(No Model.)

J. F. THAYER.

BUTTON SETTING INSTRUMENT.

No. 274,053. Patented Mar. 13, 1883.

Fig. 1.

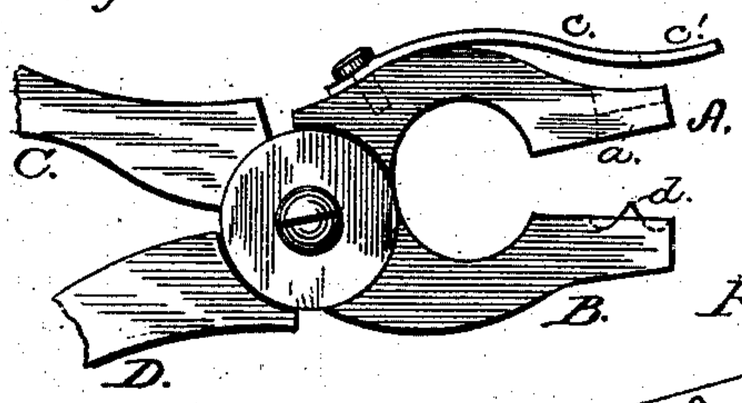


Fig. 6

Fig. 9.

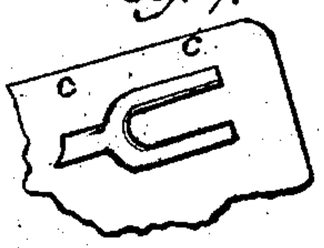


Fig. 2

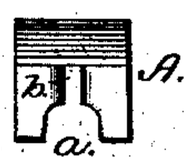


Fig. 3.

Fig. 4

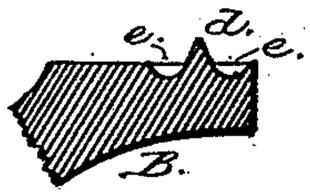


Fig. 5

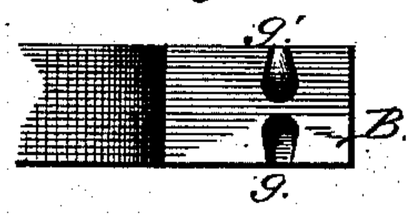


Fig. 7

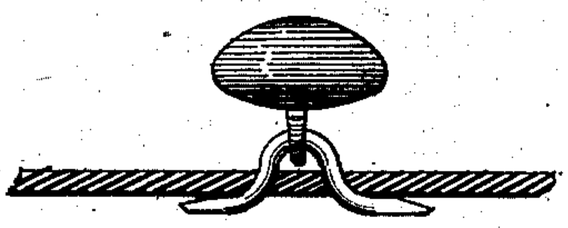
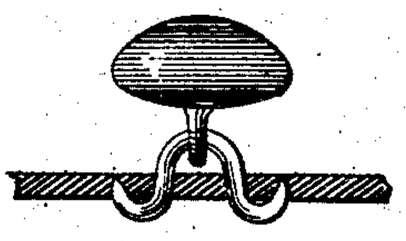


Fig. 8



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UNITED STATES PATENT OFFICE.

JAMES F. THAYER, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THE HEATON BUTTON FASTENER COMPANY, OF SAME PLACE.

BUTTON-SETTING INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 274,053, dated March 13, 1883.

Application filed December 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. THAYER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Setting-Instruments; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has for its object to provide an improved setting-instrument for attaching buttons to fabrics by means of a suitable metallic fastening device, but which is designed more particularly for use in connection with a staple-shaped fastener; and it consists, essentially, in the novel construction of one of the jaws for holding the button and fastener in position preparatory to attaching the same to a fabric, and in providing the opposite jaw with a die of novel construction for deflecting the points of the fastener to firmly attach the same to a fabric, all as will be hereinafter more fully described, and specifically designated in the claim.

In the accompanying drawings, Figure 1 represents a side view of a setting-instrument embodying my improvements; Fig. 2, a detail front view of the upper jaw; Fig. 3, a detail top plan view of the same; Fig. 4, a detail sectional view of the lower jaw; Fig. 5, a modification thereof; and Figs. 6 to 8 represent the staple-shaped connection and manner of attaching the button to a fabric therewith. Fig. 9 is a view of the slotted spring.

Similar reference-letters indicate like parts in all the figures.

In carrying out my invention the setting-instrument is composed of an upper and lower jaw, A B, which are pivoted together, and adapted to be operated by the handles C D, in a manner well known. The upper jaw, A, is preferably of a tapering shape, as shown, and is provided at its front end with a recess or groove, *a*, said groove having vertical walls on each side, terminating in an arched or other suitably-shaped top, through the center of which is formed an open slot, *b*, for the reception of the shank of a button. The rear or inner wall of the recess or groove *a* is also made vertical, in order to prevent the prongs of the staple-shaped connection from being tipped over or displaced during the operation of setting the same. A curved spring, *c*, is attached to the upper part of the jaw A, in such manner that its forked front end, *c'*, projects over the front end of the said jaw, as shown. The inner edges of the forks of the said spring are preferably hollowed out or grooved upon the top surface to correspond in shape to the rounded under surface of the button. This spring *c*, or other suitable mechanism for the same purpose, may, however, be located at the side or other suitable part of the upper jaw, A, without departing from the spirit of my invention. The lower jaw, B, is provided with a die of peculiar construction for deflecting the prongs of the metallic fastener, so as to firmly secure the same to a fabric or material, said die consisting of a sharp angular raised projection, *d*, extending in a line parallel with the side of the jaw, and which may terminate at the upper surface of said jaw, or extend downwardly into a curved recess, *e*, on each side, as fully shown in the drawings. A modified form of die is shown at Fig. 5, in which the upper surface of the lower jaw is provided with two parallel grooves, *g g'*, which extend from each side inwardly toward the center, leaving but a small shell or wall between the two, as shown, the inner ends of said grooves being enlarged to more readily permit the prongs of the fastening device to enter the same to be curved or deflected into or against the under surface of the fabric or material.

In the operation of my invention the staple-shaped connection or fastener is passed through the loop or shank of the button, and the two parts thus connected are placed in the upper jaw of the instrument, the under surface of the button resting upon the hollowed forks of the spring *c*, with its shank projecting down through the slot *b*, and the upper part of the staple-shaped fastener resting snugly within the groove or recess *a*, with its points projecting downward, the spring *c* serving to hold the button and fastener securely in position preparatory to attaching the same to fabrics.

The fabric or material is then placed between the two jaws, as in the usual manner, and by operating the handles C D the jaws are closed together, thereby forcing the prongs of the fastener down through the fabric, and which, coming in contact with the dies in the lower jaw, curves or deflects said prongs to firmly secure the button and fastener to the material, as fully shown in the drawings.

Having thus described the construction and operation of my invention, I claim as new and useful—

As an improved article of manufacture, the herein-described setting-instrument, consisting of the jaw A, provided with the spring *c*, groove or recess *a*, and slot *b*, constructed as described, and the opposite jaw, B, provided with the raised die *d*, substantially as and for the purpose specified.

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

JAMES F. THAYER.

Witnesses:
GEO. W. PRENTICE,
F. A. SMITH, Jr.