(No Model.)

C. M. PLATT.

Device for Attaching Buttons to Garments.

No. 243,303. **Patented June 21, 1881.**

Fig: 1.

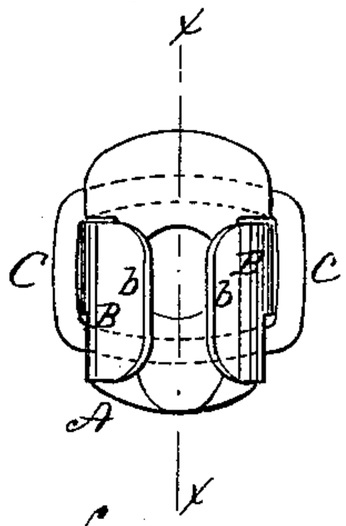


Fig: 2.

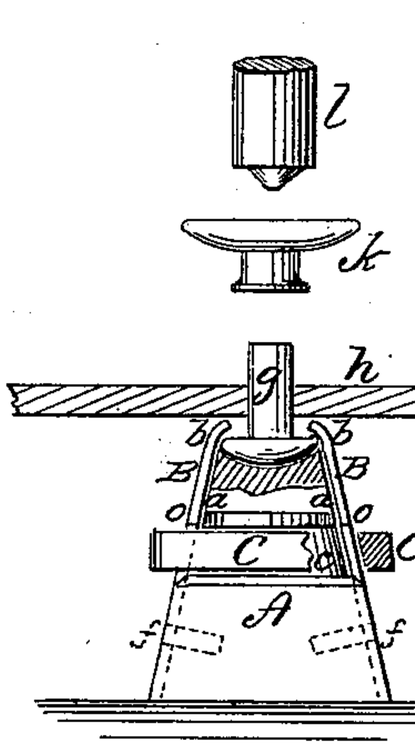


Fig: 3.

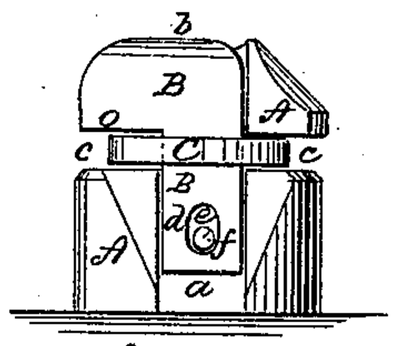


Fig: 4.

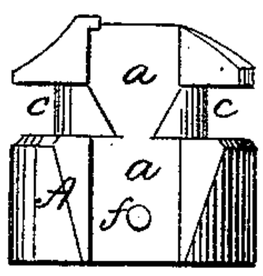


Fig: 5.

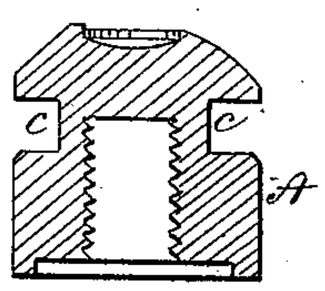


Fig: 6.

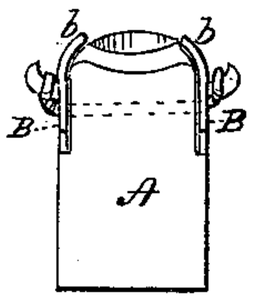


Fig: 7.

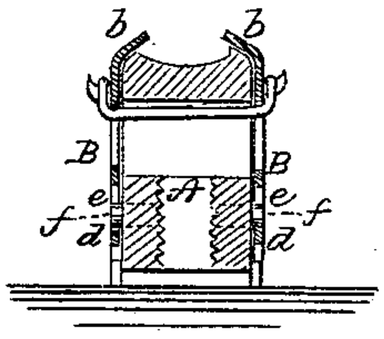


Fig: 8.

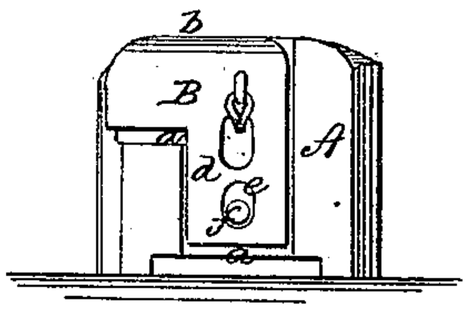
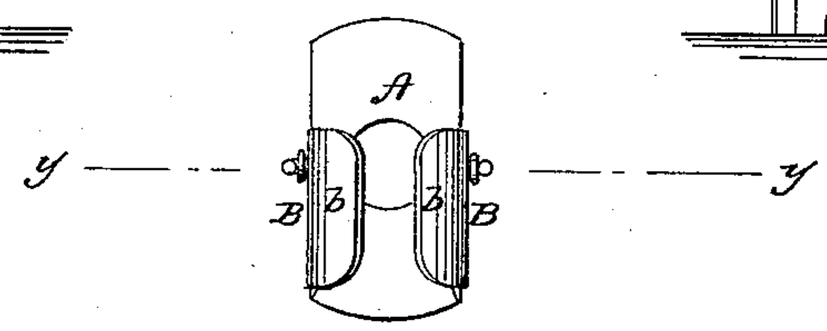


Fig: 9.



WITNESSES:

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CLARK M. PLATT, OF WATERBURY, CONNECTICUT.

DEVICE FOR ATTACHING BUTTONS TO GARMENTS.

SPECIFICATION forming part of Letters Patent No. 243,303, dated June 21, 1881.

Application filed March 11, 1881. (No model.)

To all whom it may concern:

Be it known that I, CLARK M. PLATT, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new and Improved Anvil for Attaching Buttons to Garments; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

This invention is in the nature of an improvement in a device for setting the metallic rivets or shanks of buttons; and the invention consists in an anvil for setting the metallic shanks or rivets of buttons, provided with jaws, in combination with a spring, the jaws being of cam shape, and constructed to have vertical and lateral play, as is more particularly hereinafter described.

In the accompanying sheet of drawings, Figure 1 represents a plan or top view of my improved anvil; Fig. 2, a front view of same, partly in section; Fig. 3, a side view of same; Fig. 4, a side view of my anvil, with jaws and spring removed; Fig. 5, a vertical section of same through line *x x*, Fig. 1; Figs. 6 and 7, front view and vertical section through line *y y*, Fig. 9, of modified anvil, with spring passing through interior of anvil; Figs. 8 and 9, side and top views of same.

Similar letters of reference indicate like parts in the several figures.

In securing buttons with metallic fastening shanks or rivets to garments, it is essential that the head of the rivet or eyelet should be supported firmly on an anvil while its other end is upset within the button, which operation is more particularly described in reissued Letters Patent granted to G. J. Capewell, February 23, 1869, No. 3,307; but in order to hold the rivet in place on the anvil it is necessary that some yielding device, such as elastic jaws, should be employed, so that while the rivet may be held to the anvil during the riveting process it may also be readily detached from the anvil and jaws after the riveting is completed and the button is fastened to the garment. Heretofore this releasing has been done by hand by slipping the rivet-head from between the jaws. By my invention, however, the releasing of the rivet-head is automatically accomplished, and much time therefore saved.

To that end I construct my anvil A with recesses *a* on two of its sides, with jaws B fitted within the same. These jaws have cam-shaped upper ends, *b*, which overlap to some extent the upper surface of the anvil, as shown in Figs. 1, 2, 6, 7, and 9. Fitted in a groove, *c*, and surrounding the anvil and the sides of the jaws B, is a spring, C, of sufficient elasticity to confine the sides of the jaws B snugly in contact with the recesses *a* and sides of the anvil, in which position the overlapping ends *b* of the jaws overlap to some extent the upper surface of the anvil. Near the lower ends of the downward-projecting portion or legs *d* of the jaws are formed elliptically-shaped openings *e*, through which pass studs *f*.

Now my device, constructed substantially as hereinbefore described, is operated as follows: The rivet *g* has its head inserted between the overlapping jaws B, its head or base resting firmly upon the upper surface of the anvil A. A needle such as is ordinarily used for passing tubular rivets into garments is placed within the rivet or eyelet, the garment *h* forced over the needle and the shank of the eyelet until the shank protrudes through the garment. The button *k* is next placed over the end of this protruding shank, and up to this time the elastic force of the overlapping jaws B has held the rivet firmly in position and tightly against the anvil. The setting-plunger *l* now descending upon the face of the button, the tubular end of the rivet or eyelet, by reason of the cone on the end of the plunger and the depression in the face of the button, is split or spread within the button-shell, uniting the two firmly together; but as the plunger descends to accomplish this riveting it at the same time forces the garment firmly against the upper and projecting surfaces of the overlapping jaws B, forcing these jaws downward, which operation is permitted by the elliptical openings *e*, and as these jaws are in this way forced down the cam or curved shape *b* of the jaws causes the jaws to spread outward sufficiently to release the rivet-head from their

grasp, so that the rivet is instantly and automatically removed from the anvil to make room for another, to be proceeded with as before, the jaws being restored to their normal position, after releasing the rivet *g* by the elastic force of the spring C acting against the shoulders *o* of the jaws.

By constructing the jaws so that they may have a yielding vertical movement they cannot punch a hole in the garment when the plunger descends to clinch the rivet, nor will they be broken, as is the case with jaws immovably fixed to the anvil; besides, by their elasticity, the rivet-heads are more readily inserted by the operator between the jaws without the danger of cutting the fingers, as in anvils with stationary jaws.

Instead of employing a surrounding spring, C, as shown in Figs. 1, 2, and 3, and as above described, a spiral or elastic spring may be inserted through an opening in the body of the anvil and connected to the jaws in any desirable manner. This modification is shown in Figs. 6, 7, 8, and 9; or some other arrangement of spring may be adopted without changing the features of my invention, which, having described,

I now claim to be—

1. An anvil for upsetting rivets and eyelets, having a pair of overlapping cam-shaped jaws arranged to move vertically as well as laterally, in combination with a spring, substantially as and for the purpose described.

2. In an anvil for upsetting rivets and eyelets, studs fixed to the sides thereof, in combination with jaws having overlapping ends and elliptical openings in the legs of the same, whereby vertical and lateral movement is secured, substantially as and for the purpose described.

CLARK M. PLATT

Witnesses:

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