

No. 677,588.

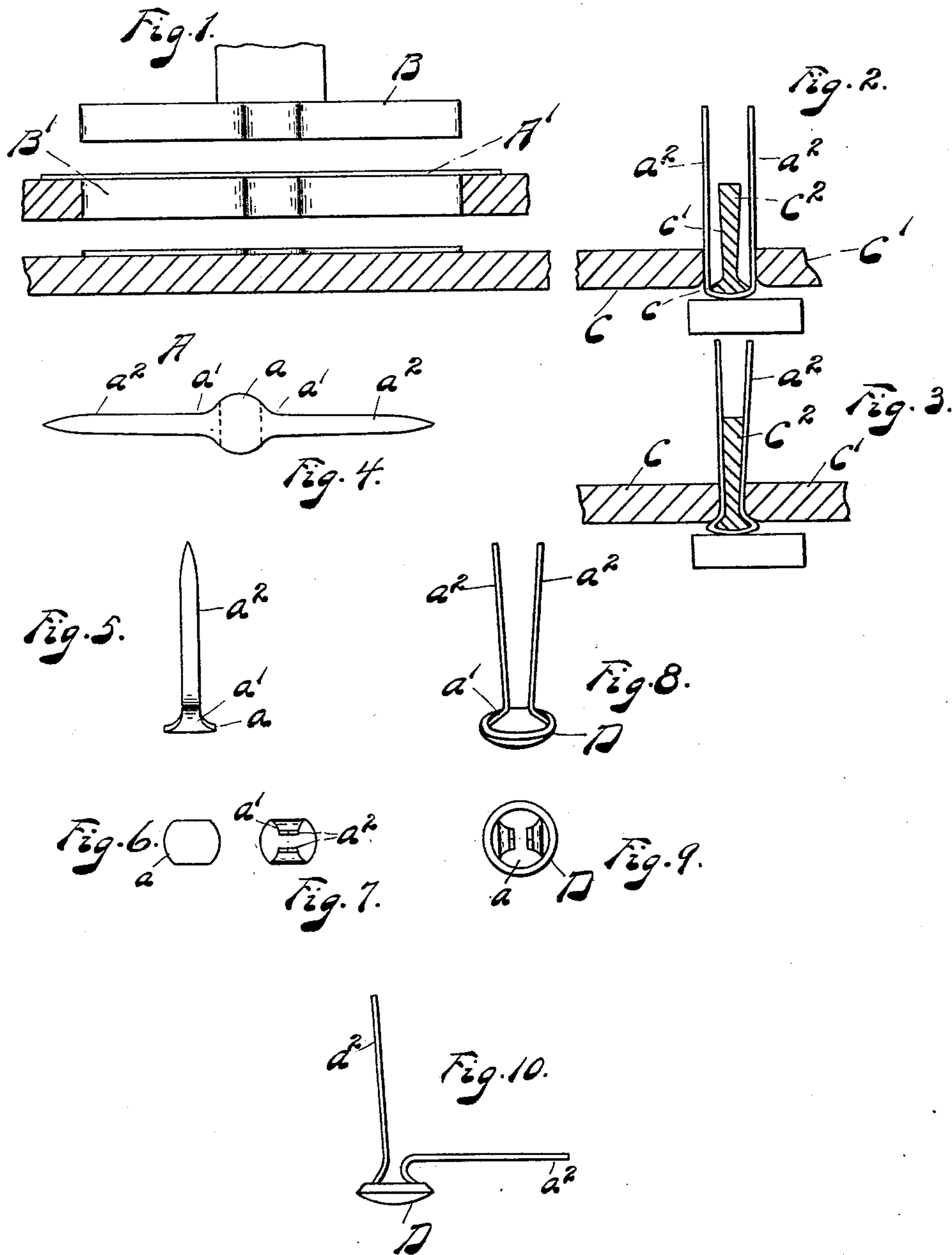
Patented July 2, 1901.

F. A. NEIDER.

PROCESS OF PRODUCING TUFTING BUTTONS.

(Application filed Oct. 27, 1900.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

FRED A. NEIDER, OF AUGUSTA, KENTUCKY.

PROCESS OF PRODUCING TUFTING-BUTTONS.

SPECIFICATION forming part of Letters Patent No. 677,588, dated July 2, 1901.

Application filed October 27, 1900. Serial No. 34,564. (No model.)

To all whom it may concern:

Be it known that I, FRED A. NEIDER, a citizen of the United States of America, and a resident of Augusta, in the county of Bracken and State of Kentucky, have invented certain new and useful Improvements in Processes of Producing Tufting-Buttons, of which the following is a specification.

The object of my invention is a process for producing tufting-buttons for cushion-seats, in which the back and prongs thereof are produced entirely automatically from a sheet of metal in a form ready for receiving the cap. This object is attained by the means described in the annexed specification and illustrated in the accompanying drawings, in which—

Figure 1 is a view showing the first step in the operation, the male die being shown in side elevation and in its raised position and the female die in longitudinal elevation with a strip of metal fed over it preparatory to having a blank cut therefrom by the descent of the male die, one of said blanks being shown lying below the female die preparatory to being fed forward to undergo the second step of the operation. Fig. 2 is a view in longitudinal section of the male and female dies which perform the second step, the blank being shown in side elevation in the shape it assumes at the close of said operation. Fig. 3 is a similar view taken after the close of the third step. Fig. 4 is a plan view of the blank cut from the metal strip in the first step. Fig. 5 is a front elevation of the blank shown in side elevation in Fig. 3. Fig. 6 is an end and Fig. 7 an inverted end view of the same. Fig. 8 is a perspective view of the completed button. Fig. 9 is an inverted end view of the same. Fig. 10 is a view in side elevation of the button, showing one of the prongs bent.

Referring to the parts, the male and the female dies B and B', respectively, used in the first step are the same in contour as blank A, which consists of an enlarged central portion forming the back a , from each side of which project prongs, each of which has an enlarged base a' , which merges into a reduced portion

a^2 , whose sides are parallel. After blank A has been cut from metal strip A', as shown in Fig. 1, it is carried forward over the female die, as shown in Fig. 2, which consists of two movable jaws C and C', held normally at a distance apart equal to the width of back a . Male die C² has a foot c , which is tapered upon each side and sloped inward to a reduced shank c' . In the second step male die C² carries blank A down between jaws C and C' while they stand in their normal positions, thereby bending the prongs of the blank at a right angle to the back. In the third step jaws C and C', whose lower edges are curved similarly to the sloping portions of die C², are moved toward each other, bending the prongs inward to fit against the male die C², so that the bases of the prongs form an acute angle with the back, making thereby a mushroom-head, and the reduced portions stand substantially at a right angle thereto. Blank A is now in its completed form. (Shown in Fig. 5.) Cap D is then put on in the ordinary manner by a capping-machine.

What I claim is—

1. The process of making the back and prongs for a tufting-button for cushion-seats, which consists of the following steps, first in punching a blank from a metal strip, second, feeding said blank over a couple of movable jaws while they are held apart a distance equal to the width of the back, third, forcing said blank down through the jaws in said position by a second die the shape of which is that of the figure formed by the inner lines of the prongs and back in their completed form, and fourth, bringing the movable jaws toward each other to bend the prongs and back against said second die, forming a mushroom-head, substantially as set forth.

2. The process of making a tufting-button which consists of the following steps, first in punching a blank consisting of an enlarged central portion forming the back, and prongs upon each side consisting of enlarged bases merging in reduced portions with parallel sides, second feeding said blank over a couple of movable jaws while they are held apart

a distance equal to the width of the back,
third forcing said blank down through the
jaws in said position by a second die which
has a foot sloping inward to a reduced shank,
5 fourth bringing the movable jaws together to
bend the prongs against said second die,
forming thereby a mushroom-head, and fifth

completing the button by placing a cap upon
the back, substantially as shown and de-
scribed.

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Witnesses:

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