W. M. CASS & J. A. LONG.

Saw-Gummer.

No. 220,574. Patented Oct. 14, 1879.

Fig. 1.

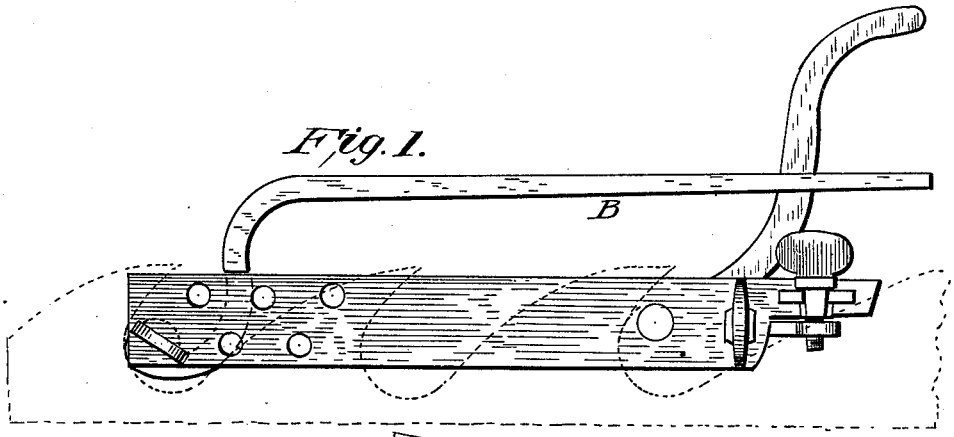


Fig. 2.

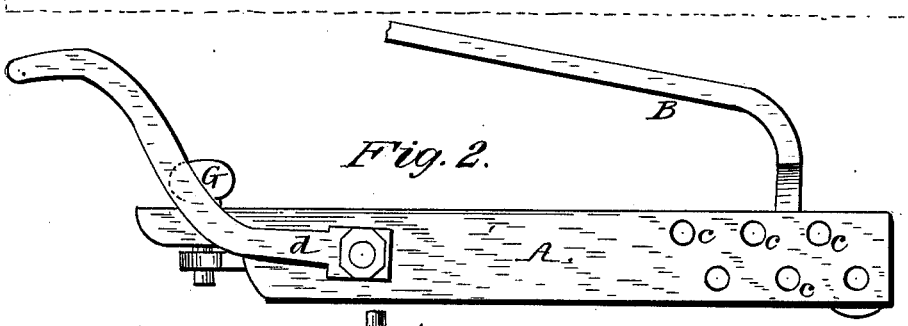


Fig. 3.

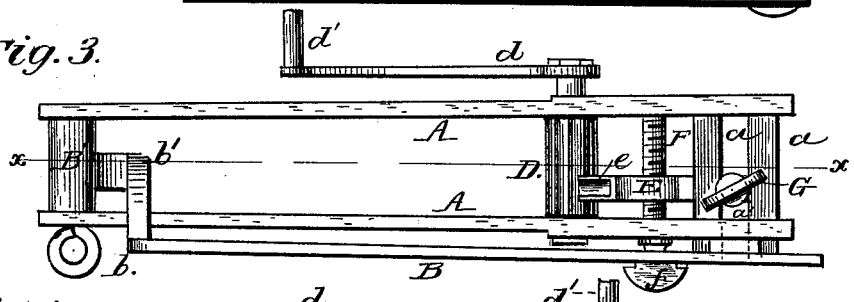


Fig. 4.

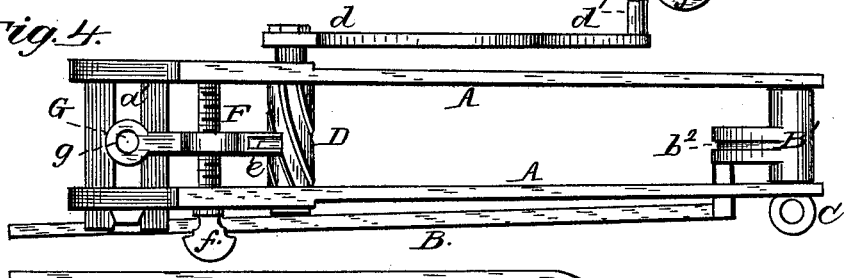
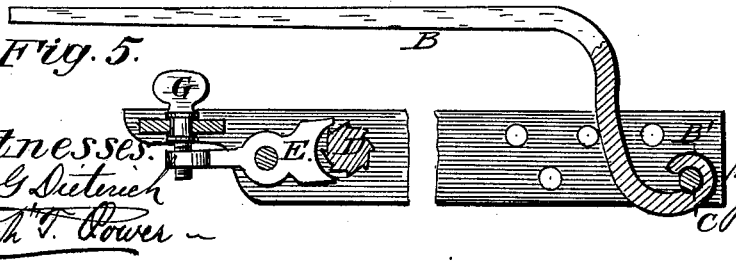


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM M. CASS AND JOHN A. LONG, OF COG HILL, TENNESSEE.

IMPROVEMENT IN SAW-GUMMERS.

Specification forming part of Letters Patent No. **220,574**, dated October 14, 1879; application filed August 16, 1879.

To all whom it may concern:

Be it known that we, WILLIAM M. CASS and JOHN A. LONG, of Cog Hill, in the county of McMinn and State of Tennessee, have invented certain new and useful Improvemnts in Saw-Gummers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation, showing the gummer in position upon the saw ready for work. Fig. 2 is a similar view, showing the opposite side of the gummer. Fig. 3 is a top view of the gummer detached from the saw. Fig. 4 is a view of the under side thereof, and Fig. 5 is a longitudinal section on line *x x* in Fig. 3.

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

This invention has relation to portable saw-gummers adapted to be used on circular as well as on straight saws, and consists in the detailed construction and combination of parts, as hereinafter described, and particularly pointed out in the claims.

The object of our invention is to produce a gummer which may be easily and expeditiously adjusted upon the saw-blade and held firmly thereon during the operation of gumming, while at the same time the teeth may be so adjusted upon the rotary cutter as to readily regulate the length as well as the pitch of cut without removing the machine or changing its position upon the saw.

In the drawings, A A are parallel side pieces, which, with the cross-bars *a a* at one end, form the frame of the machine. B is a lever, bent at right angles at *b* and b^1, where it forms a sleeve, B′, through which is inserted a bolt, C, having a thumb-nut at one end, and screw-threaded at the opposite end. The lever B, with its sleeve B′ and fulcrum-bolt C, may be adjusted in frame A A by means of a series of perforations, *c c c*, in each of the side pieces, registering with each other, those in the side piece opposite lever B being screw-threaded to fit the threaded end of bolt C and hold this with the lever firmly in place.

The lower curved part b^1 of lever B has a longitudinal groove, b^2, made wide enough to straddle the top edge of the saw-blade.

D is the cutter, which may be made either with straight teeth, as in Fig. 3, or with spiral teeth, as in Fig. 4. In either case the teeth or cutters are made deeper at one end of the cutter or grinder than at the other, their cutting-edge slanting downward and increasing gradually in depth from one side to the other. The cutter or grinder D is rotated by a crank, *d*, and handle *d′*.

E is the adjuster, the forward forked end of which projects over the cutter on its upper and lower side, so as to form grooved guides *e e*, set transversely to the cutter. This adjuster has a lateral screw-threaded perforation, which works upon an adjusting-screw, F, pivoted in frame A A, and operated by a thumb-nut, *f*, and in the extreme rear end of the adjuster is a vertical screw-threaded perforation, *g*, through which works the vertical adjusting-screw G, which is laterally adjustable in the slot *a′*, formed between the two end bars *a a* of frame A A.

From the foregoing description, taken in connection with the drawings, the operation of my improved gummer will be readily understood.

Lever B is first adjusted in the frame in such a manner that the cutter will be in the proper position upon the teeth when the gummer is inserted upon the saw, after which the lever is depressed and held with the left hand, the groove b^2 straddling the saw-blade. The cutter is then rotated by turning the crank, the adjuster being so placed in the frame, by operating the screw F, that the tooth is brought over the shallow end of the cutter-teeth. As the operation of gumming progresses, the blade is gradually shifted by the screw F and adjuster E to the opposite deep-toothed end of the cutter, while at the same time the cutting is directed up or down by operating the vertical adjusting-screw G, which elevates or dips the grooved front end or guide of the adjuster pivoted upon the lateral adjusting-screw F.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. In a portable saw-gummer, the combination, with the frame A A having perforations *c c c*, of the adjustable lever B, for holding the saw during the operation of gumming, substantially as and for the purpose set forth.

2. In a portable saw-gummer, the combination, with the frame A A and rotary cutter or grinder D, of the pivoted bifurcated adjuster E, having upper and lower grooved guides, *e e*, substantially as and for the purpose set forth.

3. The combination of frame A A, having end bars *a a*, forming the slot *a'*, rotary cutter or grinder D, pivoted adjuster E, lateral adjusting-screw F, and vertical adjustable adjusting-screw G, substantially as and for the purpose herein shown and described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

WILLIAM M. CASS.
JOHN A. LONG.

Witnesses:
THOMAS CARLOCK,
JOHN H. CASS.