

No. 753,312.

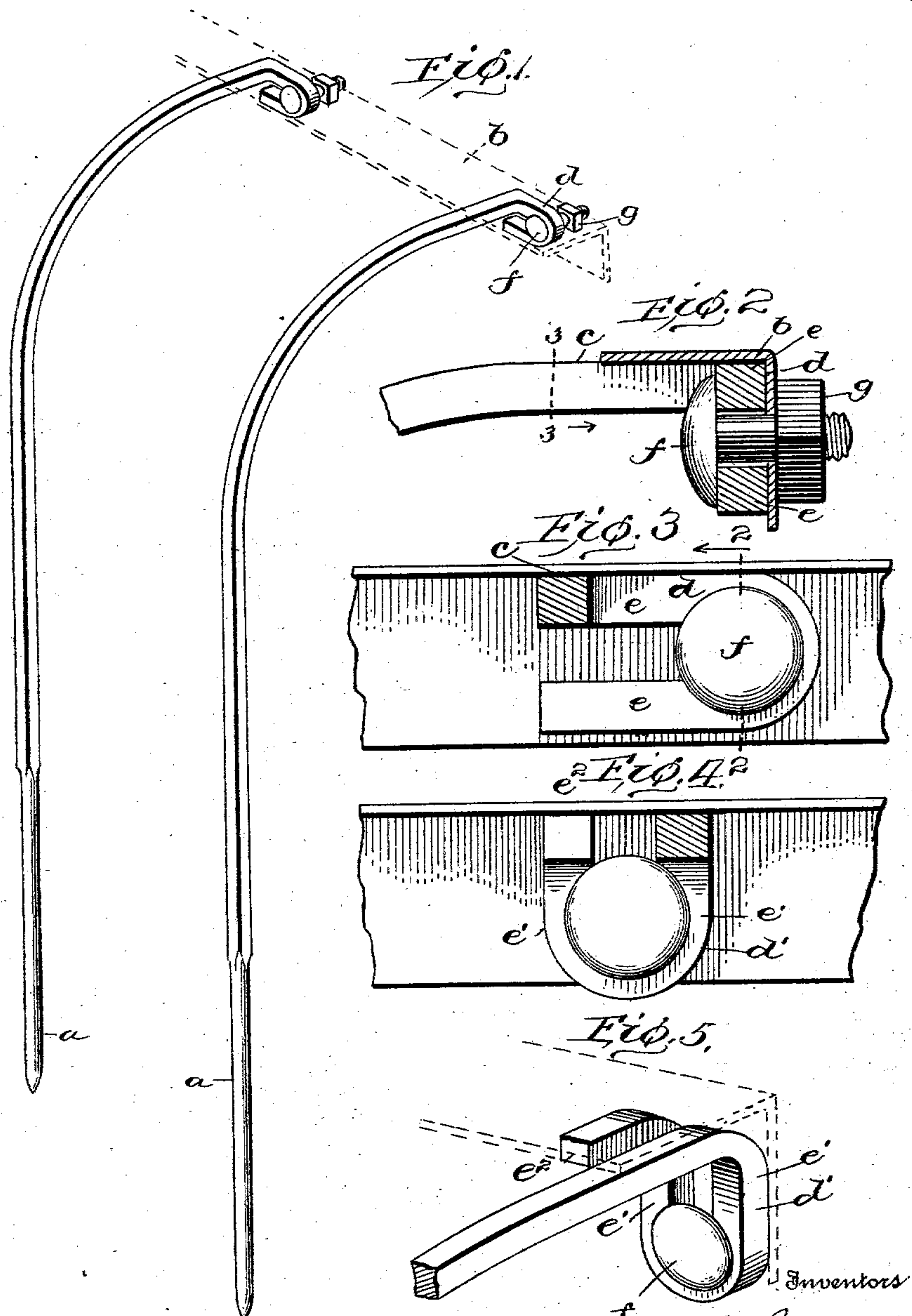
PATENTED MAR. 1, 1904.

E. G. & A. E. QUICKEL.

WEEDER TOOTH.

APPLICATION FILED SEPT. 11, 1903.

NO MODEL



Witnesses

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UNITED STATES PATENT OFFICE.

EDWIN G. QUICKEL AND ALLEN E. QUICKEL, OF YORK, PENNSYLVANIA.

WEEDER-TOOTH.

SPECIFICATION forming part of Letters Patent No. 753,312, dated March 1, 1904.

Application filed September 11, 1903. Serial No. 172,769. (No model.)

To all whom it may concern:

Be it known that we, EDWIN G. QUICKEL and ALLEN E. QUICKEL, citizens of the United States of America, and residents of York, county of York, State of Pennsylvania, have invented certain new and useful Improvements in Weeder-Teeth, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing two teeth attached to their supporting or frame bar, the frame-bar being shown in dotted lines. Fig. 2 is a transverse section on the line 2 2 of Fig. 3. Fig. 3 is a vertical section on the line 3 3 of Fig. 2. Fig. 4 shows a slight modification of a fastening device, this view being similar to the view shown in Fig. 3. Fig. 5 is a perspective view of the modified form of fastening shown in Fig. 4.

The object of this invention is to provide a strong and durable tooth and also a simple fastening device therefor, which enables the tooth to be attached to the frame-bar with but a single bolt and without punching or boring a hole in the shank of the tooth, as more fully hereinafter set forth.

The tooth consists of a spring-steel rod square in cross-section except at its lower or working end, which is rounded and pointed, as at *a*. From its attached upper end the tooth extends rearward from the frame-bar *b* and curves downward. The frame-bar is angular in cross-section, its front wall or flange being vertical and its upper wall or flange extending horizontally rearward from the front flange. The tooth is attached or clamped in the angle formed by these two flanges, its upper surface *c* bearing against the under side of the horizontal flange, and an eye *d*, formed on the upper extremity of the tooth, bearing against the rear face of the front flange, this eye being set at a right angle to the shank of the tooth in order that it may bear squarely against the front flange. The eye is formed by simply bending the extremity of the shank laterally a short distance and then again bending it in the opposite direction, the two parts or members *e* of this eye being in the same vertical plane, so that they both shall bear

against the front flange. The lower member *e* of the eye terminates under the main part of the shank, so that the eye shall be open at one side and closed at its opposite side or end, the space between the two members *e* forming an open slot for the reception of the clamp bolt or rivet *f*, which is passed through the slot and through the front flange and is held in place by a nut *g* on the front end of the bolt. It will be observed that with this construction the tooth may be quickly and securely clamped to the frame-bar with but a single bolt and without weakening the tooth by punching holes in it and also that by arranging the open eye at right angles to the main shank, so that the eye and the shank shall fit in the angle of the frame-bar, the tooth will be held rigidly and prevented from working loose while in action. It will also be observed that with this form of fastening device it will be unnecessary to use clips to prevent pivotal action and loosening of the tooth.

In the modification shown in Figs. 4 and 5 the two members *e'*, composing the eye *d'*, turn downward instead of laterally, and the extremity of one of the members is bent rearward to form an angular arm *e''*, which bears against the under side of the horizontal flange adjacent to the bearing-point of the main part of the shank. In this modified construction the same advantageous results are obtained as in the form first described, and it is clearly within the spirit of our invention.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A weeder-tooth constructed of a steel spring-bar square in cross-section and rounded and sharpened at its working end.

2. The combination, with a frame-bar angular in cross-section, of a weeder-tooth having formed in its upper end an open eye, the eye lying at an angle to the shank, said angle corresponding to the angle of the frame-bar, and the shank fitting in the angle of the bar, and a fastening device passing through said eye and the front flange of the bar.

3. The combination, with a frame-bar consisting of a depending front flange and a rearward-extending top flange, of a weeder-tooth

provided with an open eye at its upper end, said eye lying at an angle to the shank of the tooth and consisting of connected members forming an open slot, the upper side of the shank bearing against the under side of the rearward-extending flange and the angularly-disposed eye portion bearing against the front flange, and a fastening device passing through the eye and engaging the front flange.

4. The combination, with a frame-bar having a rearward-extending flange and a front flange extending at an angle thereto, of a weeder-tooth having an eye formed on its upper end, this eye being formed by angularly bending the shank of the tooth first in one direction and then in the opposite direction, said angularly-bent eye bearing against the rear face of the front flange and the shank bearing against the adjacent face of the rearward-extending flange, and a fastening device passing through the eye and front flange.

5. The combination, with a frame-bar consisting of a front flange and a rearward-ex-

tending flange lying at an angle to the front flange, of a weeder-tooth provided with an eye at its upper end, said eye being formed by laterally bending the upper end of the shank first in one direction and then in the opposite direction, so that said eye shall lie at an angle to the shank of the tooth corresponding to the angle formed by the two flanges of the frame-bar, and a fastening device passing through the eye and engaging the front flange, said eye being thereby clamped against the rear face of the front flange and the shank itself being held against the adjacent face of the rearward-extending flange.

In testimony whereof we hereunto affix our signatures, in the presence of two witnesses, this 10th day of September, 1903.

EDWIN G. QUICKEL.
ALLEN E. QUICKEL.

Witnesses:

LEONARD K. BOOZLE,
JOHN RIEDEL.