(No Model.)

J. C. DALTON.

ADJUSTABLE SAW TOOTH.

No. 361,142. Patented Apr. 12, 1887.

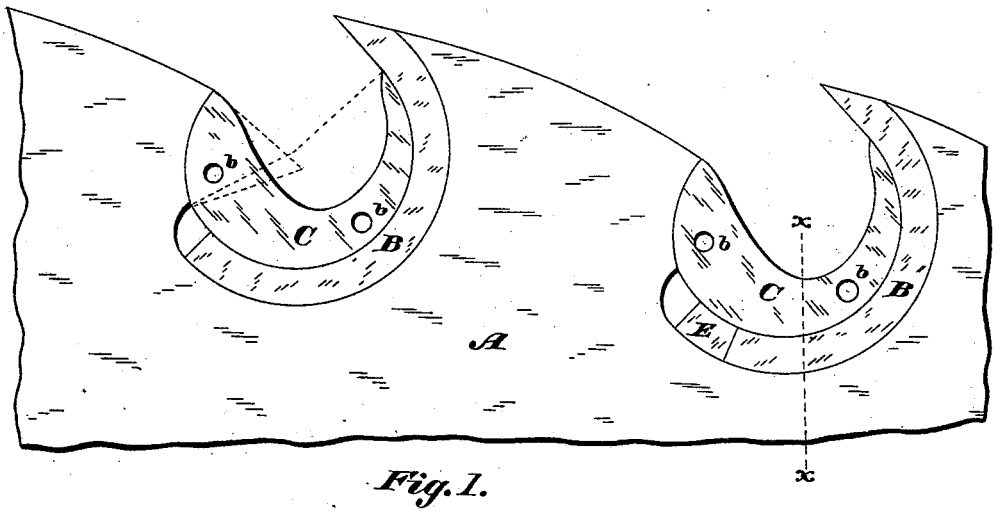

Fig. 1.

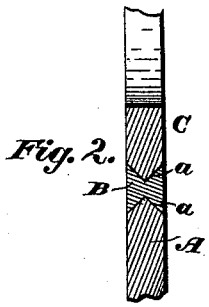

Fig. 2.

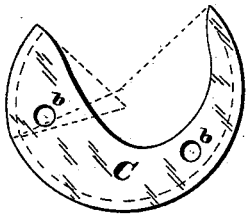

Fig. 3.

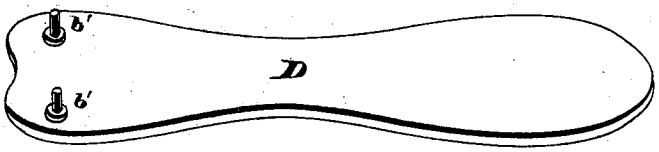

Fig. 4.

WITNESSES:

Harry Grease

Edw Smith

John C. Dalton, INVENTOR

BY Fred W. Barnd

Lin ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN C. DALTON, OF COLUMBUS, OHIO.

ADJUSTABLE SAW-TOOTH.

SPECIFICATION forming part of Letters Patent No. 361,142, dated April 12, 1887.

Application filed November 10, 1886. Serial No. 218,494. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. DALTON, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Adjustable Saw-Teeth; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is a side elevation of a portion of a saw-blade, showing two teeth properly attached thereto. Fig. 2 is a transverse section on line *x x*, Fig. 1. Fig. 3 is a detached view of a locking-block. Fig. 4 is a view of an adjusting or locking bar.

The present invention has relation to adjustable saw-teeth; and its nature consists in the different parts and combination of parts, hereinafter described, and particularly pointed out in the claim; and the object of my invention is to provide a tooth that can be fed or adjusted out as it is worn or when broken off, and also to securely hold the saw-teeth in proper position by means of an eccentric-shaped locking-block.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the saw-blade, which is provided with recesses or sockets for the reception of the saw-teeth B and the locking-block C. The teeth B are provided with the V-shaped grooves *a a*, which are for the purpose of receiving a corresponding-sized V-shaped tongue upon the recess or socket located or formed in the saw-blade A, and also a V-shaped tongue located or formed on the back of the locking-block C. The teeth B are formed of the segment of a circle of any desired diameter, and are so formed for the purpose of adjusting said teeth as they become worn, or for any other desired purpose. For the purpose of securely locking the teeth B, the recesses or sockets formed in the saw-blade A are the segments of circles having different centers, as shown by the radii in dotted lines, Fig. 1. The locking-blocks C are also formed upon their backs of the segments of circles having different centers, and are so formed for the purpose of tightening or loosening the teeth B by means of the locking-blocks C, which act as eccentrics when moved in either direction. For the purpose of securely locking the teeth B in any desired position or point, the locking-blocks C are forced away from the points or cutting ends of said teeth, thereby forcing the locking-blocks C against the teeth.

It will be seen that by my peculiar arrangement I am enabled to securely lock the teeth B in proper position with the eccentric locking-blocks C, thereby doing away with a key or wedge, and at the same time the gullets of the saw proper can be formed much larger, thereby preventing the saw from clogging or choking when using fast feed.

The locking-blocks C are provided with the apertures *b b*, which are for the purpose of receiving the pins *b' b'*, located on the bar D, said bar D being for the purpose of tightening and loosening the locking-blocks C. Blocks E may be placed at the heels of the teeth B as said teeth become worn away.

It will be seen that by my peculiar arrangement as the locking-blocks C are rotated downward, inward, and away from the points of the teeth B, said locking-blocks will be forced against the teeth, and the more force applied the farther in and around will the locking-blocks be rotated and the more pressure brought to bear on the teeth.

It will also be seen that I am enabled to securely hold the teeth B in proper position without keys, shoulders, or springs, and at the same time as the rim of the saw stretches I am enabled to keep the teeth properly secured by means of the locking-blocks C.

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

The combination, with the saw-blade A, having recesses formed of segments of circles having different centers, of the longitudinally-adjustable teeth B and the longitudi-

nally-movable locking-blocks C, said blocks being provided with apertures *b b*, for engagement therewith of a tool for moving them into and out of position, and the backs of said blocks being formed on segments of circles having different centers, substantially as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN C. DALTON.

Witnesses:
JOHN LAYLANDER,
GEO. L. ARTZ.