

No. 656,407.

Patented Aug. 21, 1900.

C. M. HORTON.
BUTTON.

(Application filed June 2, 1900.)

(No Model.)

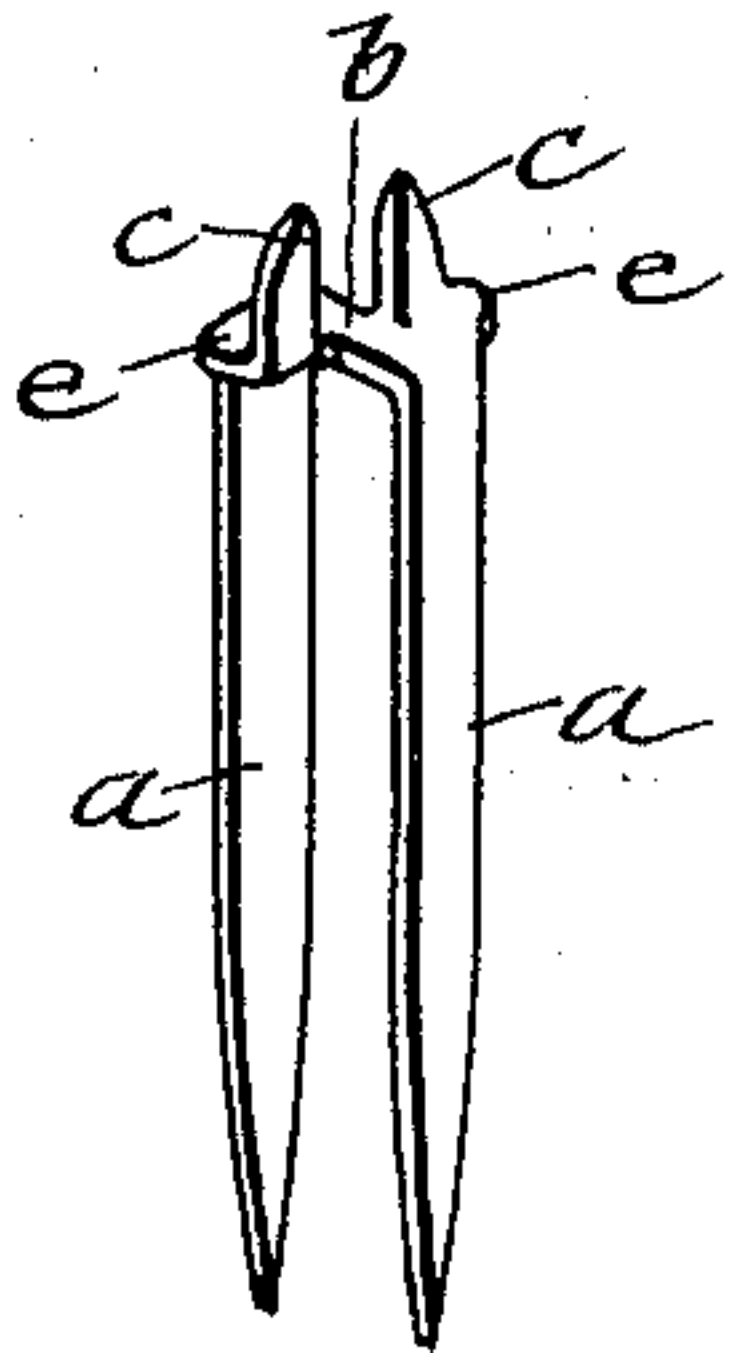
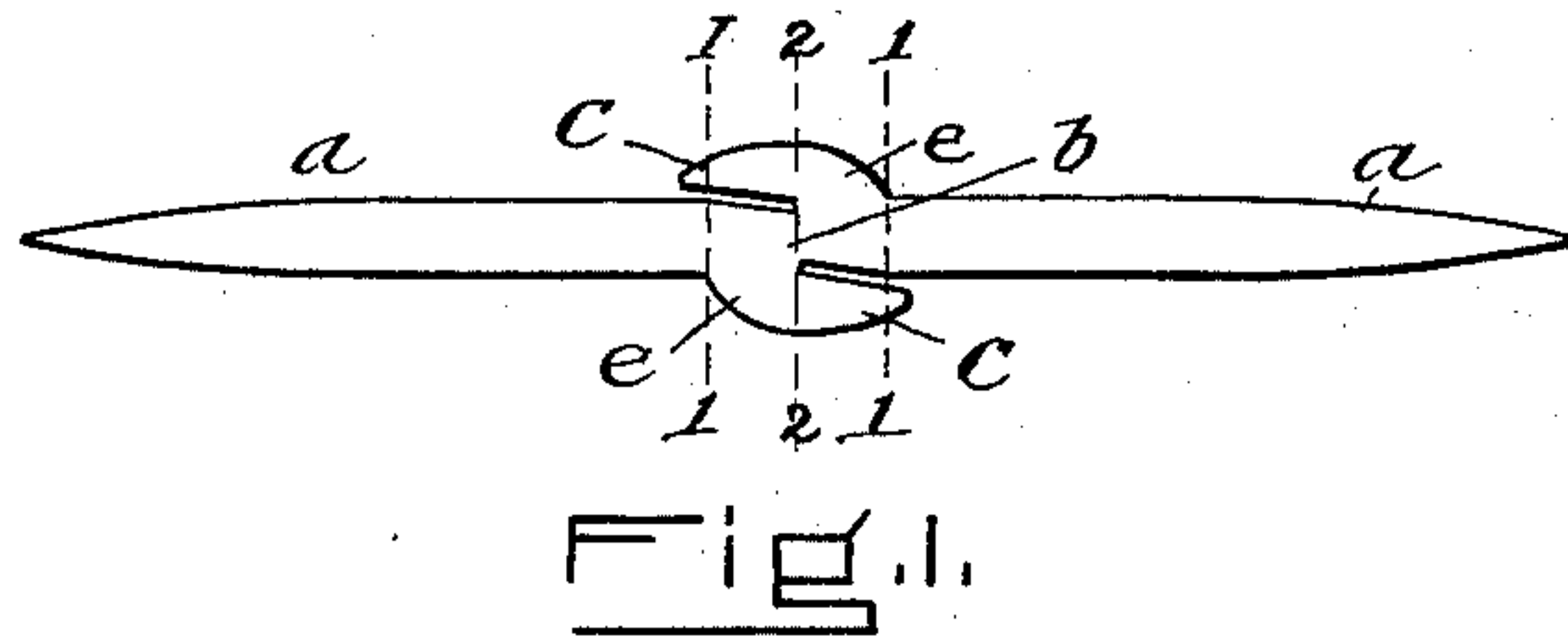


Fig. 2.

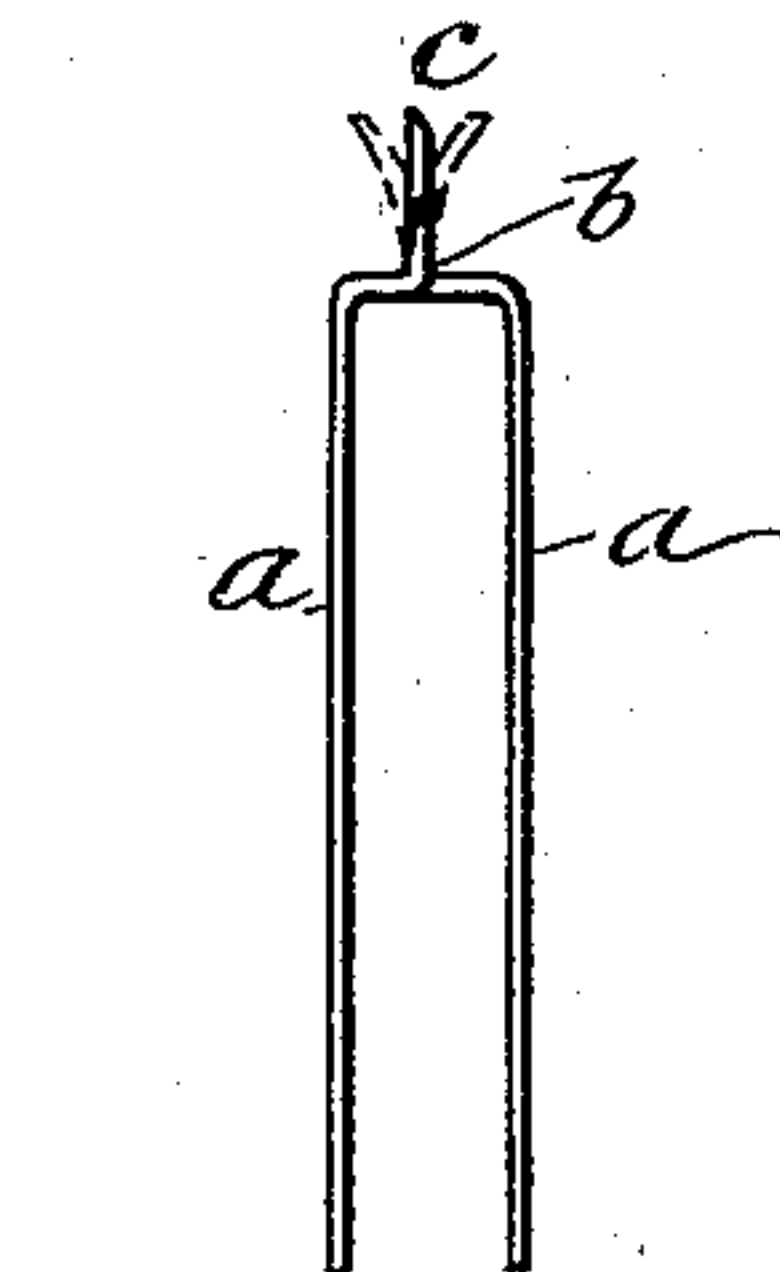


Fig. 3.

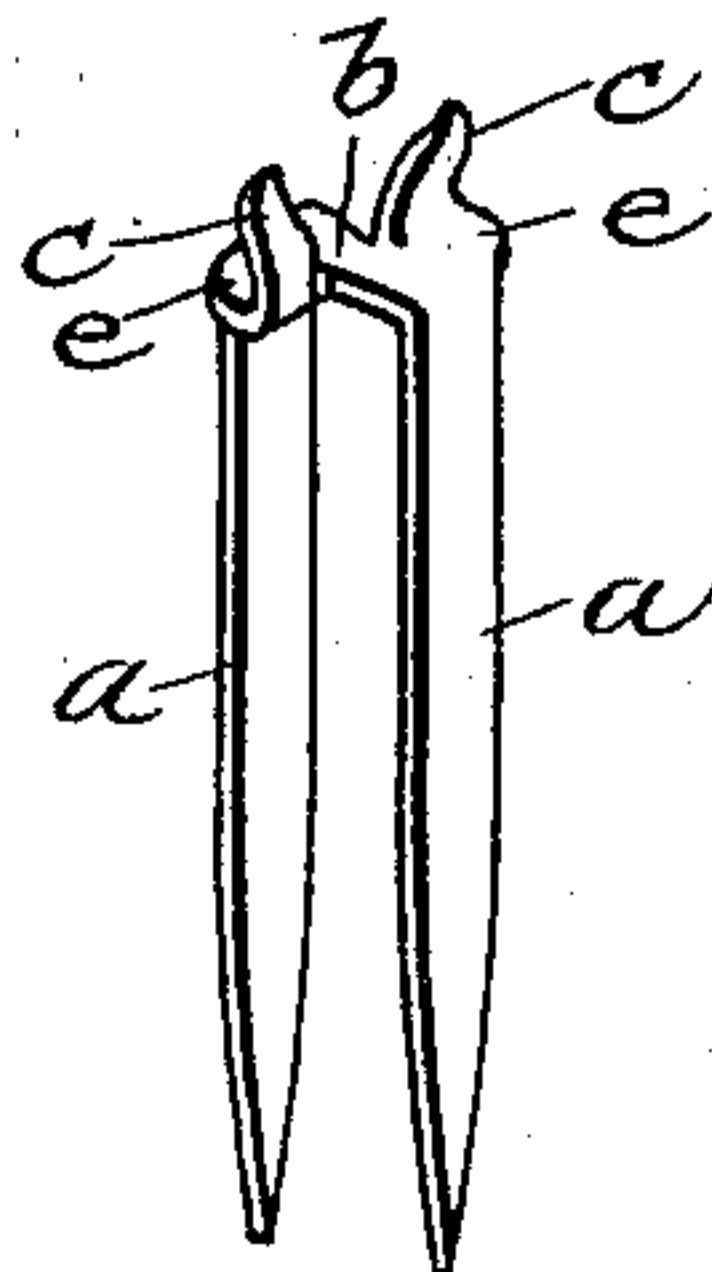


Fig. 4.

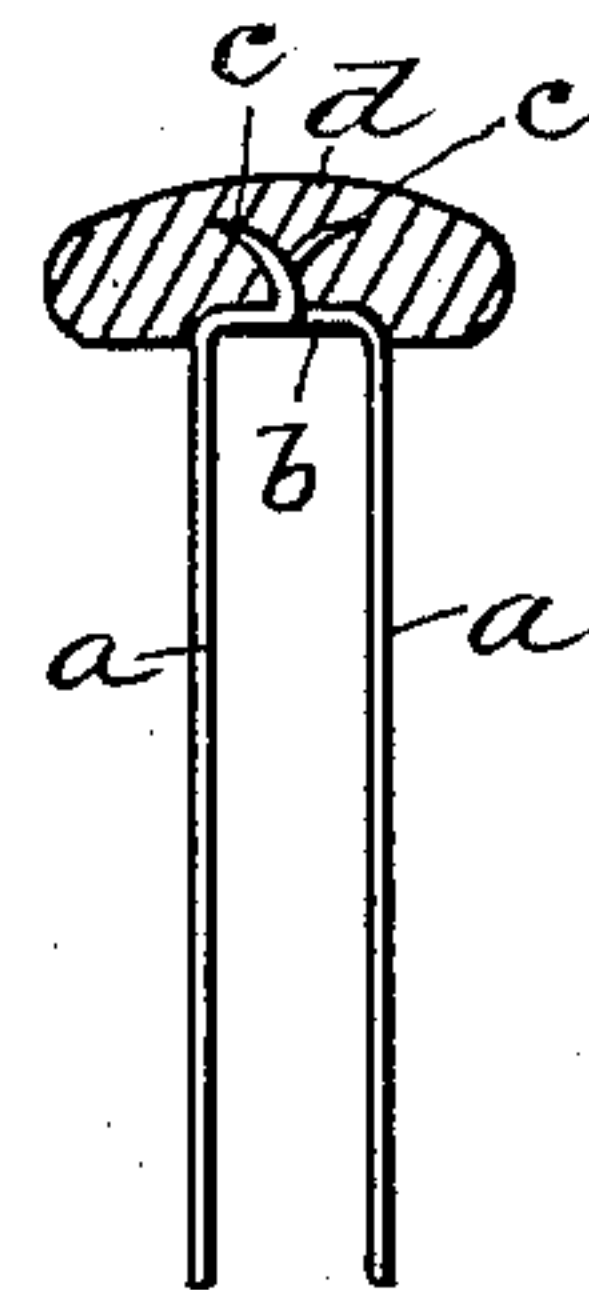


Fig. 5.

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UNITED STATES PATENT OFFICE.

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BUTTON.

SPECIFICATION forming part of Letters Patent No. 656,407, dated August 21, 1900.

Application filed June 2, 1900. Serial No. 18,825. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. HORTON, a citizen of the United States, residing at Portsmouth, in the county of Rockingham and State of New Hampshire, have invented a new and useful Improvement in Buttons, of which the following is a specification.

My invention consists of a new and improved staple for attachment of button-heads to cushions or like articles and of a button composed of my improved staple secured to a button-head.

In the drawings, Figure 1 shows the blank out of which my improved staple is formed; Fig. 2, the staple when properly bent up from the blank; Fig. 3, a side view of the head of the staple, showing the mode of deflection of the clenching-spurs with which the staple is provided; Fig. 4, a button showing the head of the button in cross-section with my improved staple clenched and embedded therein; and Fig. 5, a perspective view of the staple, showing the double deflection of the clenching-spurs.

The staple is formed from a blank cut out of metal suitable for the purpose. Sheet-steel, such as is used for the manufacture of sheet-metal staples and rivets serves the purpose admirably. The shape of the blank is shown in Fig. 1. The straight pointed legs *a* of the staple project from the central portion *b* in opposite directions. The lines where the staple-legs *a* are bent down from the body or table *b* are shown by dotted lines 1 1. Projecting laterally from the table portion *b* of the staple, and preferably at diagonally-opposite corners therefrom, are wing portions *e*, the clenching-spurs *c* projecting from the wings *e*. These spurs, while substantially parallel to each other, point in opposite directions. The clenching-spurs *c c* are bent upward from the wing portions *e e* at or about the dotted line 2 2.

In forming the blank the tool which cuts the spur portions *c* should be so shaped as to give the spurs an outside bevel at or near their points and on the same side of the blank.

When the legs and spurs of the staple are bent down and up into proper position, the

staple shown in Fig. 2 is the result of the operation, the parallel pointed legs *a a* depending from the table portions *b* and the spurs *c* standing up from the wing portions *e e*.

The result of the bevels given to the spur portions *c* in the formation of the blank is shown in Figs. 3 and 5. The bending up of the spurs *c* from the wing portions *e* turns the bevels in opposite directions, so that the spurs on being forced into a solid penetrable object, like a button-head, deflect themselves in opposite directions, as indicated in Figs. 3 and 5.

The clenching-spurs *c c* are, in effect, beveled in two directions, being pointed, as shown in Fig. 1, and beveled on the side, as shown in Fig. 3. This construction gives the spurs sufficient lateral pliability, so that when the clenching-spurs are forced into the material they are not only bent sidewise and in opposite directions, but to an appreciable degree are bent in the direction of their plane, so that the two spurs incline toward a center in the material of the button-head and away from each other in the bending due to the lateral bevel. This double deflection of the spurs serves to bind the button-head and staple together with unusual security.

To form a button, I take a suitably-shaped button-head made out of papier-mâché or wood-pulp and by means of a press force the spurs *c c* of my improved staple into the button-head with sufficient pressure to sink the table portion *b* of the staple flush with the lower surface of the button-head. By this operation the beveled spurs deflect themselves, as described, in the material of the button-head and clench the two members of the completed button securely together.

In Fig. 4 I have shown in cross-section the button-head with staple attached. The spurs *c c* of the staple are embedded and inwardly and laterally deflected in the button-head *d*, and the table *b* is sunk in the button-head, so as to be flush with its lower surface.

What I claim, and desire to secure by Letters Patent, is—

1. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table

joining the legs, wing portions extending laterally from the table and clenching-spurs bent upward from said wing portions.

2. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs bent upward from said wing portions.

3. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs bent upward from said wing portions, and the two spurs lying in substantially the same plane.

4. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table and clenching-spurs bent upward from said wing portions, the said spurs being oppositely beveled, substantially as described.

5. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs bent upward from said wing portions, the said spurs being oppositely beveled, substantially as described.

6. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs bent upward from said wing portions, and the two spurs lying in substantially the same plane, the said spurs being oppositely beveled, substantially as described.

7. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table, and clenching-spurs tapering on the outside toward their points, bent upward from the said wing portions.

8. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table, and clenching-spurs tapering on the outside toward their points and oppositely beveled on their sides.

9. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs, tapering on the outside toward their points, bent upward from the said wing portions.

10. A fastener for cushion-buttons and like articles consisting of a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs, tapering on the outside toward their points, and oppositely beveled on their sides, bent upward from the said wing portions.

11. A button, consisting of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table, and clenching-spurs bent upward from said wing portions, said clenching-spurs being embedded in the button-head.

12. A button consisting of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table, and clenching-spurs bent upward from said wing portions at diagonally-opposite corners thereof, said clenching-spurs being embedded in the button-head.

13. A button consisting of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs bent upward from said wing portions, and the two spurs lying in substantially the same plane, said clenching-spurs being embedded in the button-head.

14. A button consisting of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table and clenching-spurs bent upward from said wing portions, the said spurs being oppositely beveled, the said clenching-spurs being self-deflected and embedded in the button-head.

15. A button consisting of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs, wing portions extending laterally from the table and clenching-spurs bent upward from said wing portions, the said spurs being oppositely beveled, the said clenching-spurs being self-deflected and embedded in the button-head, and the said table sunk flush with the lower surface of the button-head.

16. A button composed of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table and clenching-spurs, beveled on the outside toward their points, bent upward from the said wing portions, and embedded in the material of the button-head, substantially as described.

17. A button, consisting of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs,

5 a table joining the legs, wing portions extending laterally from the table and clenching-spurs, beveled on the outside toward their points, bent upward from the said wing portions and oppositely beveled on their sides, and embedded in the material of the button-head, substantially as described.

10 18. A button, consisting of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs, a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs, beveled on the outside toward their points, 15 bent upward from the said wing portions, and embedded in the material of the button-head, substantially as described.

19. A button, consisting of a solid head of penetrable material and a one-piece sheet-metal staple provided with two parallel legs, 20 a table joining the legs, wing portions extending laterally from the table at diagonally-opposite corners thereof, and clenching-spurs, tapering on the outside toward their points, bent upward from the said wing portions, and 25 oppositely beveled on their sides, and embedded in the material of the button-head substantially as described.

Signed by me at Portsmouth, New Hampshire, this 14th day of May, 1900.

CHARLES M. HORTON.

Witnesses:

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FREDERICK OLDFIELD.