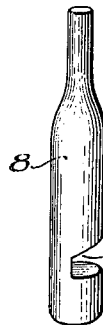
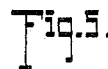
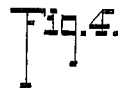
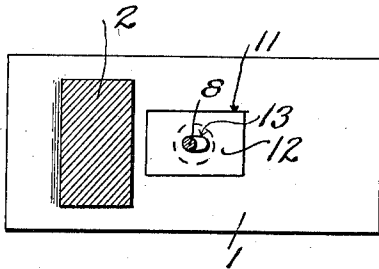
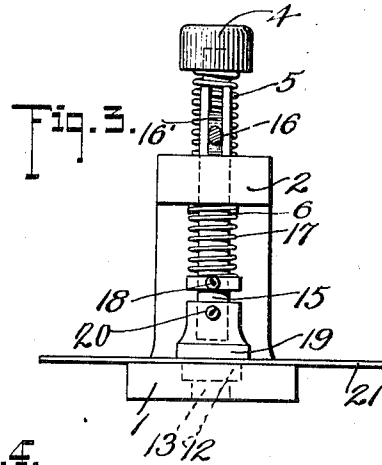
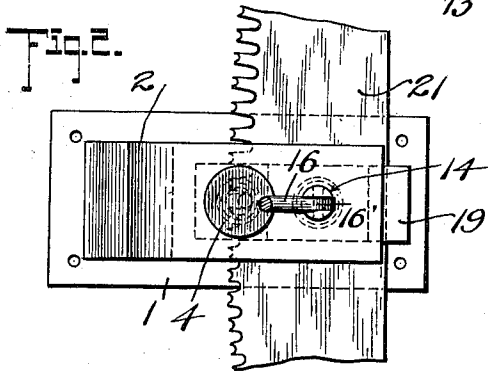
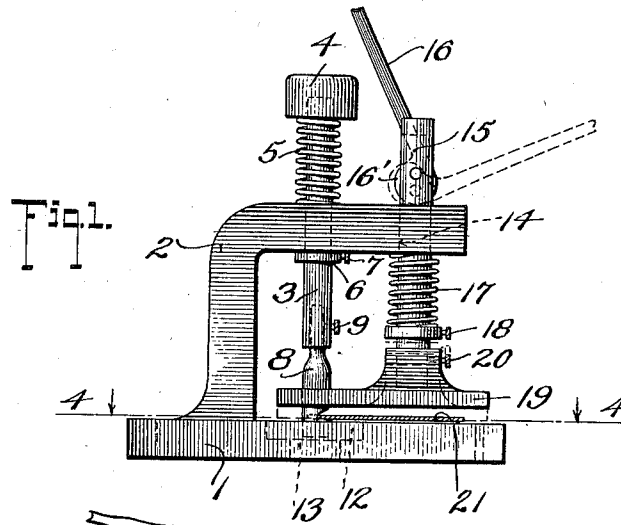


E. SMITH.
SAW GUMMER.
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1,029,516.

Patented June 11, 1912.



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SAW-GUMMER.

1,029,516.

Specification of Letters Patent.

Patented June 11, 1912.

Application filed February 3, 1912. Serial No. 675,192.

To all whom it may concern:

Be it known that I, ERICK SMITH, a citizen of the United States, residing at Flagstaff, in the county of Coconino and State of Arizona, have invented certain new and useful Improvements in Saw - Gummers, of which the following is a specification.

This invention relates to improvements in saw gumming devices, and has for its primary object the provision of a simple and efficient machine which may be cheaply manufactured and one having adjusting means to afford great efficiency of action in operation.

For a full understanding of the present invention, reference is to be had to the following description and to the accompanying drawings, in which—

Figure 1 is a side elevation of my invention showing, in section, a saw in proper position for gumming, said saw being broken away. Fig. 2 is a top plan view. Fig. 3 is an end elevation. Fig. 4 is a view partly in section, taken about on the line 4—4 of Fig. 1. Fig. 5 is a view of the punch; and Fig. 6 is a view showing a piece as cut from the saw by operation of the punch used with my device.

Throughout the following detail description and on the several figures of the drawings, similar parts are referred to by like reference characters.

Referring now to the drawings and specifically describing the invention, 1 denotes a base, extending upwardly from which is formed an overhanging arm 2, said arm having an opening bored through the horizontal portion thereof in which opening is mounted for vertical movement a plunger 3. The plunger is provided at its upper extremity with a head or striking block 4 and a spiral spring 5 is located between said head 4 and the upper surface of the overhanging arm 2, by means of which the plunger 3 is held at its upper operative position. A collar 6 is mounted on the rod 3 and adapted to bear against the under surface of the arm 2 to limit the upward movement of the plunger, said collar being easily adjusted by means of the set-screw 7.

Removably carried by the lower end of the plunger 3 is a punch 8, held in position by means of the set-screw 9. Near the lower end of the punch 8 is provided an open transverse slot 10, the upper surface of said

slot being inclined upwardly for the purpose of providing a shearing action to the punch in the operation thereof.

The base 1 is provided with a recess 11 in which is inserted a die plate 12, provided in its central portion with an opening of equal size to the size of the punch which is used in connection therewith. The base 1 may be provided further with an opening 13 extending through in order to accommodate further movement of the punch as will readily be apparent.

In the outer end of the horizontal portion of the arm 2 is provided an opening 14 to receive the vertically movable standard 15, the upper portion of said standard being bifurcated and having a lifting lever 16 pivotally mounted between the bifurcated portion. The lifting lever 16 is formed at its lower extremity with a cam 16'. Mounted on the standard 15, and bearing against the under side of the arm 2 is provided a compression spring 17 bearing against an adjusting collar 18 at its lower portion, by means of which collar the tension of the spring 17 may be regulated according to the wishes of the operator.

Removably carried by the lower end of the standard 15 is a clamping plate 19 extending parallel to the base 1 and held in proper position by means of the set-screw 20. The inner end of the clamping plate 19 has an opening therethrough which is adapted to guide the punch 8 and at the same time properly assist in positioning said plate.

In the operation of the invention the saw 21 is inserted between the base 1 and the clamping plate 19, in the usual manner, and when properly positioned the lifting lever 16 is moved downwardly, thereby releasing the cam 16' from engagement with the arm 2 and permitting the standard 15, through the instrumentality of the spring 17 to press the clamping plate 19 against said saw. A blow is then struck on the head 4 by means of a hammer or such other mechanism as may be provided, whereupon the punch 8 will cut the desired amount from the saw, the amount of metal removed being determined by the position of the saw with respect to the recess 10. In Fig. 6 I have shown a piece of metal such as would be removed in the action above described by the punch, the latter being adjusted in the plunger 3 so that when the said plunger

returns to its normal operative position the lower surface of the recess 10 will remove the metal which has been cut.

5 As will be readily apparent different sizes of punches and dies are provided for my device, for use according to the nature of gumming action which is desired by the operator.

10 After the operation above mentioned the lifting lever 16 is raised and the clamping plate 19 will thus release the saw which is then moved to permit subsequent action.

15 As will readily be apparent the different parts of my invention may be easily and quickly adjusted and a construction which may be cheaply manufactured is provided.

Having thus described the invention, what is claimed as new is:

20 In a saw gummer, the combination with a base, of an overhanging arm provided with an opening therethrough, a plunger mounted for vertical movement in said opening having an enlarged head at its upper extremity, a spring mounted on said
25 plunger between the arm and the head aforesaid normally tending to hold the plunger at its upper limit of movement, an adjusting collar mounted on the plunger and

adapted to bear against the under surface of the arm aforesaid to limit the upward 30 movement of the plunger, a punch removably carried by the lower end of the plunger and having an open transverse slot therein, a standard mounted for vertical 35 movement in the arm, a lifting lever pivotally secured to the upper portion of the standard and having a cam at its lower end adapted to engage with the upper surface of the said arm to hold the standard in 40 raised position, a clamping plate adjustably secured to the lower end of the standard and having an opening therethrough through which the plunger is adapted to pass, a spring adjustably mounted on said 45 standard normally tending to hold the clamping plate in clamping position, and a die removably mounted in the base aforesaid and having an opening therethrough through which the punch is adapted to pass.

In testimony whereof I affix my signature in presence of two witnesses. 50

ERICK SMITH.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."