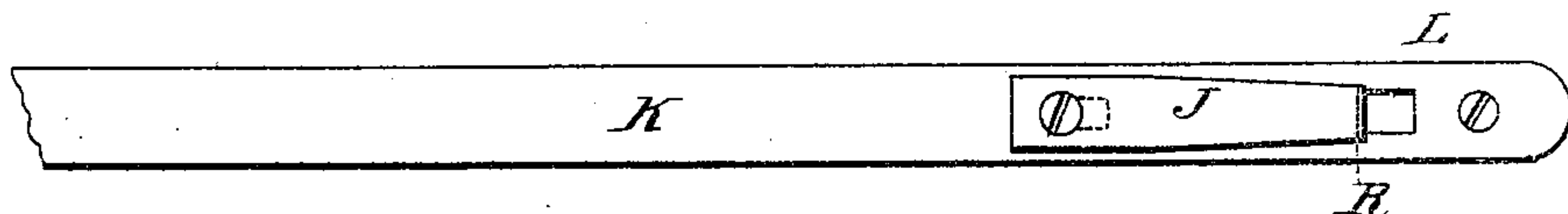


G. F. STROUD.  
Cultivator Teeth.

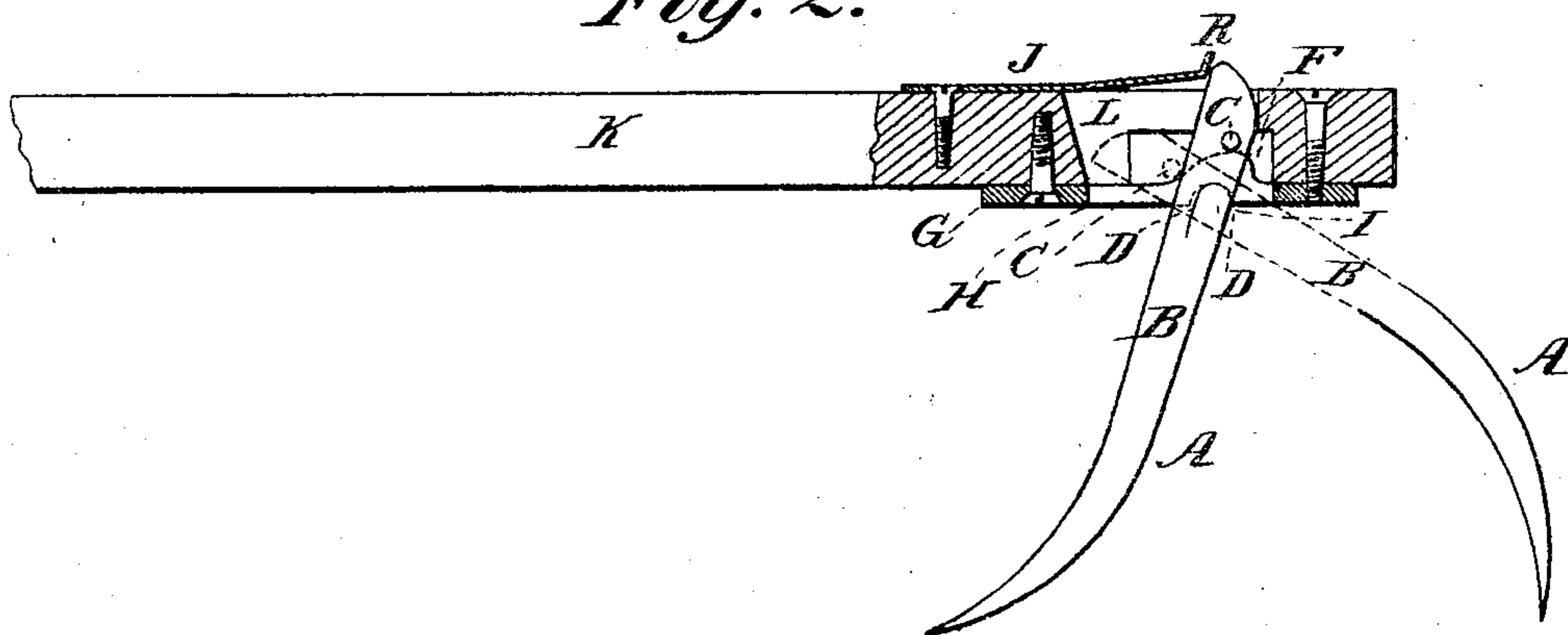
No. 141,400.

Patented July 29, 1873.

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

*John F. Thompson.*  
*W. H. Nelson*

*Inventor:*

*George F. Stroud,*  
*By Theodor Mungen,*  
*Attorney.*

# UNITED STATES PATENT OFFICE.

GEORGE F. STROUD, OF OSHKOSH, WISCONSIN, ASSIGNOR TO WILLIAM D. STROUD, OF SAME PLACE.

## IMPROVEMENT IN CULTIVATOR-TEETH.

Specification forming part of Letters Patent No. **141,400**, dated July 29, 1873; application filed June 3, 1873.

*To all whom it may concern:*

Be it known that I, GEORGE F. STROUD, of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Cultivator-Teeth; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a plan view, and Fig. 2 is a sectional elevation of a slip-tooth embodying my invention.

The principal objections to the slip-tooth now in use on cultivators are on account of the screw-bolts and braces used to retain the tooth in position. The nuts on the screw-bolts must necessarily be tightened when they have become loosened; and quite frequently—in fact, every time in most of them—when the tooth has slipped back to pass over an obstruction, the nut must be loosened to permit the tooth to be replaced, and then again tightened after the tooth has been replaced, thereby consuming much time. This invention relates to an improvement in that class of cultivator-teeth just above referred to; and consists of a shank provided with a curved knuckle and a pin, and a plate slotted and recessed to receive the shank at the knuckle, provided with vertical projections, in combination with a drag-bar, slotted and recessed to receive the top of the shank, and the projections on the plate provided with an adjustable spring, the several parts being so arranged that the spring will hold the cultivator-tooth in position while in arable soil, but will permit it to swing back and slip over any obstruction it may meet before sufficient strain comes upon the tooth to break it, after which it can be replaced by a blow on or near its point with the foot.

In the accompanying drawing, A is the cultivator-tooth, the shank B of which is provided with the shoulder or knuckle D. The knuckle D is cast with the shank B; its top is rounded, and it occupies a space equal to about one-half the width of the shank B. A pin, C, passes through the shank B a short distance above the knuckle D, and projects on both sides of the shank a distance sufficiently

great to permit it to rest upon the projections F F on the upper side of the plate G. The plate G has a slot, H, and a recess, I. The end of the shank B is passed through the slot H before the pin C is inserted, and the knuckle D enters the recess I, which is made beneath the rear portions of the projections F F. The projections F F each form the segment of a circle. One point of the segment rests on the plate G, and the other is elevated above it, so that the greatest distance of the curve from the face of the plate G is equal to the distance between the top of the knuckle D and the bottom of the pin C, less the thickness of the plate G. The knuckle D so works in the recess I as to enable the pin C to describe a curve equal to the curve of the projections F F. The top of the shank B is bounded by irregular curves. An adjustable spring, J, having a curved or beveled point, R, is secured to the upper side of the drag-bar K, directly over the slot L. The slot L is recessed on the under side to receive the projections F F on the plate G. The plate G and spring J are secured to the drag-bar K by bolts or screws. The spring J is made adjustable by being slotted, so that it may be moved either backward or forward by loosening the screw or bolt by which it is held in place.

The operation of the invention is obvious. The tooth, having slipped back to pass over an obstruction, may be replaced by a blow on or near its point with the foot.

Having thus described my improvement, what I claim as new and useful and desire to secure by Letters Patent, is—

The shank B provided with the knuckle D and pin C, and the slotted and recessed plate G provided with projections F F, in combination with the drag-bar K and spring J, substantially as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing improvement in cultivator-teeth, as above described, I have hereunto set my hand and seal.

GEO. F. STROUD. [L. S.]

Witnesses:

A. G. RANDALL.

ALBERT NORTON.