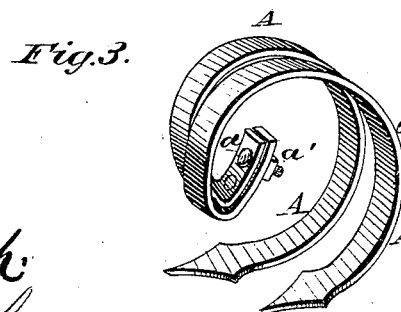
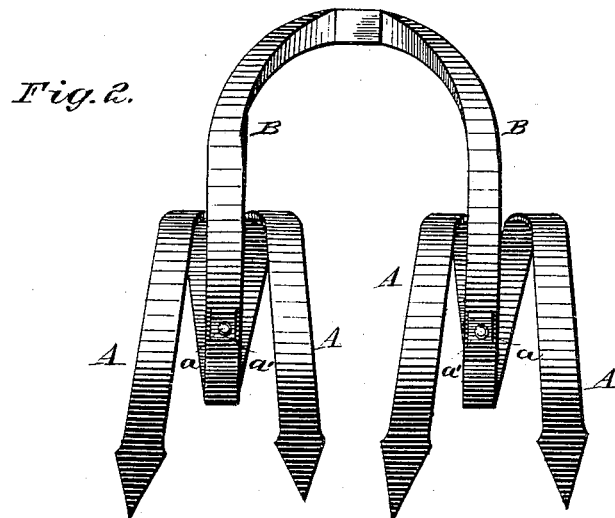
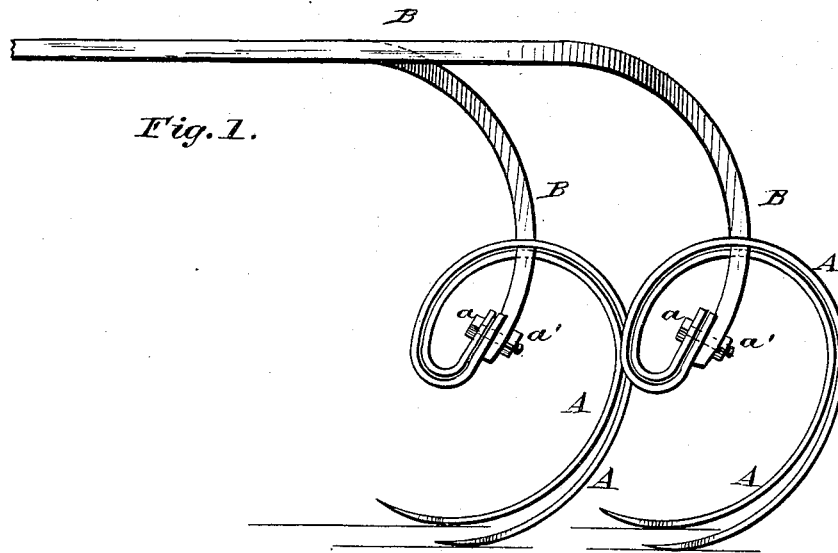


(No Model.)

T. W. LOGAN.
CULTIVATOR TOOTH.

No. 263,546.

Patented Aug. 29, 1882.



WITNESSES:

Wm. L. Dietrich
P. C. Dietrich

Thos. W. Logan,
INVENTOR,
by Louis Bagger & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS W. LOGAN, OF LA FONTAINE, INDIANA.

CULTIVATOR-TOOTH.

SPECIFICATION forming part of Letters Patent No. 263,546, dated August 29, 1882.

Application filed June 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. LOGAN, of La Fontaine, in the county of Wabash and State of Indiana, have invented certain new and useful
5 Improvements in Cultivator-Teeth; and I do hereby declare that the following is a full, clear, and exact description of the invention, 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, which form a part of this specification, and in
10 which—

Figure 1 is a side elevation of my invention as applied for use. Fig. 2 is a rear elevation
15 of the same, and Fig. 3 is a detailed perspective view of my improved form of cultivator-teeth.

My invention has relation to flexible spring-teeth for harrows; and it consists in the detailed construction of the same, as hereinafter
20 more fully described and claimed.

In carrying out my invention I construct or make two teeth, A A, of spring metal, to enable them to yield as against breaking in event
25 of contact with an obstruction. The teeth are adapted to fit one against the other at their inner or securing ends, and are bolted together thereat by a common bolt or rivet. They diverge from each other from their point of contact toward their free ends or points, thus
30 leaving a space between them to permit the passage of the standard or beam between them

and the arrangement of one on each side thereof, to which they are designed to be attached. Each tooth is curved from the point of attachment to the standard or beam forward and upward, and thence rearward and downward, its point extending downward and forward, as
35 clearly shown in Figs. 1 and 3. This construction forms, with the spring metal of which the teeth are made, each tooth into a coiled spring-tooth, giving it a highly-flexible character. The teeth may vary in length or size, and are
40 adjustably connected to the standard or beam B by an adjusting bolt and nut, *a a'*, to permit the gaging their depth of penetration into the ground to cultivate the plants the desired depth below the surface.

I claim and desire to secure by Letters Patent of the United States—

The combination, with the beam or standard B and the adjusting bolt and nut *a a'*, of the compound tooth, consisting of the recurved spring-teeth, having a common uniting-point and diverging therefrom, leaving a space
50 between themselves, substantially as set forth, and for the purpose specified.

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

THOMAS W. LOGAN.

Witnesses:

WINTEM U. LINE,
WM. M. PERKINS.