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C. Snow & Co.



# UNITED STATES PATENT OFFICE.

JAMES W. RAMSEY, OF PARAGOULD, ARKANSAS.

## SAW-GUMMER.

SPECIFICATION forming part of Letters Patent No. 468,031, dated February 2, 1892.

Application filed August 8, 1891. Serial No. 402,120. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES W. RAMSEY, a citizen of the United States, residing at Paragould, in the county of Greene and State of Arkansas, have invented a new and useful Saw-Gummer, of which the following is a specification.

This invention relates to metal tools and implements, and more especially to the machines for gumming saws; and the object of the same is to effect certain improvements in devices of this character.

To this end the invention consists in the construction hereinafter more fully described and claimed, and as illustrated on the sheet of drawings, wherein—

Figure 1 is a front elevation of this machine with the guide turned aside. Fig. 2 is a central longitudinal section thereof. Fig. 3 is a right-hand end elevation showing a circular saw in dotted lines in position to be operated upon. Fig. 4 is a bottom plan view with the bracket turned and the cutter partly withdrawn. Fig. 5 is an enlarged perspective detail showing the parts of the cutter-head slightly separated.

Referring to the said drawings, 1 designates the main frame of this machine, which is of approximately L shape, the foot of the L standing vertical and the other end of the shank having a downturned ear 2 with a notch 3. Within the body on a bolt or other swivel 4 is pivoted a bracket 5, which approximately follows the contour of the body, except that its downturned foot is not in contact with the foot of the body, and longitudinally through this bracket extends the main shaft 6, which is threaded where it passes through the depending ear 7 of the bracket, there being about twenty-four threads to the inch. In its normal position the bracket stands beneath the frame, as shown in Figs. 1 and 2, and is held there by a set-screw 8, passing through the downturned ear 2 of the frame and into the bracket, while the main shaft 6 stands in the notch 3, and its operating crank-handle 9 stands beyond the outer end of the set-screw, so that it may be manipulated. The main shaft 6 has an enlarged tubular head 10, which is provided with exterior longitudinal recesses 11, closed at their inner ends and opening at their outer ends at

the outer end of the head, as shown in Fig. 5, and 12 are cutters preferably ground to a point at each end and of a size to be seated within said recesses and to project beyond the end of the head.

13 is a collar surrounding the cutters and borne tightly thereupon by a tightening screw or bolt 14, the cutters being slightly thicker than the depth of the recesses, in order that the collar will strike upon them.

15 is a discharger sliding within the tubular head 10, and 16 is an operating-handle extending laterally from this discharger through a slot 17 in the head, whereby the discharger may be operated.

20 and 21 are set-screws passing inwardly through the depending feet of the frame and the bracket and having jam-nuts 22 and 23 on their bodies outside the depending feet, as shown.

24 is a large-sized set-screw passing inwardly through the depending foot of the main frame and having a jam-nut 26, the inner end of this set-screw standing opposite the cutter-head.

30 is the guide removably and adjustably secured upon the corner of the main frame by a set-screw 31, the body of this guide bending downwardly and being provided with a deep slot 32, and 33 34 are inwardly-projecting set-screws respectively having jam-nuts 35 36, all connected with the outer end of the guide.

In operation the cutters are placed in the recesses of the tubular head and held therein by the collar 13. The main shaft is then arranged within its bearings in the bracket and its operating crank-handle applied. The bracket is then turned to its normal position and the set-screw 8 inserted to hold it there. The saw-blade is passed between the feet of the frame and the bracket and the various set-screws adjusted to bring the blade to the proper position for the gumming operation, and then by properly manipulating the handle the saw can be gummed, as will be clear. If further support for the saw-blade is desired, or if the saw be of the concave or tubular pattern, the bracket may be applied to the frame and adjusted to the proper angle, after which its set-screws are adjusted to properly guide the saw-blade.

The jam-nuts are obviously for the purpose



of preventing the accidental and undesirable movements of the various set-screws.

This machine is easy of manufacture and simple in operation, and it provides for the various adjustments necessary for the treatment of saw-blades of nearly any size and shape.

What is claimed as new is—

1. In a saw-gummer, the combination, with the L-shaped frame having set-screws passing inwardly through its foot, of the L-shaped bracket removably secured within the frame with its foot parallel with that of the frame, a set-screw through this foot, the main shaft journaled in said bracket, a cutter-head at the inner end of said shaft opposite one of the set-screws in the frame, and means for rotating and for feeding the shaft, as and for the purpose set forth.

2. In a saw-gummer, the combination, with the L-shaped frame having set-screws passing inwardly through its foot, a downturned ear located at the other end of the frame and provided with a notch, and a set-screw through this ear, of the L-shaped bracket pivotally secured within the frame and having a set-screw through its foot, a depending ear at the other end of the bracket standing normally inside said downturned ear and then engaged by the set-screw through the latter ear, the main shaft journaled in the foot and ear of the bracket and normally resting in said notch, a cutter-head at the inner end of said shaft, and means for rotating and for feeding the shaft, substantially as described.

3. In a saw-gummer, the combination, with the supports for the saw-blade, of a shaft hav-

ing a head provided with exterior longitudinal recesses closed at their inner ends and opening at their other ends at the end of the head, cutters removably located in said recesses and thicker than the depth of the recesses, the cutters being sharpened at both ends, a collar surrounding the cutters, a bolt for tightening said collar thereon, and means for rotating and for feeding said shaft, as set forth.

4. In a saw-gummer, the combination, with the supports for the saw-blade, of a shaft having a tubular head, cutters removably clamped on the exterior of said head, a discharger sliding within the head, an operating-handle projecting therefrom through a slot in the head, and means for rotating and for feeding said shaft, substantially as described.

5. In a saw-gummer, the combination, with the L-shaped frame, the L-shaped bracket removably secured therein with its foot parallel with that of the frame, and the rotating cutter mounted in the bracket, of oppositely-disposed set-screws in the two feet, a large set-screw through the foot of the frame opposite the cutter, a guide adjustably mounted on the frame and having a slotted body, and oppositely-disposed set-screws through said body into the slot, substantially as hereinbefore described.

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

JAMES W. RAMSEY.

Witnesses:

A. HOUSE,  
L. H. CASE.