

No. 844,398.

PATENTED FEB. 19, 1907.

L. A. PLATT & W. T. ABEL,

STAPLE FASTENER.

APPLICATION FILED JAN. 30, 1906.

Fig. 1.

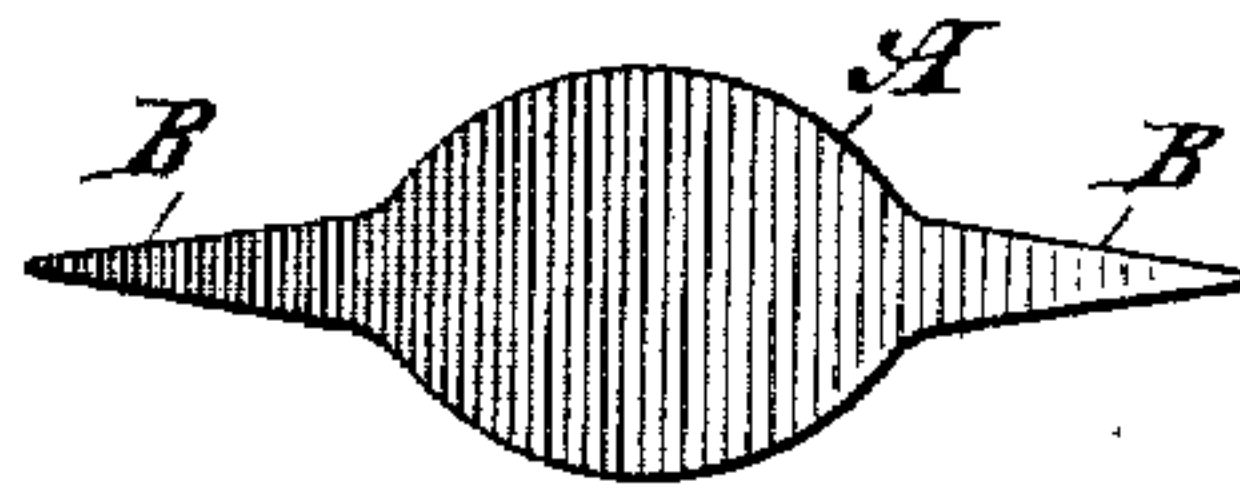


Fig. 2.

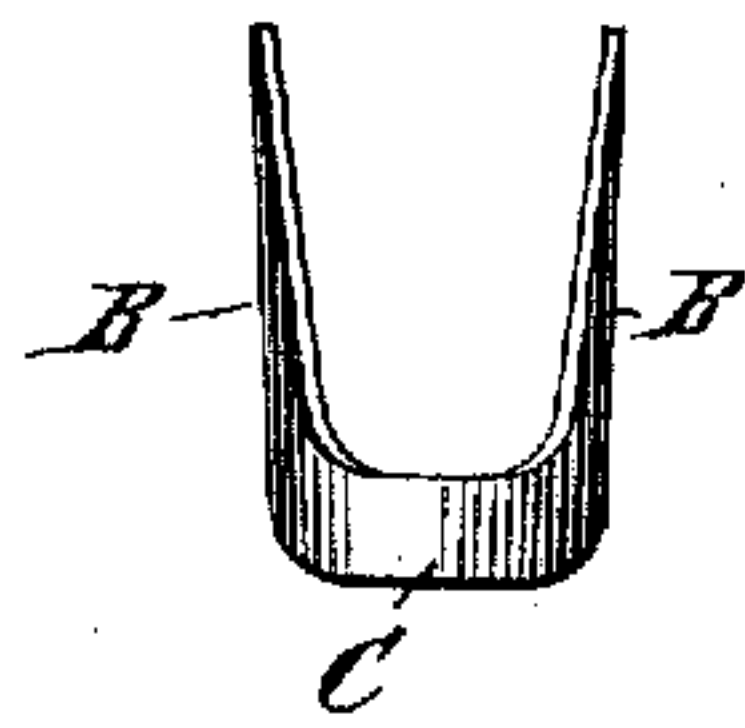


Fig. 3.

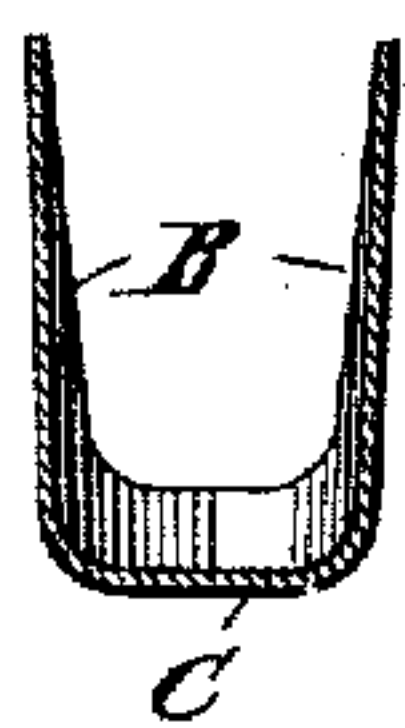


Fig. 4.

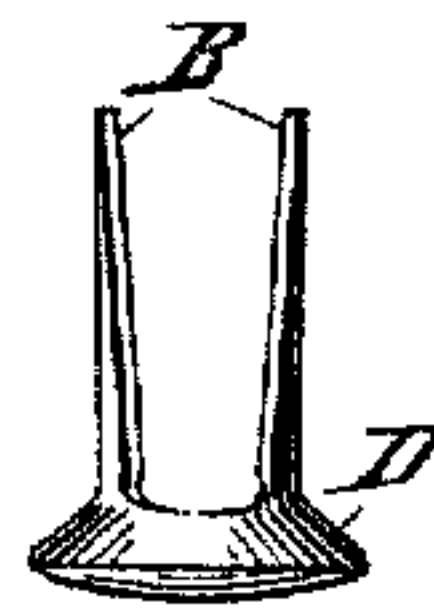


Fig. 5.

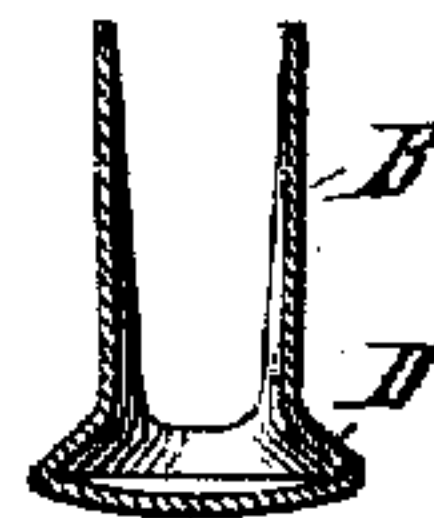


Fig. 6.

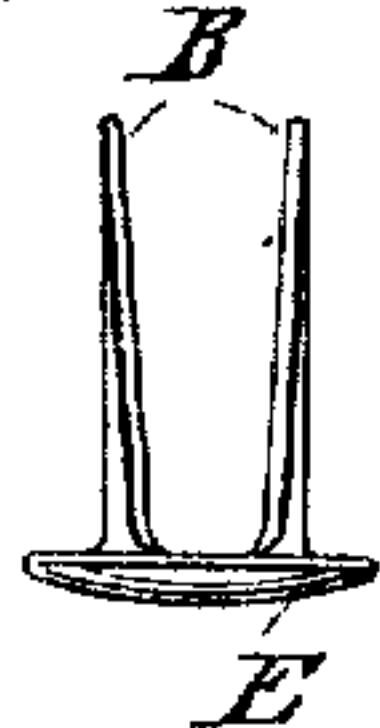


Fig. 7.

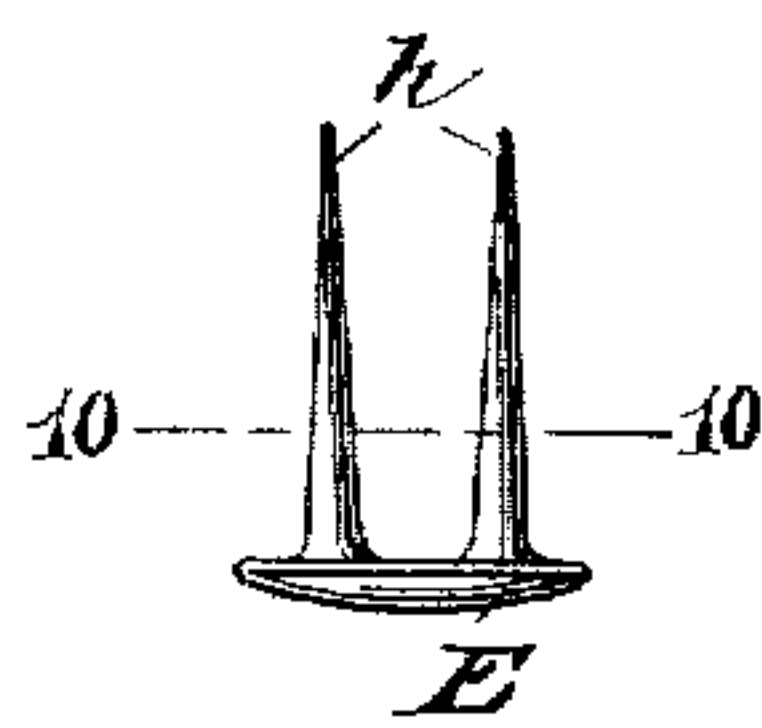


Fig. 8.

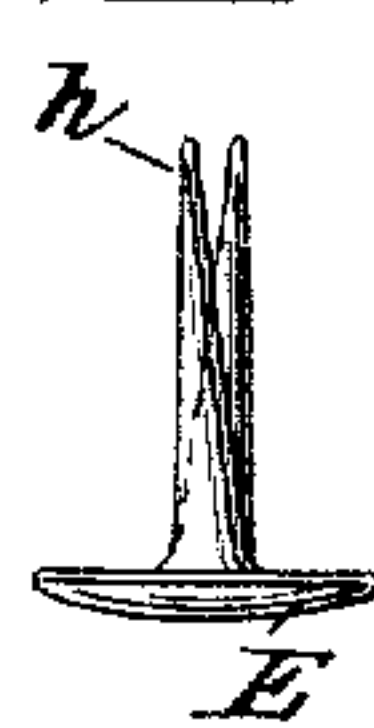


Fig. 9.

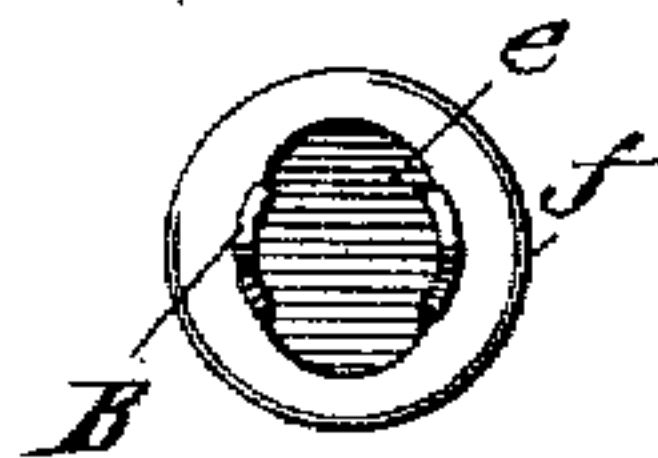
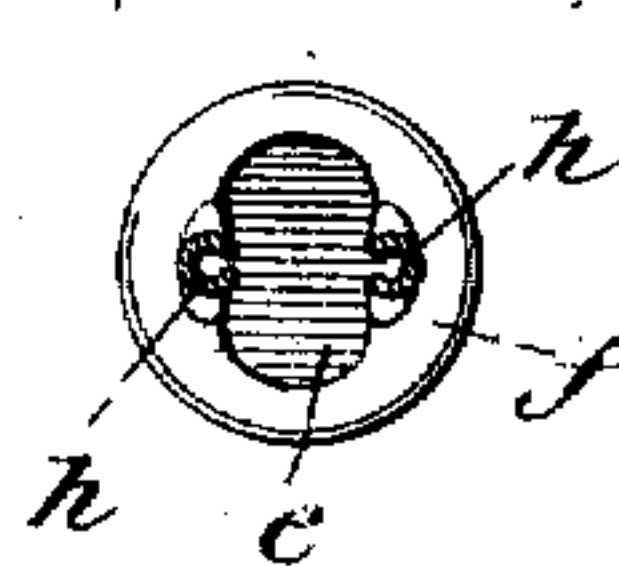


Fig. 10.



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# UNITED STATES PATENT OFFICE.

LEWIS A. PLATT AND WALTER T. ABEL, OF WATERBURY, CONNECTICUT,  
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## STAPLE-FASTENER.

No. 844,398.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed January 30, 1906. Serial No. 298,632.

*To all whom it may concern:*

Be it known that we, LEWIS A. PLATT and WALTER T. ABEL, citizens of the United States, and residents of Waterbury, in the county of New Haven and State of Connecticut, have made and invented certain new and useful Improvements in Staple-Fasteners, of which the following is a specification.

Our invention relates to an improvement in metal staple-fasteners—such, for instance, as may be employed for fastening or securing together leather or fabrics or to attach buttons or other articles to the latter—the object of the same being to provide an article of this kind or character which shall be made of a single piece of sheet metal as strong or stronger than those produced from wire and at a much less cost.

With these and other ends in view the invention consists in certain novel features of construction, as will be hereinafter described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of the blank from which the staple-fastener is formed. Figs. 2, 3, 4, 5, and 6 are views showing the fastener in its several stages of formation. Figs. 7 and 8 are views in elevation of the finished fastener. Fig. 9 is a top plan view of the fastener illustrated in Fig. 6. Fig. 10 is a sectional view taken on the line 10 10 of Fig. 7.

The fastener is preferably formed of a single piece of sheet metal, the shape or outline of the blank being illustrated in Fig. 1 and consisting of the central portion A, elliptical in form and having extending therefrom the V-shape projections B, the elliptical central portion A forming the circular head of the finished fastener, as hereinafter described. By a second operation this blank is drawn into the shape as illustrated in Figs. 2 and 3, the elliptical central portion being cupped, as illustrated at C. This partly-formed fastener is then subjected to a further operation which partially forms the head D, as illustrated in Figs. 4 and 5, and to still another operation which completes the head, as illustrated at E, Fig. 6, this head consisting of the

circular plate *e*, having its edge bent around and under the same, forming a continuous ring of metal *f*, somewhat wider at those portions from which the prongs extend or project.

We have found by experiment that in order to form a circular and neat-appearing head for the fastener it is preferable to stamp out the blank with the elliptical central portion A, as illustrated in Fig. 1, as by forming the same of a round or circular shape the finished head will be elliptical in form or the metal comprising the ring *f* will be caused to overlap, the result being that the head will be thick or bulky and unfinished in appearance.

As illustrated in Fig. 1, the prongs B of the blank are comparatively wide at the base in order to contain an amount of metal to lend sufficient strength thereto even though stamped out of comparatively light stock. These prongs in the final operation are bent or curved in their length, as illustrated in Fig. 10, thereby materially increasing the strength of the same, the stiffness of the metal graduating from the point to the base. By thus shaping the prongs all danger of their cutting or forming large openings in the cloth or material through which they are passed is avoided.

By reference to Fig. 8 it will be seen that in the formation of the fastener the prongs of the finished fastener are staggered, so that in the subsequent bending thereof the pointed ends will be allowed to pass each other, and thereby avoid any danger of striking and causing an imperfect fastening of the materials together or of the button or other article to the material.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A staple, comprising a circular head having its edge turned or bent under the same, said turned-over edge varying in width, and prongs extending from the wider portions of said turned-under edge, substantially as described.

2. A staple comprising a circular head having its entire edge turned or bent under the same, said turned-under edge varying in width, and prongs extending from the wider portions of said edge and curved eccentrically to the head, substantially as described.  
Signed at Waterbury, in the county of

New Haven and State of Connecticut, this  
27th day of January, A. D. 1906.

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Witnesses:

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