

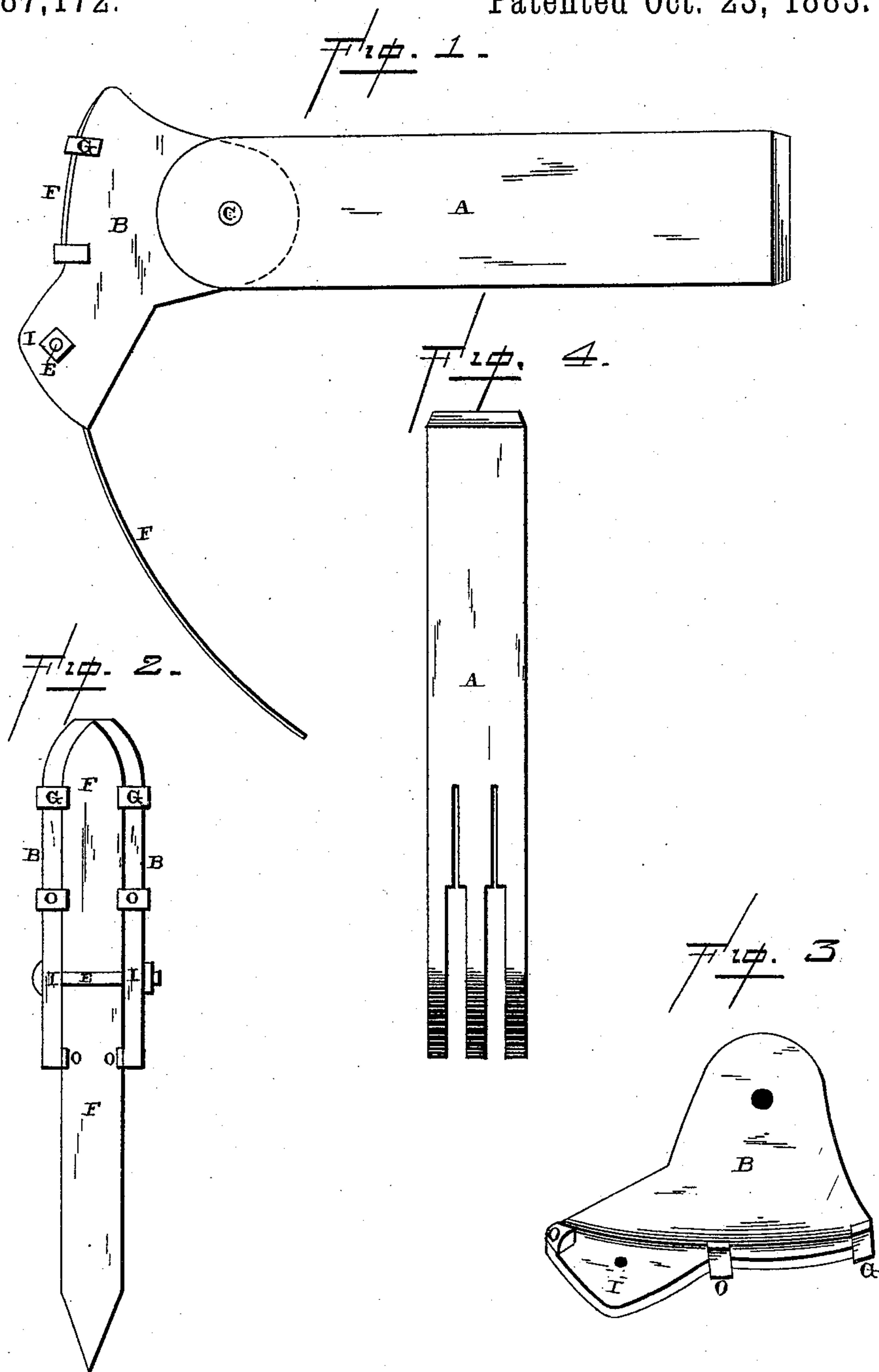
(No Model.)

G. D. ROWELL.

REVERSIBLE CULTIVATOR TOOTH.

No. 287,172.

Patented Oct. 23, 1883.



— Witnesses. —

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UNITED STATES PATENT OFFICE.

GUILFORD D. ROWELL, OF APPLETON, WISCONSIN.

REVERSIBLE CULTIVATOR-TOOTH.

SPECIFICATION forming part of Letters Patent No. 287,172, dated October 23, 1883.

Application filed November 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, GUILFORD D. ROWELL, of Appleton, in the county of Outagamie and State of Wisconsin, have invented certain new and useful Improvements in Reversible Cultivator-Teeth; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in reversible cultivator-teeth; and it consists in the combination of the beam having its rear end divided into two or more parts, the holding-block made in two separate parts, and pivoted in slits in the rear end of the beam, a spring-tooth, and the clamping-bolts, by which the two parts of the block are clamped against the tooth.

It still further consists in the combination of a slitted beam, the curved holding-block made in two parts, and provided with the lugs or projections and the flanges, the spring-tooth, and the clamping-bolts, as will be more fully described hereinafter.

The object of my invention is to provide two friction-blocks for holding the spring-tooth, which will both allow the tooth to be reversed and to hold the tooth rigidly in position at any desired angle until an obstruction is struck, when the tooth will give backward without the danger of being broken.

Figure 1 is a side elevation of my invention complete. Fig. 2 is a rear view of the same. Fig. 3 is a perspective of one-half of the clamping-block. Fig. 4 is a plan view of the beam.

A represents the cultivator-beam, which has its rear end slit in two places in the usual manner, for the purpose of having the two parts B of the holding-block clamped between them by means of the bolt C. By having a slit or notch in the rear end of the beam for each one of the parts of the holding-block, double the amount of friction is secured, and thus the holding-block can be clamped in position more securely and with less damage to the beam itself. Instead of making this holding-block in a single piece, as has heretofore been done, it is here made in two separate and distinct pieces, which are held together both by the

bolt C, and the small clamping-bolt E, which passes through their outer edge over the outer side of the spring-tooth F. These two parts of the holding-block are separated a slight distance from each other, and each one has its rear edge made rounding or curved, as shown, where the tooth is applied to them. The tooth being made curved, the rear edges of these blocks are made to conform to the shape of the tooth, and to hold the tooth in such a manner as to bring the full elasticity of the tooth into play. For the purpose of holding the tooth more securely against the rear edges of the two parts of the block, there is formed on each part a lug or projection, G, which catches over opposite sides of the tooth near its upper end, and upon the lower rear edge of each part is formed the flange I, through which a small clamping-bolt is passed. As the great strain brought to bear upon the tooth has a tendency to bend the clamping-bolt, clips O will be formed above or below the tooth; or clips may be used above and below the bolt, so as to take off all strain from this bolt. The tooth will then be pushed up under the clips into position. When the two clamping-bolts are tightened, so as to draw the two parts of the block together, the lugs or projections and the flanges on the rear edges of the block clamp the tooth in two separate places at the same time. As any desired degree of force can be applied to the clamping-bolts, the two parts of the block can be made to clamp the tooth in position so tightly that the tooth will break before it can be moved endwise between them. Owing to the amount of friction which can be brought to bear upon the two blocks by the divided ends of the beams, the holding-block can be set at any desired position, so as to give the tooth any angle that may be preferred. This tooth will be held rigidly enough in any position to which it is adjusted to open up the earth until an obstruction is encountered, when the holding-blocks will overcome the frictional contact of the beams, and give backward and upward, so that the tooth will ride over the obstruction before it breaks. Owing to the curved shape of the rear edge of the block, the spring can be given any desired degree of elasticity.

Having thus described my invention, I claim—

1. The combination of the beam, the hold-
ing-block made in two separate parts, and piv-
oted in slits in the rear end of the beam, a
spring-tooth, and the clamping-bolts, by which
5 the two parts of the block are clamped against
the tooth, substantially as described.

2. The combination of the slitted beam, the
curved holding-block made in two parts, and
provided with lugs or projections and the

flanges, the spring-tooth, and the clamping- 10
bolts, substantially as described.

In testimony whereof I affix my signature in
presence of two witnesses.

GUILFORD D. ROWELL.

Witnesses:

F. W. HARRIMAN,
A. M. SPENCER.