

(No Model.)

F. A. SMITH, Jr.  
BUTTON FASTENER.

No. 294,089.

Patented Feb. 26, 1884.

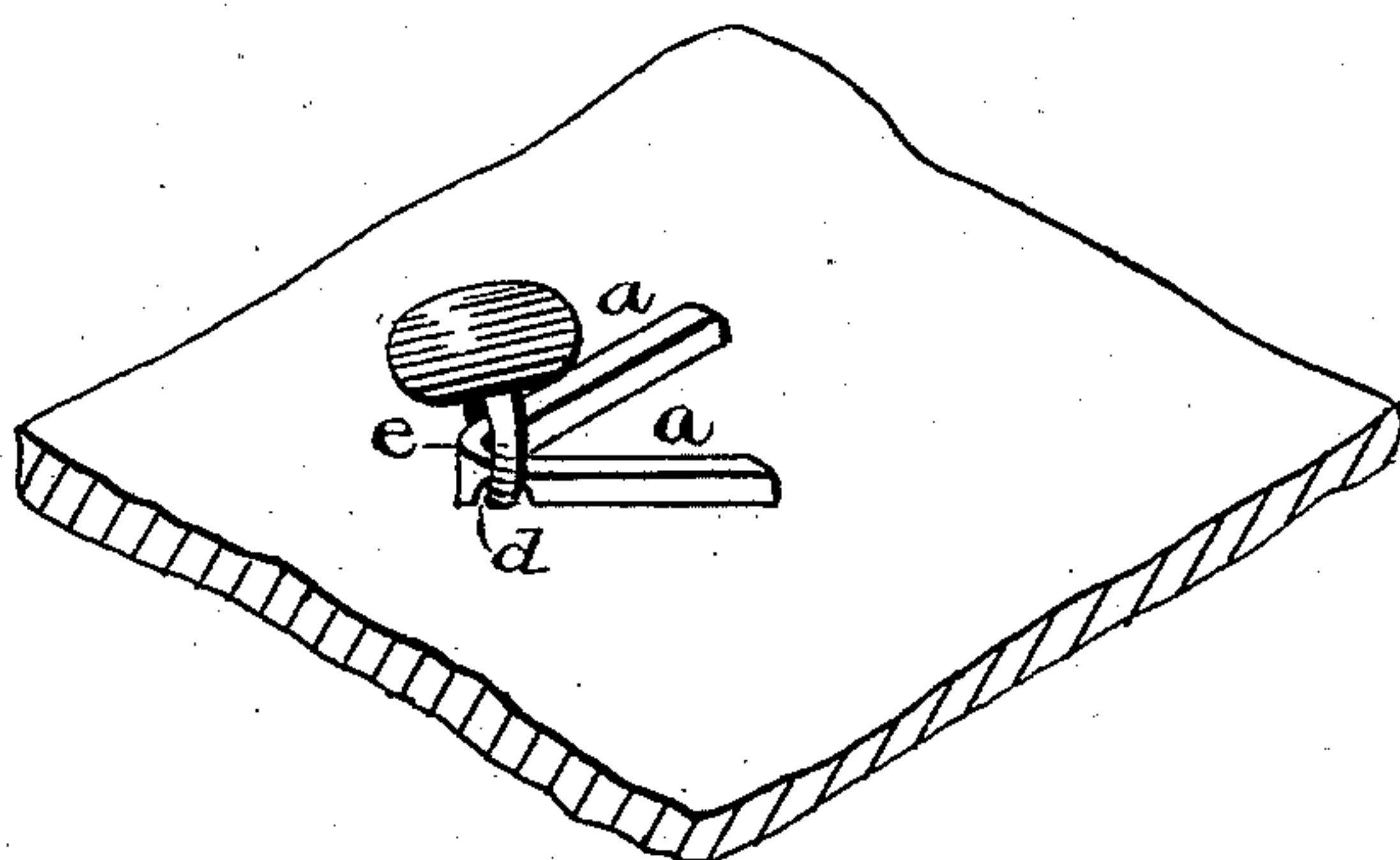


Fig. 1.

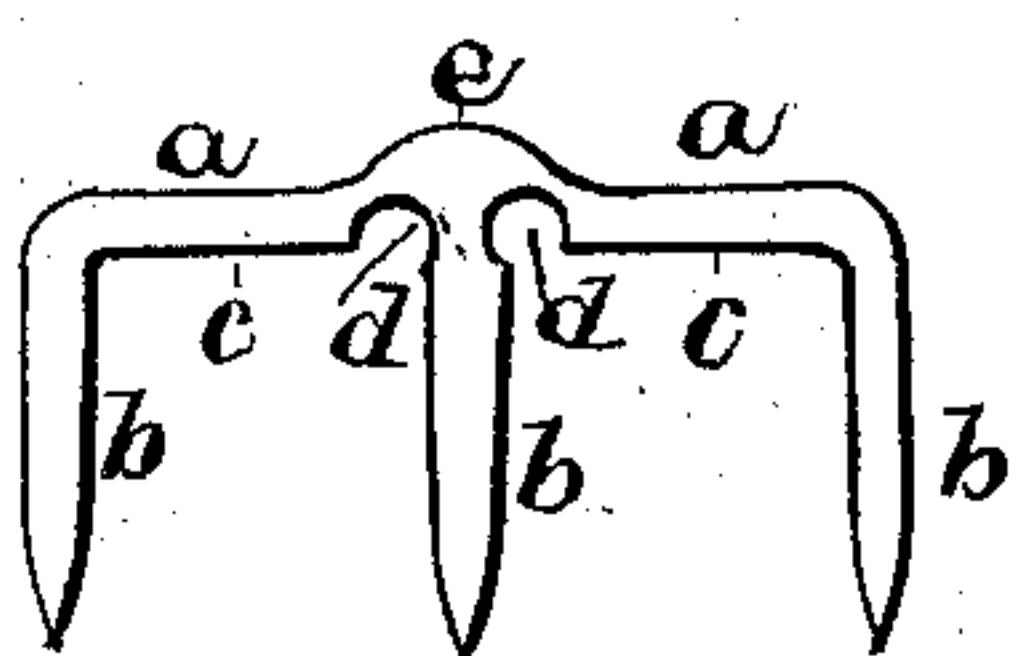


Fig. 2.

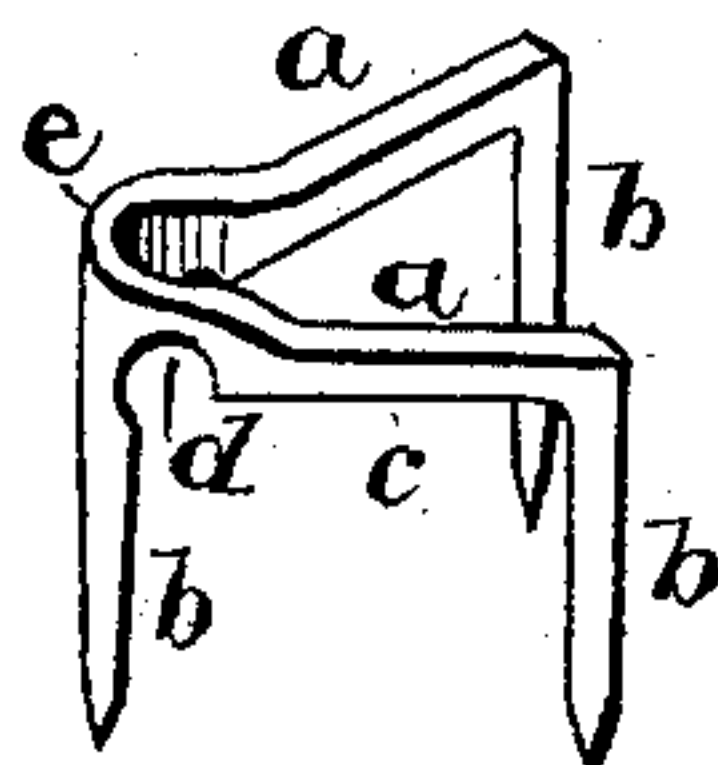


Fig. 3.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANKLIN A. SMITH, JR., OF PROVIDENCE, RHODE ISLAND.

## BUTTON-FASTENER.

SPECIFICATION forming part of Letters Patent No. 294,089, dated February 26, 1884.

Application filed December 31, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, FRANKLIN A. SMITH, Jr., a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented an Improvement in Button-Fasteners, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to that class of pronged button-fasteners which are adapted to firmly secure a button to a shoe or other article, by causing the prongs to penetrate and be subsequently clinched to the leather or other material.

Heretofore in the manufacture of button-fasteners of the class mentioned, it has been necessary to bend the prongs at an angle to the table or base to adapt the fasteners for use, thereby weakening the fasteners, and, in many instances, rendering them unfit for use. Such fasteners are further weakened when, in the course of manufacture, the prongs are swaged or tapered to a point to adapt them to readily penetrate the material to which they are to be secured, since the strain put upon the prongs during such operation is mostly exerted at the weakened or bent portion of said prongs. Further, when such fasteners are in use to hold a button to a fabric a comparatively large table or base is presented to view at the surface of the material.

My invention has for its object to provide a cheap, strong, and easily-manufactured button-fastener, the prongs of which shall not be bent to adapt the fastener for use, the said fastener presenting but little metal to view at the surface of the material to which it may be secured, and the cut edge of which shall engage said outer surface of the material.

To these ends my invention consists of a sheet-metal button-fastener having a head-bar and three or more prongs projecting in substantially the same direction from the cut edge of said head-bar, the head-bar being of an angular form or bent at the point where the middle or button prong joins said head-bar, substantially as hereinafter described, and particularly pointed out in the claims.

Figure 1 shows in perspective my improved button-fastener as holding a button to a piece

of leather or other material; Fig. 2, an elevation of the metal blank from which my button-fastener is formed, and Fig. 3 a perspective of my improved button-fastener.

In the present instance my improved button-fastener consists of the head-bar *a* and three straight prongs, *b*, projecting in substantially the same direction from the cut edge *c* of said head-bar, the whole being formed from the metal blank shown in Fig. 2, which is bent laterally at the middle or button prong, so that said head-bar will assume, substantially, a V shape, as clearly illustrated in the drawings. The central prong is passed through the shank-eye of a button, so that said shank-eye will engage the two integral parts of the head-bar in the recessed or cut-away portions *d*, which form a loop or staple for the wire shank of the button, immediately in rear of said central prong.

When the fastener is secured to the material, the under or cut edge, *c*, of the head-bar *a* engages the material or abuts against the surface thereof, and a V-shaped strip of metal only is presented to view instead of the plate or table, as heretofore.

The prongs may be tapered or pointed when the blank is cut from the sheet-metal stock. Thus a fastener is formed wherein the prongs are not required to be bent, and consequently weakened, and but one bend, in substance, is given to the head-bar by one blow of a die or former to adapt the fastener for use.

The head-bar *a* may be re-enforced above the recesses or cut-away portions *d*, as at *e*, to strengthen the same, the said head-bar being formed with the recesses and strengthening portions by the cutting-die which cuts the blank from stock.

I claim—

1. A button-fastener consisting of a head-bar and three or more prongs integral therewith, and projecting in substantially the same direction from one side or edge thereof, the said head-bar being bent at an angle to and at each side of the middle or button-prong, for the purpose specified.

2. A metal fastener consisting of a V-shaped head-bar having prongs integral therewith located at its ends and at the angle or bend, and projecting in substantially the same direction from one side or edge of the head-bar, substantially as set forth.



3. A button-fastener consisting of an angular head-bar and three or more prongs integral therewith, and projecting from the head-bar in substantially the same direction from the edge and in the line of said head-bar, all of said prongs being adapted to enter the material while they are in the line of the head-bar, and the cut edge of said head-bar adapted to engage or rest upon the material to which the fastener may be secured, substantially as set forth.

4. The improved sheet-metal button-fastener, consisting, essentially, of the V-shaped head-bar *a*, provided with the recesses *d* and strengthening portion *e*, and having the prongs

*b* integral therewith, disposed at the ends and middle of the head-bar, and projecting in substantially the same direction from the cut edge *c* of said head-bar, the head-bar and prongs being in alignment when adapted to be secured to leather or other material, all substantially as described, and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANKLIN A. SMITH, JR.

Witnesses:

GEO. W. PRENTICE,  
JAS. F. THAYER.