

No. 642,254.

Patented Jan. 30, 1900.

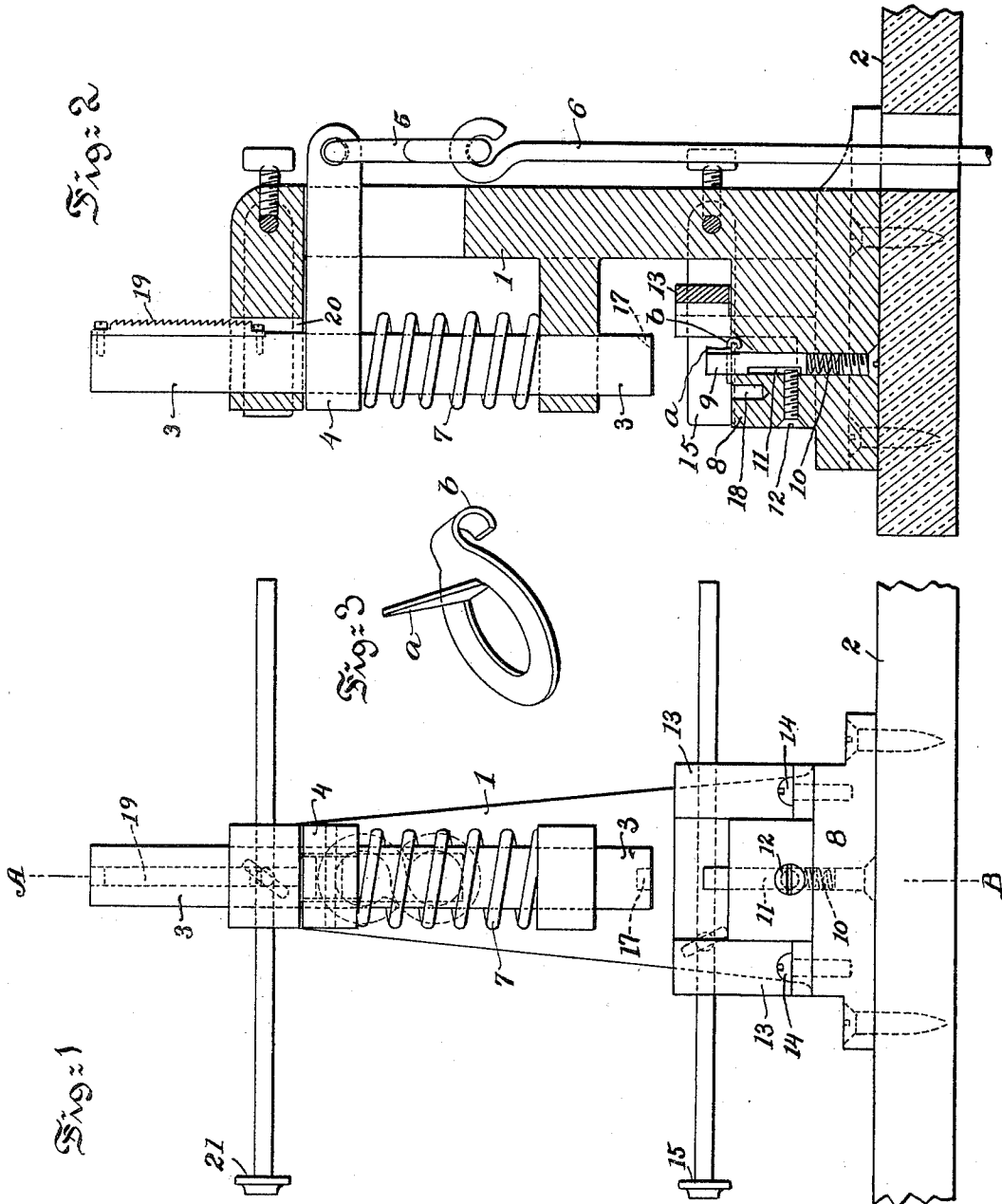
W. T. PARKER.

MACHINE FOR SECURING CLASPS TO BOX LIDS.

(Application filed June 15, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:
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Inventor:
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 By his attorney Chas. A. Rutter.

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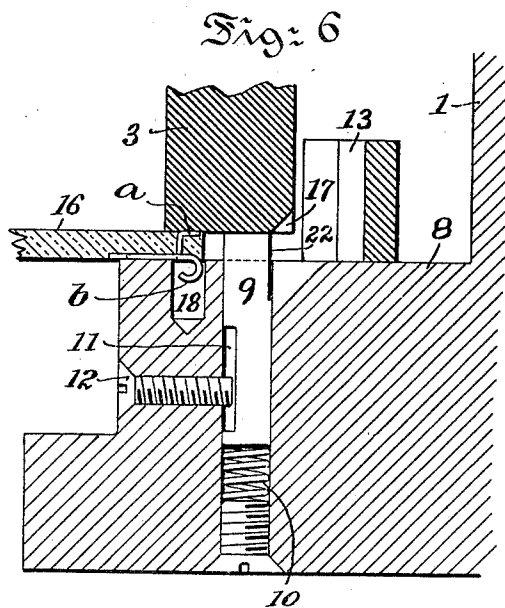
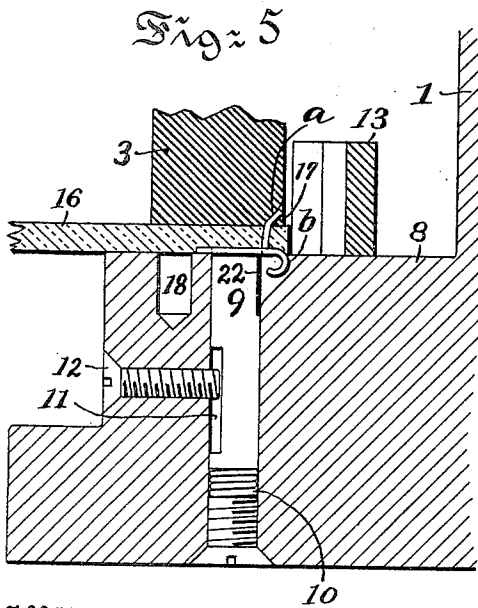
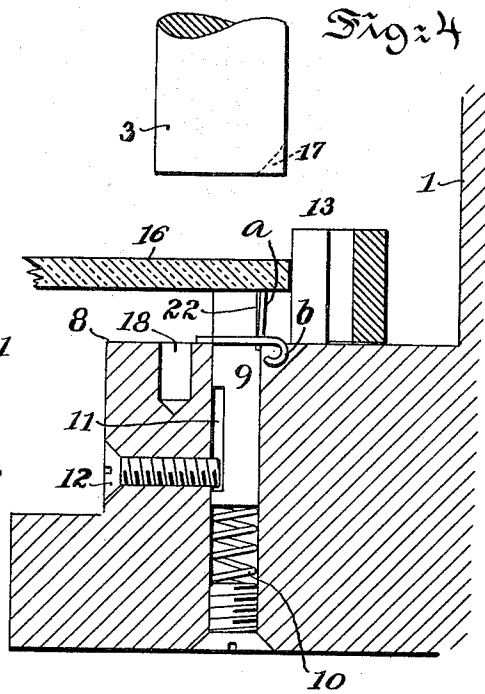
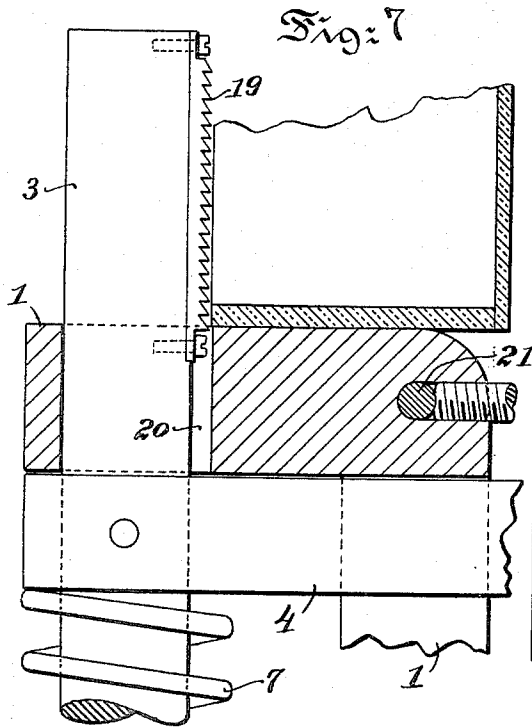
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MACHINE FOR SECURING CLASPS TO BOX LIDS.

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2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

WILLIAM T. PARKER, OF PHILADELPHIA, PENNSYLVANIA.

MACHINE FOR SECURING CLASPS TO BOX-LIDS.

SPECIFICATION forming part of Letters Patent No. 642,254, dated January 30, 1900.

Application filed June 15, 1899. Serial No. 720,624. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. PARKER, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Machines for Securing Clasps to Box-Lids, of which the following is a specification.

My invention relates to improvements in machines for securing clasps or fastenings to boxes or similar articles, and more particularly to machines for securing clasps to the lids of cigar-boxes; and the object of my invention is to furnish a clasp-fastening device which will in one operation drive the tang or pin of the clasp through the lid of the box and bend the projecting point of this tang toward the edge of the lid, which will in another operation bend or clench the tang down on the lid, and which will be furnished with means for cutting a notch in the upper edge of the front side of the box directly beneath the hook or clasp to permit the passage of the hook and the placing of a keeper to be engaged by the hook.

In the accompanying drawings, forming part of this specification, and in which similar letters and numerals of reference indicate similar parts throughout the several views, Figure 1 is a front elevation of my clasp-driving machine; Fig. 2, a section of Fig. 1 on line A B; Fig. 3, a perspective view of the clasp; Fig. 4, an enlarged sectional view of the lower forward part of the machine, showing clasp and lid before former is driven into latter; Fig. 5, a similar view showing clasp driven into lid; Fig. 6, a similar view showing the method of clenching the tang of clasp; Fig. 7, an enlarged view, partly in section, of upper part of machine, showing method of cutting notch in the upper edge of the front side of box.

The clasp that my fastening-machine is adapted to secure to the box is one for which Letters Patent of the United States were granted me July 26, 1898, No. 608,004, and which is illustrated in Fig. 3 of the accompanying drawings. This clasp is constructed from a single piece of metal the center of which is cut out and bent up, forming a tang *a*, and the forward part of which is bent down and around, forming a hook *b*. The tang *a* is adapted to

be driven through and clenched down on the box-lid, and the hook *b* is adapted to engage a staple or keeper carried by the forward side of the box and to pass into a notch cut in the upper edge of the side of the box, so that the box when closed will have no projections.

I have found in practice that in order to properly secure the clasp to the lid it is necessary that the tang *a*, after being driven through the lid, be clenched forward—that is, toward the hook *b*—and the mechanism illustrated is adapted to accomplish this.

1 is a standard carried by a base 2, and 3 a plunger carried by standard 1 and connected, through a link 5, rod 6, and collar 4, with an operating-treadle. (Not shown.)

7 is a spring normally holding plunger 3 and collar 4 in an elevated position; 8, a base or anvil; 9, a vertical yielding guide carried by base or anvil 8 and projecting normally above the top thereof, and 10 a spring for keeping guide 9 normally elevated. The forward side of guide 9 is furnished with a notch 11, into which passes the point of a screw 12, which acts to prevent the withdrawal or turning of this guide, and the upper rear part of the guide is furnished with a flattened face 22, against which the tang rests, as shown.

13 is a stop secured in any suitable manner to base 8, by screws 14, Fig. 1, preferably.

To operate the device, the clasp to be secured to the box-lid is dropped over guide 9, as shown in Figs. 2, 4, and 5, the tang *a* projecting upward alongside the guide and resting against the flattened face 22. The box-lid 16 is now placed on top of guide 9, its forward edge resting against stop 13 and one of its sides resting against a gage 15, Figs. 1 and 2. The plunger 3 is now driven down against the top of the lid 16 in any convenient manner. The guide 9 yields, and the tang *a* enters and passes through the lid. As the point of the tang passes out of the top of lid it engages a beveled-off portion 17 of plunger 3, and as this plunger descends the beveled-off portion turns the point of tang *a* forward, as shown in Fig. 5. The tang *a* having been driven completely through the lid, plunger 3 is released, and the spring 7 returns it to its raised position. The lid 16 is now moved back until the hook *b* of the catch enters a hole 18 in anvil 8, as shown in Fig. 6, when

the plunger 3 is again driven down, clenching the tang *a*, as shown in Fig. 6.

The device for cutting the notch in the upper edge of the front side of box is shown in Figs. 1, 2, and 7, and consists of a toothed rack 19, secured to the upper rear side of plunger 3 and working in a slot 20 in the upper end of standard 1. To cut the notch in the side of box, the edge of this latter is brought up against the toothed rack, as shown in Fig. 7, and while the box is being pressed in against the rack the plunger 3 is lowered, during which operation the teeth of the rack cut the notch. A gage 21, against which one end of the box rests during the cutting of the notch, insures this latter being cut in the proper place.

The catch or fastening secured to the box-lid and the notch in the side of the box should be cut so that the hook *b* of the former will enter the latter when the lid is closed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a device for securing clasps to box-lids or the like, in combination, a vertically-

moving plunger the lower end of which is furnished with an outwardly-beveled face, a standard in which said plunger is guided, means for lowering and means for lifting said plunger, a base or anvil, a yielding guide carried by and projecting above said base or anvil, a stop for engaging the front edge of the box-lid and a gage for engaging the end of the lid.

2. In a device for securing clasps to box-lids or the like, in combination, a vertically-moving plunger the lower end of which is furnished with an outwardly-beveled face, a standard in which said plunger is guided, means for lowering and means for lifting said plunger, a base or anvil, a yielding guide carried by and projecting above said base or anvil the rear face of which is flattened, a hole or slot in the top of said base or anvil in front of said yielding guide and beneath said vertically-moving plunger, and stops or gages for the front and side of said lid.

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Witnesses:

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