

(No Model.)

C. J. BURNETT.
TOOL FOR GUMMING SAWS.

No. 562,705.

Patented June 23, 1896.

FIG. 1.

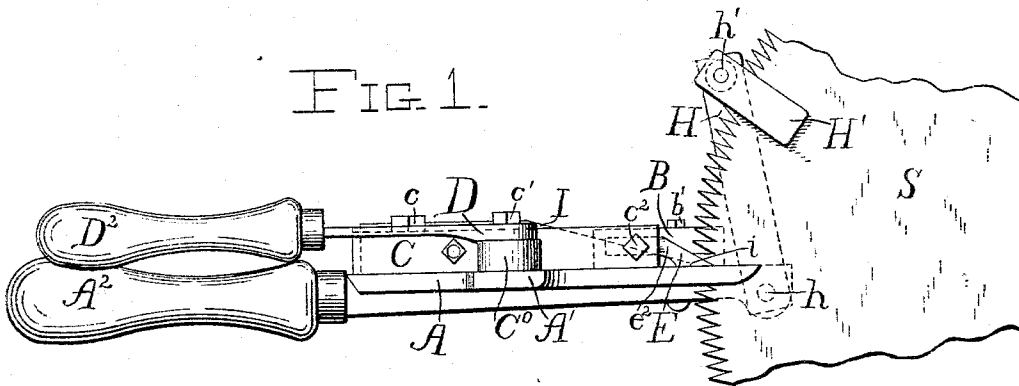


FIG. 2.

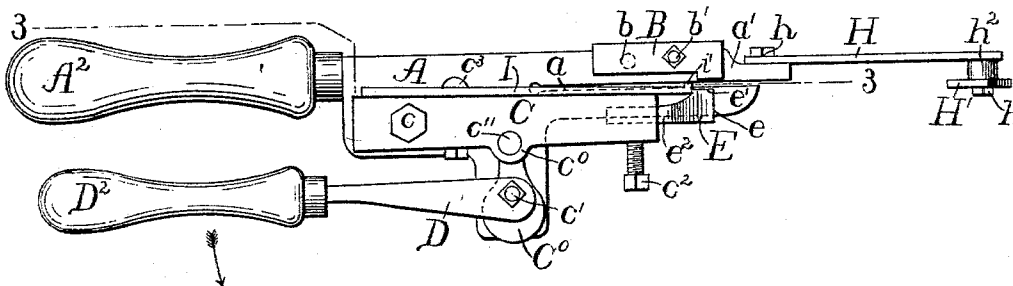


FIG. 3.

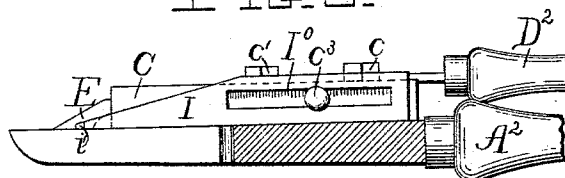


FIG. 4.

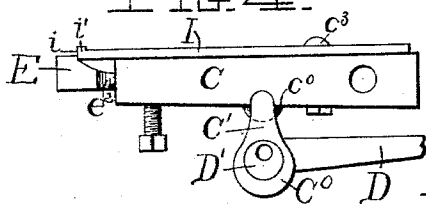


FIG. 5.

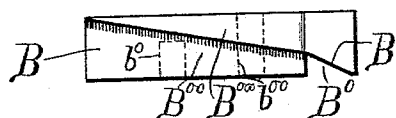
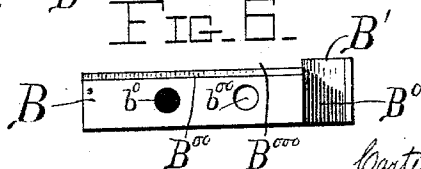


FIG. 6.



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UNITED STATES PATENT OFFICE.

CARTER J. BURNETT, OF GADSDEN, ALABAMA, ASSIGNOR OF TWO-THIRDS
TO E. T. SLACK AND E. G. THORNTON, OF ETOWAH COUNTY, ALABAMA.

TOOL FOR GUMMING SAWS.

SPECIFICATION forming part of Letters Patent No. 562,705, dated June 23, 1896.

Application filed March 4, 1896. Serial No. 581,804. (No model.)

To all whom it may concern:

Be it known that I, CARTER J. BURNETT, a citizen of the United States, residing at Gadsden, in the county of Etowah and State of Alabama, have invented certain new and useful Improvements in Tools for Gumming Gin-Saws; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for gumming gin-saws and saws of a similar nature; and it consists of the novel parts and combinations of parts hereinafter described and claimed.

My invention will be understood by reference to the accompanying drawings, wherein the same parts are indicated by the same letters throughout the several views.

Figure 1 is a side elevation of my improved tool for gumming saws, the same being shown as in use upon a gin-saw. Fig. 2 is a top plan view of the same, the saw being omitted and the holding-arm extended. Fig. 3 is a section taken on the line 3 3 of Fig. 2 and looking toward the bottom of the sheet. Fig. 4 is an inverted plan view of the cutter-holder, cutter-bar, and gage and shows the eccentric and lever connected thereto, by means of which the cutter is operated. Fig. 5 is a side view of the die used with my tool, the same being enlarged, and looking at the cutting-face thereof; and Fig. 6 is an inverted plan view of the same.

A represents the body or base of the tool, slotted at *a* to receive the saw, and provided at one end with handle *A*², by means of which the tool may be held when in use. A laterally-extending lug or projection *A*¹ is formed on one side of this body *A*, to which the operating-lever of the cutter is pivoted, as will be hereinafter more fully described.

B represents the stationary die or block against which the cutter moves in gumming the teeth of the saw. This die is provided with a hole or socket *b*⁰ in its under side, which fits over a stud *b*, rigidly mounted upon the body *A* of the tool, and is also provided with a perforation *b*⁰⁰ to receive a bolt *b*¹, which passes through the body *A* and through the said die,

and is firmly held by means of a nut, as shown. By fixing this die in the manner shown it will be seen that it will be firmly held in place when in use, and that it may be readily removed when worn or when it be desired to substitute another die, for reasons obvious.

C represents the holder for the cutter and gage. This holder is in the form of a swinging bar which is pivoted to the base *A* by means of a screw-bolt *c*, which passes through said holder and engages in a screw-threaded hole in the said base portion, as shown, or the said bolt may pass entirely through said base portion and be secured by a nut.

D represents the lever for operating the cutter. This lever is provided with handle *D*² and carries an eccentric *D*¹, which eccentric works in the outer enlarged end *C*⁰ of the stem *C*¹ and is pivoted to the lug or projection *A*¹ by means of a bolt *c*¹. The opposite end of the stem *C*¹ is provided with a stud *c*², which engages in a perforated lug *c*⁰ on the side of the holder *C*, as seen most clearly in Figs. 2 and 4.

By moving the handle *D*² of the lever-arm *D* away from the handle *A*² in the direction of the arrow, the action of the eccentric *D*¹ will throw the arm *C*¹ and the holder *C*, with its attachments, across the upper face of the base portion *A*, as will be hereinafter more fully described.

E represents the cutter, which is beveled toward its forward end, forming the flat point *e*, and is provided with the cutting-face *e*¹. This cutter is provided with a shank *e*², which is adapted to fit into a socket in the forward end of the cutter-bar *C* and is held rigidly therein by means of a clamp-screw *c*², which screws into a screw-threaded hole in the side of the said cutter-bar and clamps the cutter firmly when in position. It will be seen that the said cutter may be easily removed and put into position, and that, as in the case of the die *B*, hereinbefore referred to, the cutter may be removed when worn, or changed for another to suit the teeth of the saw to be gummed.

I represents a gage for regulating the depth of the teeth to be cut. This gage *I* is provided with an elongated slot *I*⁰, through which passes the bolt *c*², by means of which the gage

may be set and clamped in the desired position. The forward portion of this gage is beveled, as at i , to fit into the angle between the teeth of the saw, and its forward end is widened, as at i' , so as to form a good bearing-surface for the saw when in use. This gage, as above stated, may be adjusted forward or backward to regulate the depth of the cut, and when in use fits into the angle between the teeth of the saw, and will render it easy to make a uniform cut.

In order that the cutter may move beneath the die in making a cut, the said die is cut away at its forward end, as at B^0 , (see Figs. 5 and 6,) and it also has a beveled recess cut along its inner side, as at B^{00} , to receive the gage which moves with the cutter. This gage is normally in a position so that its forward end will be immediately across the slot in the base A, into which the teeth of the saw enter when the tool is in use.

In order to allow a clean and thorough cut to be made, the die B is also cut away along a portion of its inner face at B^{000} , so that the cutter may pass far enough beneath the die to finish the cut without hindrance. The saw-tooth is gummed or cut against the beveled edge B' of the die, which corresponds with the shape of the cutter being used.

The tool is steadied upon the saw when in use by means of the arm H, pivoted at h to the perforated lug a' on the forward end of the base A, which arm H carries at its opposite end the shorter arm H' , connected thereto by means of a bolt h' , which passes through a sleeve or collar h^2 and thus clamps the two arms together at sufficient distance apart to admit the saws.

Many modifications of my improved device could be made which could be used without departing from the spirit of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a saw-gumming tool, the combination with a metal frame slotted longitudinally at one end to receive the edge of the saw, and provided at its opposite end with a handle to be grasped by the hand of the operator; of the die B rigidly mounted upon said frame to one side of said slot and provided with cutting edge B' , beveled recess B^0 in its under side to admit the movable cutter beneath said cutting edge B' , and beveled recess B^{00} on its side next said slot to admit the gage for regulating the cut; a cutter-bar pivoted at its rear end upon said frame; a cutter mounted in the forward end of said cutter-bar and adapted to enter the recess B^0 in said die; a gage mounted upon the inner side of said cutter-bar and movable therewith, and adjustable longitudinally thereon; a stem pivoted to said cutter-bar; an eccentric working in one

end of said stem; and a hand-lever pivoted upon said frame and operating said eccentric to cause said cutter-bar and gage to move across the face of said frame, substantially as and for the purposes described.

2. In a saw-gumming tool, the combination with a metal frame slotted longitudinally at one end to receive the edge of the saw, and provided at its opposite end with a handle to be grasped by the hand of the operator; of the die B rigidly mounted upon said frame to one side of said slot and provided with cutting edge B' , beveled recess B^0 in its under side to admit the movable cutter beneath said cutting edge B' , and beveled recess B^{00} on its side next said slot to admit the gage for regulating the cut; a cutter-bar pivoted at its rear end upon said frame; a cutter mounted in the forward end of said cutter-bar and adapted to enter the recess B^0 in said die; the gage I having beveled point i with widened portion i' , and longitudinal slot I^0 therein; a bolt passing through said slot in said gage and through said cutter-bar, for adjustably securing said gage to said cutter-bar; a stem pivoted to said cutter-bar; an eccentric working in one end of said stem; and a hand-lever pivoted upon said frame and operating said eccentric to cause said cutter-bar and gage to move across the face of said frame, substantially as and for the purposes described.

3. In a saw-gumming tool, the combination with a metal frame slotted longitudinally at one end to receive the edge of the saw, and provided at its opposite end with a handle to be grasped by the hand of the operator; of the die B rigidly mounted upon said frame to one side of said slot and provided with cutting edge B' , beveled recess B^0 in its under side to admit the movable cutter beneath said cutting edge B' , and beveled recess B^{00} on its side next said slot to admit the gage for regulating the cut; a cutter-bar pivoted at its rear end upon said frame and having a socket in its forward end to receive the shank of the cutter; the cutter E having shank e^2 fitting into said socket and held by a set-screw, and having beveled point e and cutting-face e' ; a gage mounted upon the inner side of said cutter-bar and movable therewith, and adjustable longitudinally thereon; a stem pivoted to said cutter-bar; an eccentric working in one end of said stem; and a hand-lever pivoted upon said frame and operating said eccentric to cause said cutter-bar and gage to move across the face of said frame, substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

CARTER J. BURNETT.

Witnesses:

E. T. SLACK,
E. G. THORNTON.