

No. 845,691.

PATENTED FEB. 26, 1907.

G. E. CAMP.
CULTIVATOR TOOTH.
APPLICATION FILED SEPT. 8, 1905.

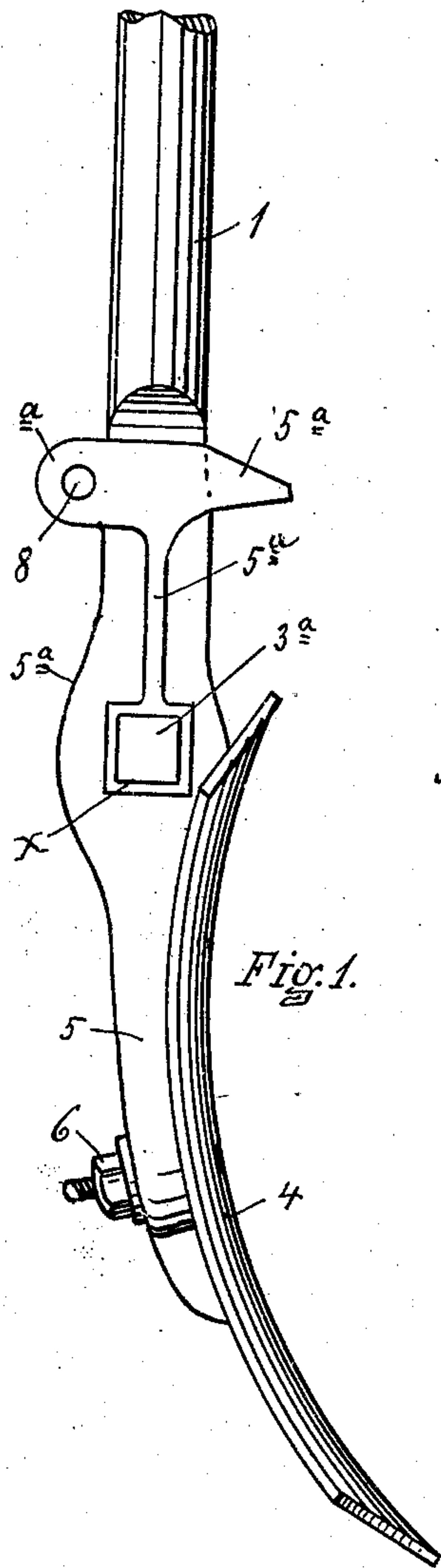


Fig. 1.

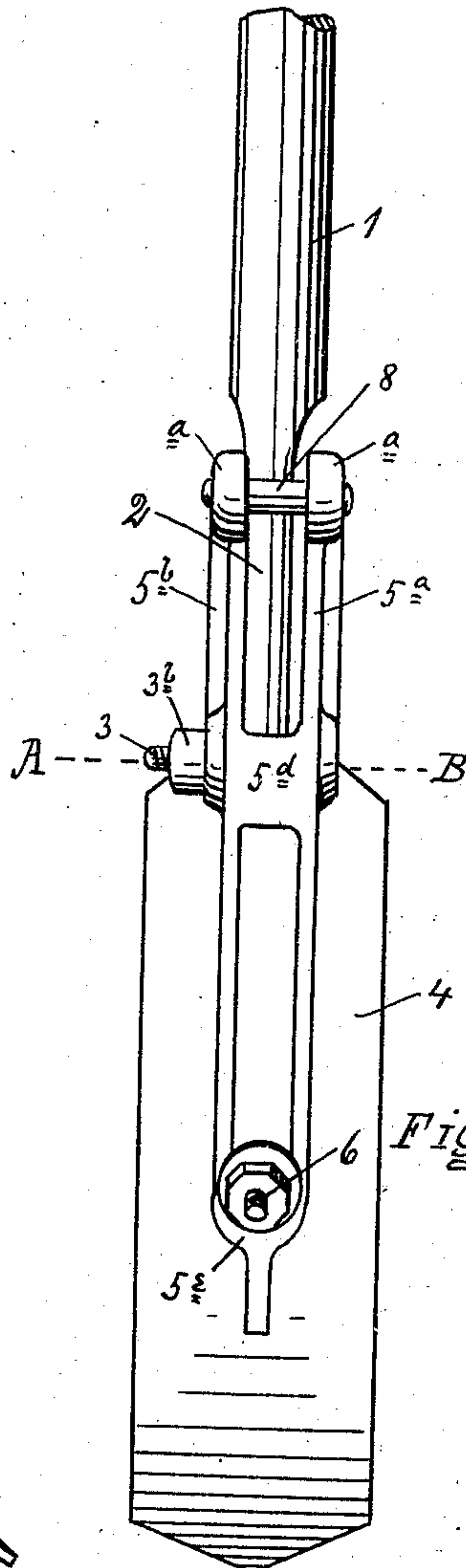


Fig. 3.

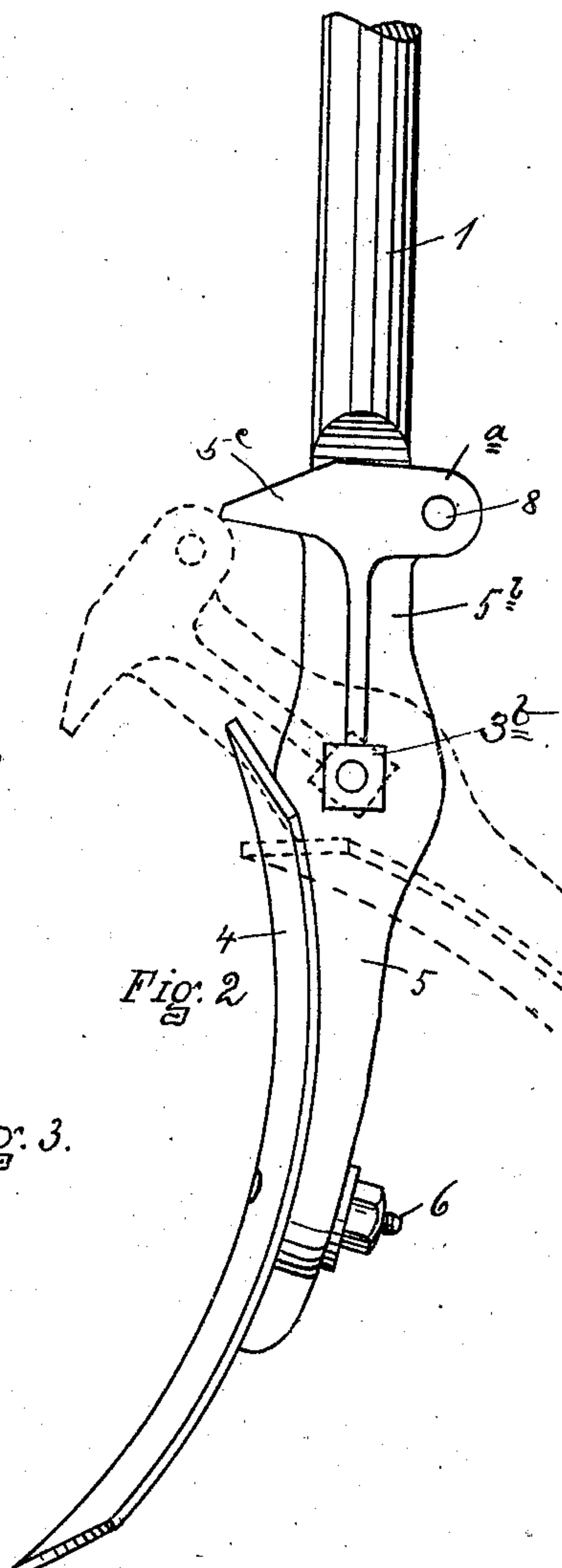


Fig. 2.

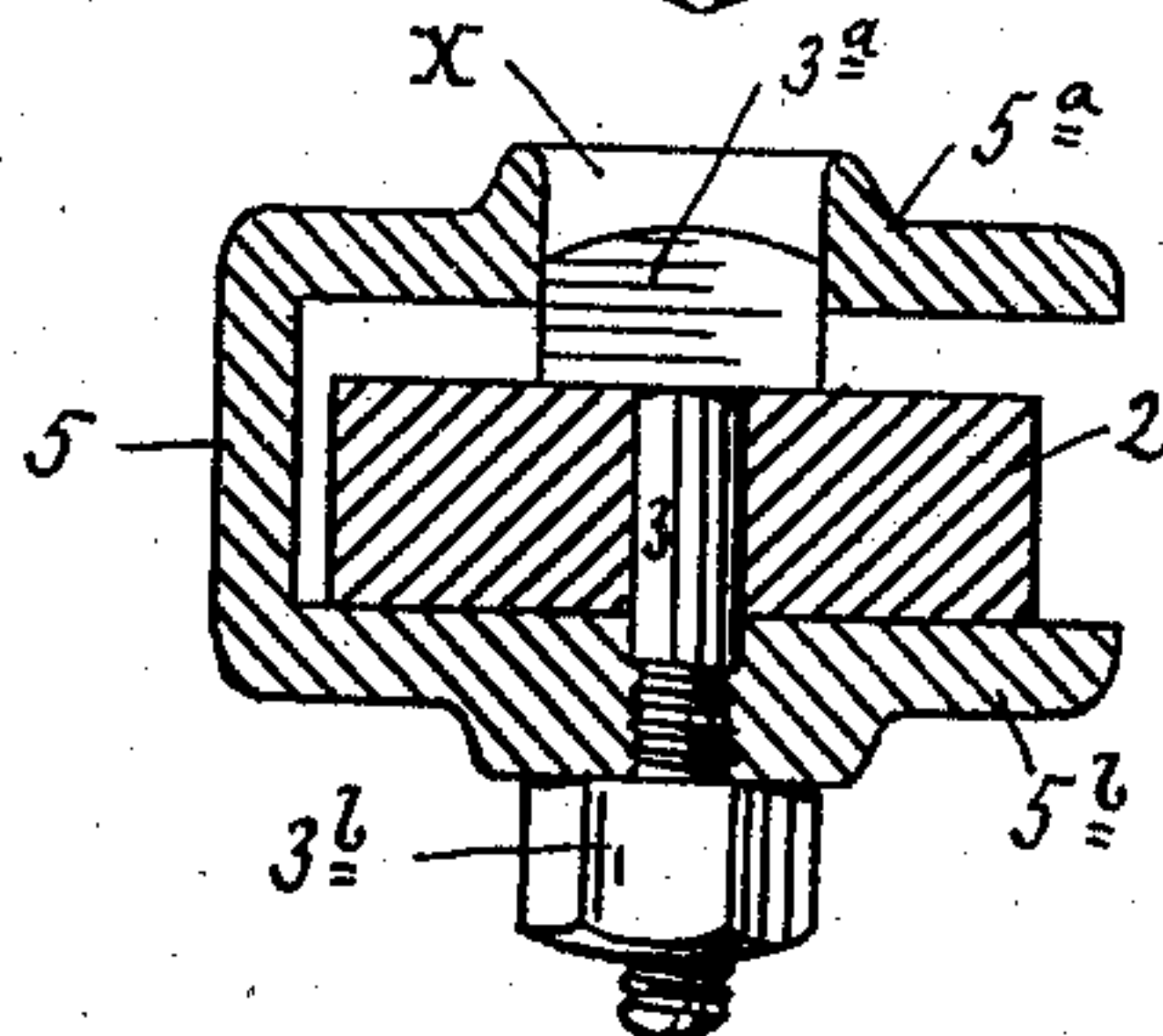


Fig. 4.

WITNESSES.
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UNITED STATES PATENT OFFICE.

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CULTIVATOR-TOOTH.

No. 845,691.

Specification of Letters Patent.

Patented Feb. 26, 1907.

Application filed September 8, 1905. Serial No. 277,480.

To all whom it may concern:

Be it known that I, GEORGE E. CAMP, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Cultivator-Teeth; 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 the letters of reference marked thereon, which form part of this specification.

The object of my present invention is to provide an improved cultivator-tooth mounting or attachment wherein provision is made for releasing the tooth-blade under excess strain and still wherein the tooth is held firmly and satisfactorily and without objections or defects incident to the releasing feature.

In the drawings, Figure 1 shows a side elevation of a cultivator-tooth, including my improved mounting. Fig. 2 shows the same from the opposite side. Fig. 3 shows a rear view. Fig. 4 shows a section taken on line A B of Fig. 3.

Referring to the reference letters and figures in a more particular description of the device, 1 indicates the shank of the cultivator-tooth, which is round at the upper end, as usual, to adapt it to be attached to the implement or machine, while the lower end of the shank is flattened, as indicated at 2, and is provided at its lower end with an opening to receive the bolt 3. The blade 4, which is shown as of the double-pointed variety, is mounted on the blade-holder 5 and secured thereto by a bolt 6. The flat portion 2 of the shank 1 is received between the two side wall portions 5^a 5^b of the blade-holder, which side walls are connected at the upper end by a cross-piece 5^c and are also connected by a cross-section 5^d and are connected at the lower ends at 5^e and may be connected at other points.

In the wall 5^a there is provided a square opening *x*, which receives the head 3^a of the bolt 3 and allows the same to pass freely there-through, but prevents the rotation of the bolt. In the wall 5^b there is provided an opening of suitable size to allow the passage

of the bolt 3 therethrough, and on the outer side of the wall 5^b the bolt 3 is provided with a screw-threaded nut 3^b. The arrangement of these parts is such that when assembled and the bolt 3 is tightened up it draws the flat side of the shank 1 against the wall 5^b of the blade-holder and holds it firmly against said wall. Not only that, but the head of the bolt 3 is supported in the opening *x* in such a manner as to prevent the bolt being bent by lateral strains. The portion of the bolt adjacent to the nut 3 is supported in the wall 5^b.

In rearwardly-extending ears *a* at the upper end of the blade-holder 5 there are provided openings which receive the pin 8. This pin 8 is a breakable pin, preferably of wood, but also may be made of brittle metal or other material. When the pin 8 is in position, it engages with the rear face of the shank 1, and the tendency of the blade and blade-holder to cant over into the position shown in dotted lines in Fig. 2 is resisted by this pin, as well as by the friction of one side of the shank against the wall 5^d of the blade-holder. The strength of the pin 8 and this friction is so regulated as to withstand the ordinary working strains which the tooth should be made to withstand. In case of excessive resistance to the tooth, however, the pin 8 will break or shear off and the tooth or blade allowed to cant into the position shown in dotted lines in Fig. 2, whereby the same becomes released. To replace it in working order, the blade and blade-holder are brought into normal position, as shown in full lines in the drawings, and a new pin 8 is placed in position.

It should be noted that in this construction there is no looseness as between the shank 1 and the blade-holder 5, which allows a relative working and wearing of parts as between these two. In case of looseness at this point in course of time the break-pin 8 is liable to be worn off and likewise the bolt 3.

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

1. The combination in a cultivator-tooth holder of the shank, the blade, the blade-holder on which the blade is secured and having walls between which the shank is received, a bolt passing through the shank and one of

the walls and having a head received in an opening in the opposite wall and supported thereby, substantially as set forth.

2. The combination in a cultivator-tooth
5 holder of the shank, the blade, the blade-
holder on which the blade is secured, having
walls between which the shank is received, a
bolt passing through the shank and one of
the walls and binding the shank against said
10 wall, and having a head received in an open-
ing in the other wall and supported thereby,

and a break-pin passing between the walls and back of the shank at a point removed from said bolt, substantially as set forth.

In witness whereof I have affixed my sig- 15
nature, in presence of two witnesses, this 24th
day of August, 1905.

GEORGE E. CAMP.

Witnesses:

LEON L. ARTHUR,
E. S. HESSE.