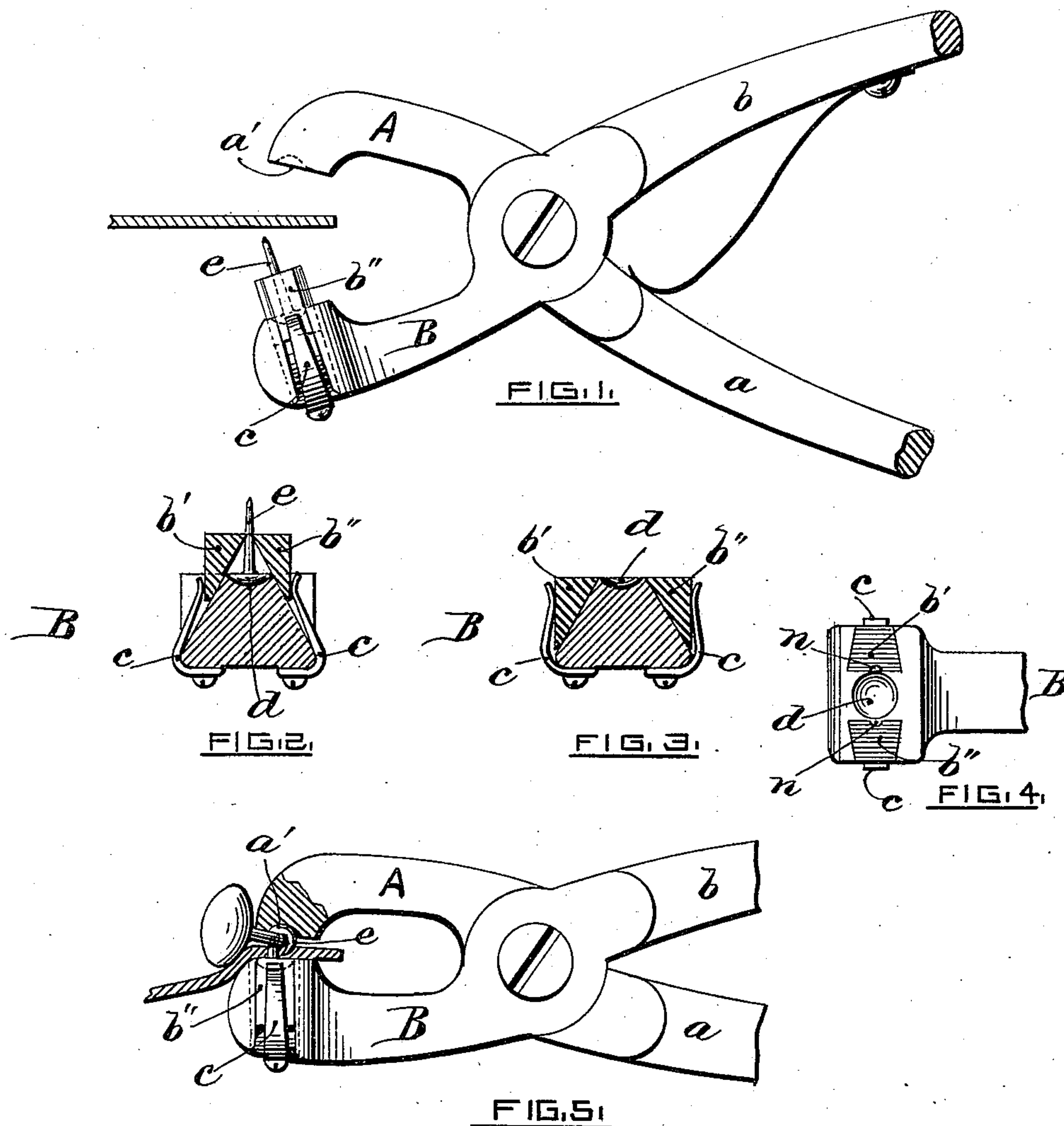


(No Model.)

J. F. THAYER.
BUTTON SETTING IMPLEMENT.

No. 297,315.

Patented Apr. 22, 1884.



WITNESSES.

Chas. Harrigan
Frank B. Grater

INVENTOR

James F. Thayer.

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UNITED STATES PATENT OFFICE.

JAMES F. THAYER, OF PROVIDENCE, RHODE ISLAND.

BUTTON-SETTING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 297,315, dated April 22, 1884.

Application filed February 27, 1884. (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 relates to certain improvements in the construction of setting-instruments for attaching buttons to articles of wear; and it consists of a new and novel arrangement of movable jaws for retaining a fastener in position, combined with one member of the instrument, the opposite member being provided with a suitable die for turning the prong of a fastener.

In the accompanying drawings, Figure 1 is a front elevation of the instrument, showing fastener in position preparatory to being inserted in fabric. Fig. 2 is a transverse sectional view through the lower jaw, showing movable jaws and the fastener in position before clinching. Fig. 3 represents a similar section, showing the position of the movable jaws after clinching the fastener. Fig. 4 is a plan view of a portion of lower jaw corresponding to Fig. 3. Fig. 5 is a front elevation of the instrument, showing the fastener clinched, a portion of the upper jaw being in partial section.

A and B represent, respectively, the upper and lower members or jaws of an instrument, terminating in handles *a* and *b*, to be operated in a well-known manner. The member A is provided on its lower front end with a die, *a'*, to receive and deflect the prong of a fastener. The opposite member, B, is provided with the movable jaws *b'* and *b''*, which are inclined on their inner sides, and are dovetailed or fitted into corresponding-shaped grooves in the said member, as shown in the drawings. These movable jaws are provided on their upper inner ends with notches *n*, as

shown in Fig. 4, to embrace the prong of a fastener. On either side of the jaws are secured the springs *c*, as shown. These springs operate on the movable jaws to return them to their normal position, as shown in Fig. 2. The member B is further provided on its upper surface with a seat or depression, *d*, in which the head of the fastener rests, as shown in Fig. 4. These movable jaws and springs constitute the fastener-holding mechanism for the instrument. The instrument is operated as follows: The jaws *b'* and *b''* are first compressed to position shown in Figs. 3 and 4. The head of the fastener *e* is now placed in the seat *d*, and the pressure on the jaws being removed, the springs *c* force the jaws up the inclines until the notches *n* embrace the prong of the fastener, as shown in Fig. 2, firmly holding it in position for attachment. The instrument, being compressed, forces the fastener through the fabric and button-eye until the fabric reaches the upper surface of the movable jaws, when the pressure causes them to move down the inclines until the fastener is wholly released, the springs yielding sufficiently to allow them to do so, the head of the fastener being pressed firmly against the under surface of the fabric, as fully shown in Fig. 5. The instrument being opened, the button and fastener are easily removed, the springs *c* returning the movable jaws to their normal position. I am thus enabled to produce a cheap and efficient method of holding a fastener firmly in position, whereby the head may be pressed closely against the fabric.

I am aware of Patent No. 272,919, granted to me February 27, 1883, in which movable dies having inclined inner surfaces operated by side springs are employed.

Having described my invention, what I claim is—

1. An instrument for setting buttons, consisting of two jaws or members, one of which is provided with supplemental movable jaws, the meeting faces of which are beveled, and which are adapted to hold the fastener and to slide out of the way while it is being secured, substantially as described.

2. In an instrument for setting buttons, the combination, with the members thereof, of

the movable jaws *b'* and *b''* and springs *c*, arranged and adapted for use substantially as described.

3. The herein-described instrument for attaching buttons, consisting of the member B, provided with seat *d*, movable jaws *b'* and *b''*, and spring *c*, in combination with the member A, provided with die *a'*, the whole com-

bined, arranged, and adapted for use substantially as described and shown. 10

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

JAMES F. THAYER.

Witnesses:

F. A. SMITH, Jr.,

WM. R. DUTEMPLE.