

No. 844,850.

PATENTED FEB. 19, 1907.

E. R. COBB.
SAW DRESSING TOOL.
APPLICATION FILED JUNE 5, 1906.

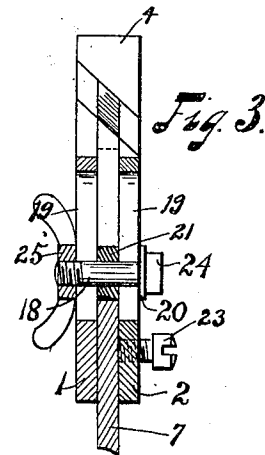
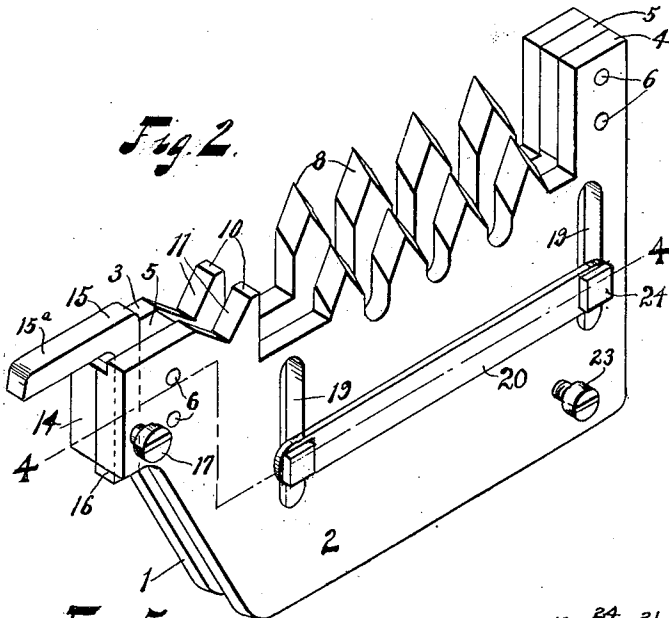
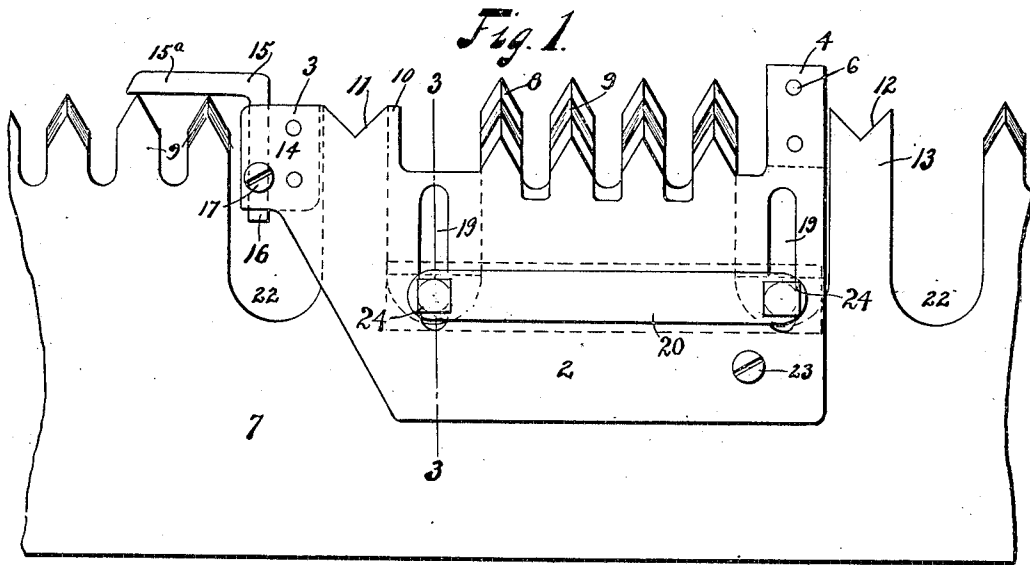
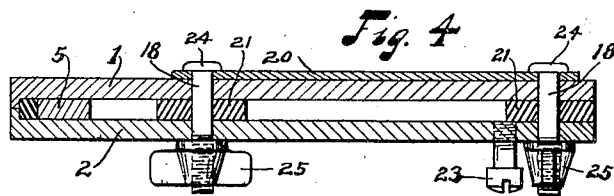
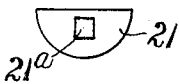


Fig. 5



Witnesses:

Edw. Lindmueller.

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UNITED STATES PATENT OFFICE.

ELBERT R. COBB, OF BERMUDA, LOUISIANA.

SAW-DRESSING TOOL.

No. 844,850.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed June 5, 1906. Serial No. 320,275.

To all whom it may concern:

Be it known that I, ELBERT R. COBB, a citizen of the United States, residing at Bermuda, in the parish of Natchitoches and State of Louisiana, have invented certain new and useful Improvements in Saw-Dressing Tools, of which the following is a specification.

My invention relates to improvements in saw-dressing tools designed with special reference to the dressing or filing of what are known as "crosscut-saws." As is well known, the saws of this class now in common use are provided at regular intervals with a series of pairs or groups of two or four teeth known as "cutters" and a series of teeth arranged intermediate said cutters and known as "rakers" or "drag-teeth."

It is desirable that the cutting-teeth after being "set" be filed at a certain uniform angle or bevel, depending upon the hardness of the material to be sawed and the temper of the saw-teeth, and that the rakers or drag-teeth be filed uniformly and of less length than the cutting-teeth, preferably about one-sixteenth of an inch shorter than the cutting-teeth.

The primary object of my invention is to enable the teeth of saws of this class to be filed uniformly of the desired length and bevel without the necessity of the operation known as "jointing," commonly employed for securing a uniform length of teeth and which results in much waste of material in the dressing of the saw.

Another object of the invention is to produce a generally improved tool of this class which will be exceedingly simple in construction, cheap of manufacture, efficient in use, and much better adapted to its intended purposes than any other device of the same class with which I am acquainted.

Referring now to the accompanying drawings, forming a part of this specification, Figure 1 is a side view of the improved tool in its operative position, applied to an ordinary saw of this class; Fig. 2, a perspective view of the improved tool; Fig. 3, a vertical cross-sectional view taken on line 3 3 of Fig. 1; Fig. 4, a horizontal sectional view taken on line 4 4 of Fig. 2; Fig. 5, a side view of one of the gum-supporting blocks used in the improved tool.

Similar numerals of reference designate like parts throughout all the figures of the drawings.

The improved tool consists, essentially, of two steel plates 1 and 2, secured in the present instance at the upper front and rear ends or corners 3 and 4, respectively, by means of bridge-blocks 5 and rivets 6.

The plates 1 and 2 are adapted to take over or straddle the toothed edges of the saw 7, as shown in Figs. 1 and 3 of the drawings, and are provided with a series of very hard non-filable steel teeth 8, having their sides properly beveled and adapted to register with the cutting-teeth 9 of the saw. The plates 1 and 2 are further provided with a pair of raker-blocks 10, provided with notches 11, adapted to register with the notch or recess 12 of the raker-tooth 13.

The front portion of the plates 1 and 2 is provided with an integral gage-head or block 14, carrying an inverted-L-shaped gage member 15, the vertical stem or shank portion 16 of which is adjustably mounted in said gage-block 14 by means of a set-screw 17. The horizontally-extending arm 15^a of the adjustably-mounted gage member 15 is adapted to rest on the edges of the cutting-teeth 9, as shown in Fig. 1 of the drawings, and the relative adjustment of the raker-blocks 10 with reference thereto is made by means of the set-screw 17, so that the tips of the raker-teeth will be filed with the sides shorter than the tips of the cutting-teeth 9, preferably about one-sixteenth of an inch less in length than said cutting-teeth. The plates 1 and 2 are further provided with a pair of square-shanked set-screws or bolts 18, adjustably mounted in vertical slots 19, carrying on their ends a strap-plate 20, slidably mounted adjacent to the plate 2. A pair of semicircular-shaped gum-supporting blocks 21, provided with square openings 21^a, (see Fig. 5,) are mounted on the square set-screws or bolts 18 and interposed between the plates 1 and 2 and are thereby adapted to be properly supported and rest within the gums 22 of the saw, whereby the improved tool is properly supported for dressing the cutting-teeth of a uniform and of any desired length.

The adjustable set-screws or bolts 18 are provided with heads 24, engaging the strap-

plate 20, and thumb-nuts 25 for adjusting and setting the set-screws or bolts 18 when desired.

When the various adjustable parts of the improved tool have been properly adjusted and set for dressing the teeth of the saw uniformly, the improved tool may be clamped to the saw by means of the set-screw 23.

When it is desired to use the improved tool, the saw-teeth are first given the desired set, after which the saw is placed in a vise or clamp for filing, and the improved tool is placed over the toothed edges of the middle portion of the saw and let down and adjusted to such a position that the dulled or worn points of the teeth of the saw will protrude or extend upwardly far enough so that when the sides are filed down flush with the adjacent or contiguous teeth and raker-block of the improved tool they will have been brought to a sharp point, as illustrated in Fig. 1 of the drawings. The adjustable parts are then adjusted and secured in proper position and the set-screw 23 drawn up, after which the set of teeth within the tool may be given the proper and desired filing or dressing. The set-screw is then loosened and the improved tool set over the next set or group of teeth, after which the operation is repeated as before until all the teeth on the one side of the saw have been treated, after which the improved tool is reversed and the operation repeated as before until all the teeth in the saw have been properly dressed.

In Fig. 4 I have shown the adjusting-bolts 18 reversed, with strap-plate 20 adjusted to the plate 1 and thumb-nuts 25 adjacent to the plate 2.

From the foregoing description, taken in connection with the accompanying drawings, the operation and advantages of my invention will be readily understood.

Having thus described my invention, without having attempted to set forth all the forms in which it may be made or all the modes of its use, I declare that what I claim, and desire to secure by Letters Patent, is—

1. In a saw-dressing tool, the combination with a pair of filing gage-plates provided with vertically-arranged slots; of a pair of bolts passing through said vertically-arranged slots formed in said plates and carrying at one end a slidably-mounted strap-plate and at the other a pair of nuts, and a pair of gum-supporting blocks mounted on said bolts and interposed between said plates.

2. In a saw-dressing tool, the combination with a pair of filing gage-plates suitably secured together; of a gage block or head integral with said plates, and a gage member slidably mounted in said gage block or head and arranged to be held in adjusted position by a set-screw.

3. In a saw-dressing tool, the combination with a pair of filing gage-plates provided with vertically-arranged slots; of bolts provided with thumb-nuts adjustably mounted in said slots and carrying gum-supporting blocks interposed between said plates.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELBERT R. COBB.

Witnesses:

SAM KRANSON,
ABE H. KRANSON.