J. FLYNN.

Cultivator Teeth.

No. 166,979. Patented Aug. 24, 1875.

Fig. 1

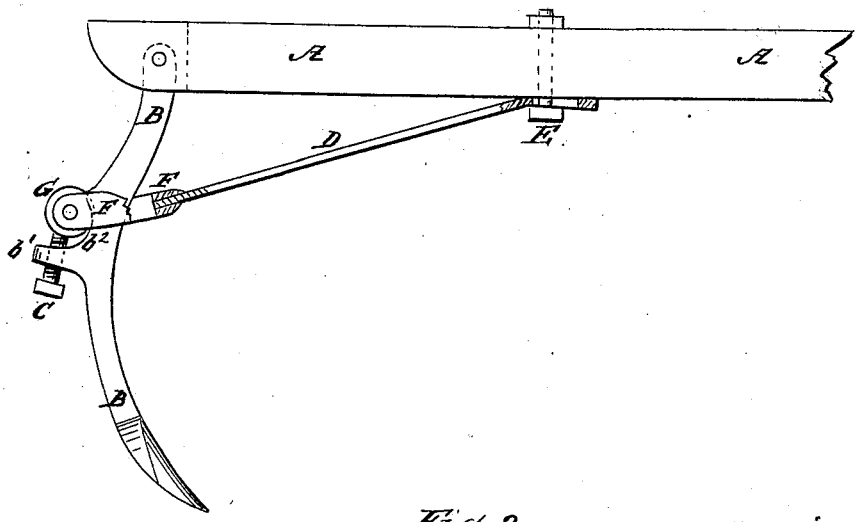
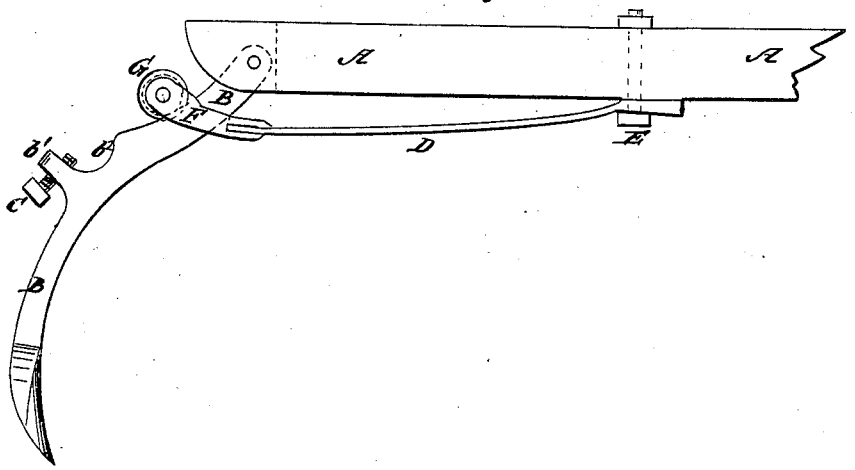


Fig. 2



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

JOHN FLYNN, OF MONCHES, WISCONSIN.

IMPROVEMENT IN CULTIVATOR-TEETH.

Specification forming part of Letters Patent No. **166,979**, dated August 24, 1875; application filed May 15, 1875.

To all whom it may concern:

Be it known that I, JOHN FLYNN, of Monches, in the county of Waukesha and State of Wisconsin, have invented a new and useful Improvement in Self-Adjusting Cultivator-Tooth, of which the following is a specification:

Figure 1 is a side view of my improved device, shown with the tooth in working position, and parts being broken away to show the construction. Fig. 2 is the same view as Fig. 1, but showing the tooth swung back to pass an obstruction.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improvement in cultivators, seeders, &c., having teeth so constructed that they will yield to pass an obstruction, and will immediately readjust themselves in working position.

The invention consists in the combination of the spring and its wheel with the tooth, having a concavity formed in its rear side contiguous to a lug, through which passes a set-screw, whereby the wheel can be adjusted in such manner as to cause the tooth to yield more or less readily, as required in different soils.

A represents the beam or drag-bar. B represents the tooth, the upper end of the shank of which is pivoted to the bar or beam A in such a way that it can swing rearward, but not sidewise. Upon the rear side of the middle part of the shank of the tooth B is formed a lug, b^1, in which is formed a screw-hole to receive the set-screw C. In the rear side of the shank of the tooth B, just above the lug b^1, is formed a concavity, b^2. The rear side of the shank of the tooth B, above the concavity b^2, is inclined or slightly curved, as shown in Figs. 1 and 2. D is a spring, the forward end of which is slotted longitudinally to receive the bolt E, by which it is secured to the beam or bar A, and is thickened toward its end, to prevent it from slipping beneath said bolt E. To the rear end of the spring D are secured jaws or a slotted block, F, to receive the shank of the tooth B, and in the rear end of said slot is pivoted a small wheel or roller, G, which rests against and rolls along the rear edge of the shank of the tooth B. The spring D is made of such a strength that when left free its elasticity will force the tooth B forward until the wheel G enters the concavity b^2, and will then support the said tooth against the draft-strain under ordinary circumstances; but should the tooth B strike a root, stone, or other obstruction, the increased pressure will cause the wheel G to rise out of the concavity b^2, and move up along the rear edge of the shank of the tooth B, allowing the said tooth B to swing back and pass the obstruction. As soon as the obstruction has been passed the elasticity of the spring D will force the wheel G downward, forcing the tooth again into working position. The position or pitch of the tooth B is regulated by loosening the bolt E and moving the spring D forward or back. The resistance of the spring D to rearward pressure upon the tooth B is regulated by adjusting the set-screw C to allow the wheel G to enter the concavity b^2 more or less.

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

The combination of spring D F and wheel G with the pivoted tooth B, having the concavity b^2, lug b^1, and set-screw C, as shown and described, to operate as specified.

JOHN FLYNN.

Witnesses:
MICHAEL DAILY,
JAS. LINNEHAN,
DENNIS FLYNN.