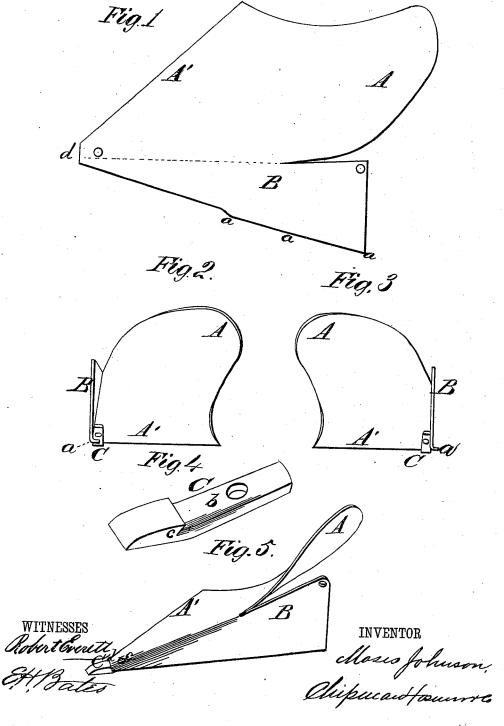
## M. JOHNSON. Cultivator-Tooth.

No. 197,638.

Patented Nov. 27, 1877



Attorneys

## JNITED STATES PATENT OFFICE.

MOSES JOHNSON, OF THREE RIVERS, MICHIGAN, ASSIGNOR TO THE UNION MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN CULTIVATOR-TEETH.

Specification forming part of Letters Patent No. 197,638, dated November 27, 1877; application filed October 26, 1877.

To all whom it may concern:

Be it known that I, Moses Johnson, of Three Rivers, in the county of St. Joseph and State of Michigan, have invented a new and valuable Improvement in Cultivator Teeth; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my cultivator tooth. Figs. 2 and 3 are end views of the same. Fig. 4 is a detail view, and Fig. 5 is a perspective view,

of the same.

My invention relates to the manufacture of cultivator-teeth; and it consists in the construction of a cultivator-tooth of one piece of steel, pressed into shape, and provided with a removable point, and also with a land-side flange, which forms the sole of the implement, as will be understood from the following description.

In the annexed drawings, A designates the wing of the tooth, A' the share, B the landside, and C the point. These parts, with the exception of the point C, are first formed out of a single piece of steel, as shown in Fig. 1, and then pressed into the shape shown in Fig. 5.

On one edge of the land-side B a flange, a,

is formed, which is bent at right angles to the land-side, so as to form the sole of the implement. This flange a may be bent inwardly, as shown in Fig. 2, or it may be turned out, as shown in Fig. 3.

The point Č is constructed with a thin shank, b, which terminates in an under-beveled shoulder, c, that receives the straight portion a of the share at the point of the implement, and serves, in connection with a single bolt or rivet, e, to rigidly secure the point C to its

I am aware that the mold-board, land-side, and share of a plow have heretofore been constructed in one piece, and therefore I make no

claim to such invention.

What I claim as new, and desire to secure

by Letters Patent, is-

The cultivator-tooth herein described, composed of the wing or mold-board A and landside B, having the flange or sole a, made of a single piece of metal, in combination with the point C, provided with the beveled shoulder c and rounded seat b, as and for the purpose

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MOSES JOHNSON.

Witnesses:

R. R. PEALER, GEORGE NEYCE.