## M. J. RAHILLY. Saw-Teeth.

No. 146,708.

Patented Jan. 20, 1874.

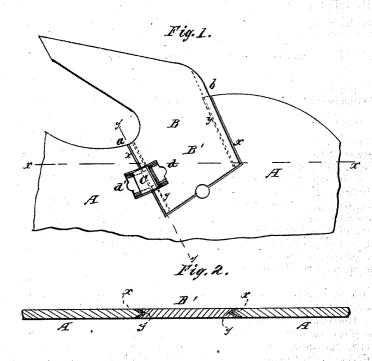


Fig. 3.

A C

Fig. 4.

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## UNITED STATES PATENT OFFICE.

MAURICE J. RAHILLY, OF BEAVER FALLS, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND JOHN E. COYLE, OF SAME PLACE.

## IMPROVEMENT IN SAW-TEETH.

Specification forming part of Letters Patent No. 146,708, dated January 20, 1874; application filed January 2, 1874.

To all whom it may concern:

Be it known that I, MAURICE J. RAHILLY, of Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Saw-Teeth; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction of a removable saw-tooth for circular saws, and in the means for fastening the same to the saw-plate, as will be hereinafter more fully set forth; the object being to form a tooth that shall be easily inserted and removed from the saw-plate, and, when inserted, be easily and securely fastened in its position.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my invention. Fig. 2 is a transverse section on line x x, Fig. 1. Fig. 3 is a cross-section on line y y, Fig. 1. Fig. 4 is a perspective view of the fastening device.

A represents a portion of the saw-plate of a circular saw, and B represents one of the removable teeth in the same. That part marked B' of the tooth B, which enters the saw-plate, has two parallel sides, a and b, in each of which there is a longitudinal V-shaped groove, y. In the saw-plate A is made an aperture, corresponding in size and shape with the part B' of the tooth, and the edges x of the two parallel sides of this aperture are V-shaped to fit in the grooves in the edges a b of the tooth;

or, in other words, the grooved edges of the tooth fit over and slide on these **V**-shaped edges x x. By this construction of the tooth with parallel edges it can be easily inserted and removed when desired. In the side a of the tooth, from the edge inwardly for a suitable distance, is a slot, d, the sides of which are made **V**-shaped. A corresponding slot, d', is made in the saw-plate A, the ends of the two slots d and d' coming directly opposite each other when the tooth B is inserted in its place; but the slots stand not on line with each other, but form a slight angle, as shown. In the slot d' in the saw-plate is a slide, C, having **V**-shaped grooves in its edges to fit on the **V**-shaped edges of the slot. After the tooth has been inserted in the saw-plate this slide is moved so as to partly enter the slot d in the saw-tooth. The slot d being at an angle with the slot d', as above described, the slide C, in entering the slot d, acts as a wedge to hold the tooth in place.

When it is desired to remove the tooth, the slide C is easily moved entirely out of the slot d

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

The combination of the tooth B, saw-plate A, slots d d', set at an angle with each other, and the slide C, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

MAURICE J. RAHILLY.

Witnesses:
John E. Coyle,
Danl. M. Daugherty.