

(No Model.)

G. W. MCGILL.
STAPLE FASTENER.

No. 285,640.

Patented Sept. 25, 1883.

Fig. 1.

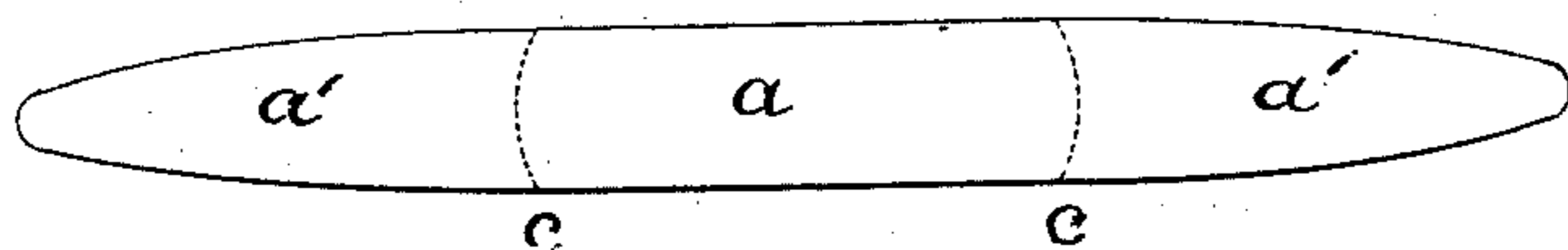


Fig. 2.

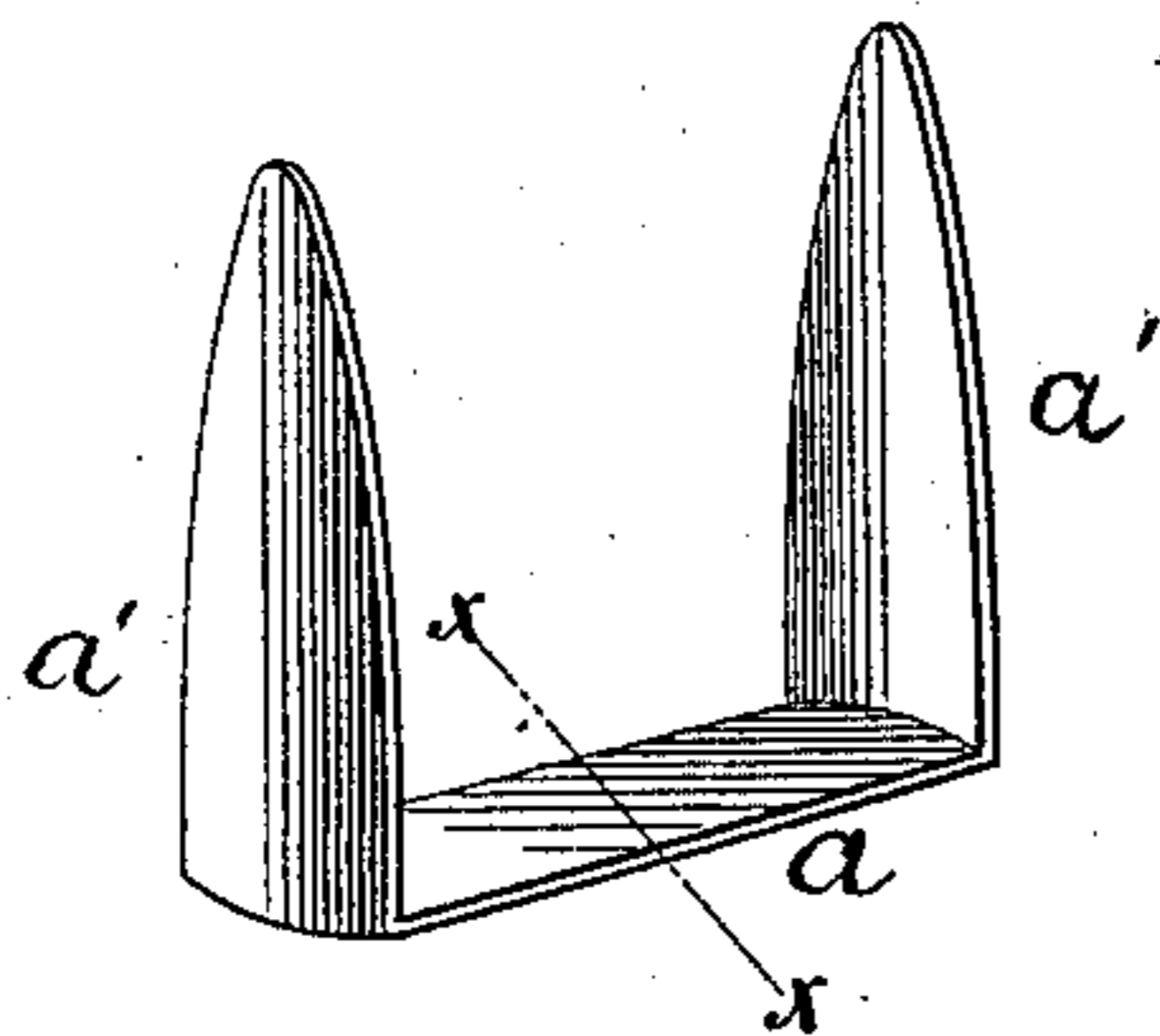


Fig. 3.

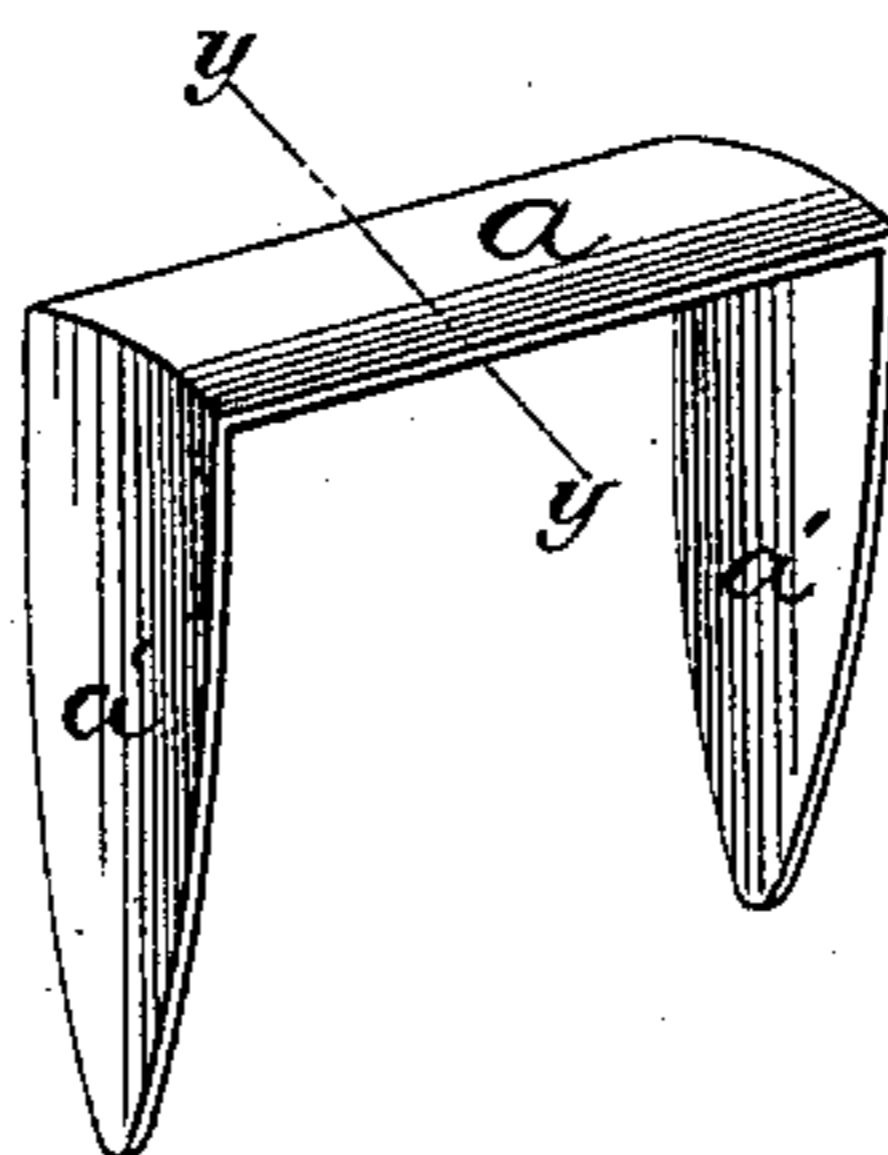


Fig. 4.

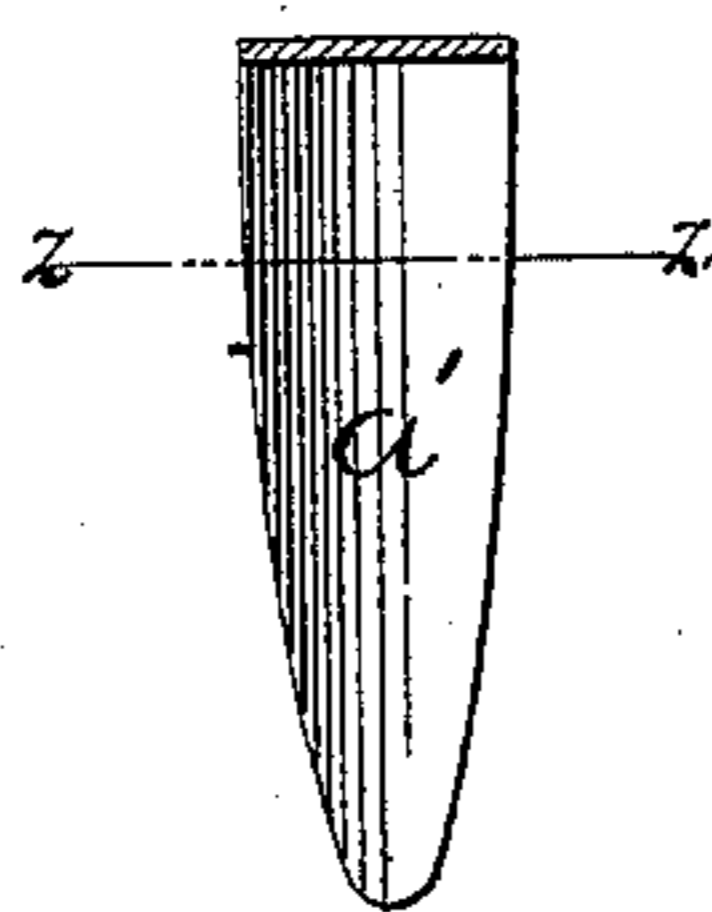


Fig. 5.

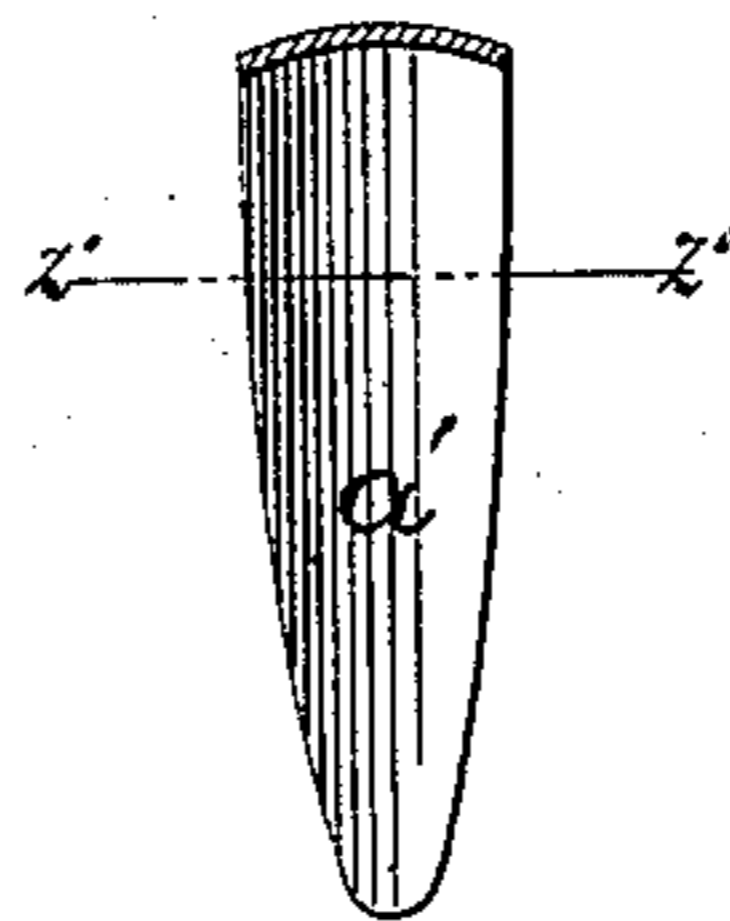
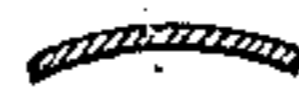


Fig. 6.



Fig. 7.



WITNESSES:

Gustave Dietrich

Harry McGill

INVENTOR

George W. McGill

UNITED STATES PATENT OFFICE.

GEORGE W. MCGILL, OF NEW YORK, N. Y.

STAPLE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 285,640, dated September 25, 1883.

Application filed August 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MCGILL, of the city and county of New York, in the State of New York, have made certain new and useful Improvements in Metallic Staple-Fasteners, of which the following is a full and exact description or specification, reference being had to the accompanying drawings, making part of the same, in which—

Figure 1 represents the metal blank from which the fastener is formed. Fig. 2 is a perspective view of the fastener in reverse position. Fig. 3 is a perspective view of the fastener in upright position. Figs. 4 and 5, respectively, are sectional views of the fastener, taken on the lines x and y of Figs. 2 and 3, respectively; and Figs. 6 and 7, respectively, are cross-sections of the shanks of the fastener, taken on the lines z and z' of Figs. 4 and 5, respectively.

Similar letters of reference indicate corresponding parts.

The object of my invention is the production of a metallic staple-fastener having superior strength and penetrating power to those of ordinary make without any increase in the weight or hardness of the metal used in the same.

The fastener-blank, as shown in Fig. 1 of the drawings, is cut from metal, preferably sheet-brass—that is to say, its center portion, a , is of uniform width, and its end parts, a' , are each fashioned so as to curve and decrease in width for their entire length toward their extremities, where they terminate in slightly-rounded points. That portion of the blank marked a forms the crown or head of the staple, and the parts marked a' form its shanks. The blank so shaped is fashioned into my improved staple by bending or swaging in a suitable machine its end parts, a' , down at right angles from its center part, a , on the curved lines c , so as to give them, vertically, the form of a gouge, declining in width from their top to their points, as shown in Figs. 2,

4, and 6. I also propose in some cases swaging the crown a of the staple as well as its shanks into a partly-cylindrical form, as is shown in Figs. 3, 5, and 7. By making the shanks of the staple of the form herein shown and described—that is to say, with a slightly dull or rounded point and curving, so that their width gradually increases from their points upward—enables the shanks to be forced with considerable ease through papers and such like material as it may be used to fasten, for, the opening the shanks make for themselves being gradual, the force required to do so is correspondingly lessened, and the formation of the points is such that, while sharp enough to easily penetrate the articles being fastened, they will not turn on being forced against a hard substance, as they would if made sharp, nor are they as liable to prick the fingers of the user, and by giving the shanks a partially-cylindrical form, as described, their strength and penetrating power are greatly increased, and giving the crown a of the staple a similar formation, as in Figs. 3 and 5, its strength is greatly increased, and its liability to buckle, on insertion, is correspondingly lessened.

The staple-fastener so constructed is adapted to be operated in the staple-inserting machines patented to me February 18, 1879, No. 212,316.

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

1. A staple-fastener formed of sheet metal, with a longitudinally-straight head and curved and pointed prongs convex on their outer surfaces, substantially as described.

2. A staple-fastener formed of sheet metal, having a longitudinally-straight head convex on its outer surface, with curved and pointed penetrating-prongs similarly convexed, substantially as described.

GEORGE W. MCGILL.

Witnesses:

HENRY SCOTT,

W. H. GREENLAND.