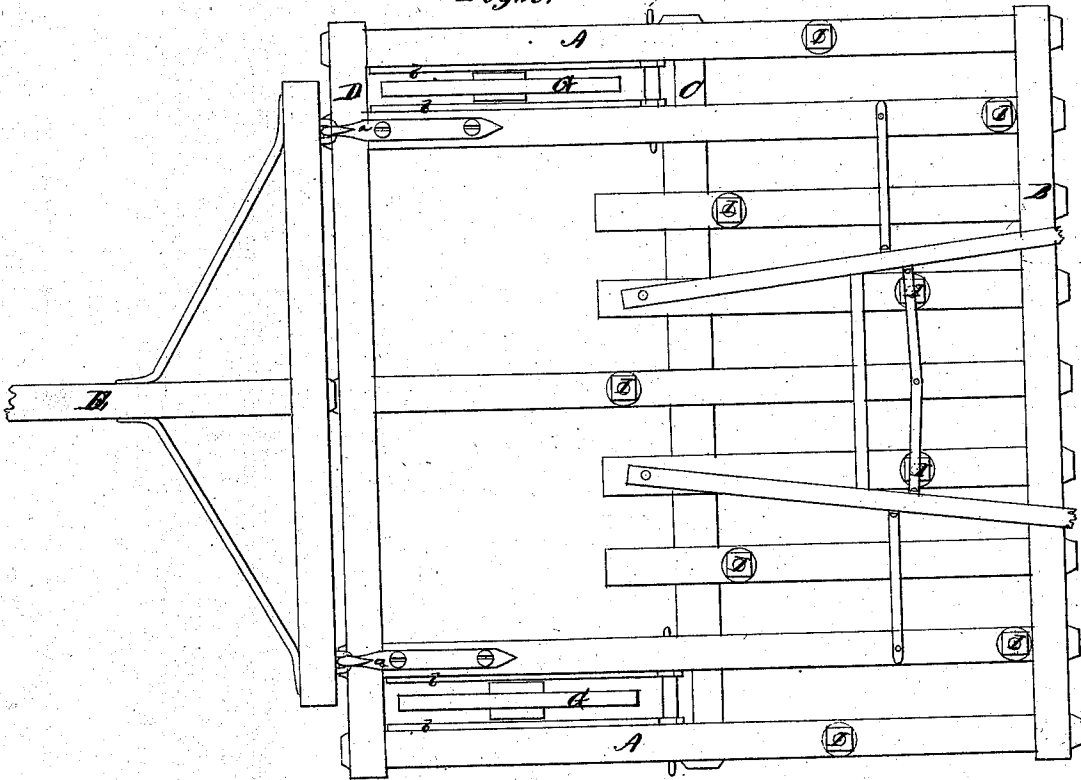


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ISAAC MILLER, OF WORTH, MICHIGAN.

IMPROVED CULTIVATOR.

Specification forming part of Letters Patent No. 105,828, dated July 26, 1870.

To all whom it may concern:

Be it known that I, ISAAC MILLER, of Worth, in the county of Tuscola 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a cultivator, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a plan view, of my machine.

The frame of my machine consists of a series of bars, A A, placed parallel and a suitable distance from each other, said bars being all at their rear ends connected by a bar, B, and near their front ends another bar, C, passes through mortises in them. The center one of the bars A, as well as two other bars at each side, extend a suitable distance in front of the other, and are connected by a bar, D, on which are secured hooks *a a* to attach the tongue E.

Between the front ends of the projecting side bars, A A, are pivoted two metal bars, *b b*, the rear ends of which are curved upward and perforated. In these bars *b* the axle of the wheel G has its bearings, and said bars are held in

position by a pin, *d*, passing through one of the holes in their curved rear ends, and also through the side bars, A A. By changing the pin *d* in the different holes in the bars *b b* the wheel G is thrown up or down, as may be desired, thus regulating the depth at which the cultivator is to work.

The cultivator-teeth H H are attached at suitable points on the under side of all the parallel bars A A, the shanks of said teeth passing up through the bars and secured by nuts on their upper ends.

Braces I I are attached one in rear of each tooth, the lower ends of said braces being in the shape of the hook-catches in the rear side of the tooth, and not only braces it, but also holds it up firmly against the bar A in its proper position.

Handles J J are suitably attached on the upper side of the frame.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The arrangement of the frame A B C D, hooks *a a*, tongue E, wheels G G, bars *b b*, pins *d*, teeth H H, braces I I, and handles J J, all constructed and operating substantially as and for the purposes herein set forth.

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

ISAAC MILLER.

Witnesses:

D. G. SLAFTER,
M. C. GRAVES.