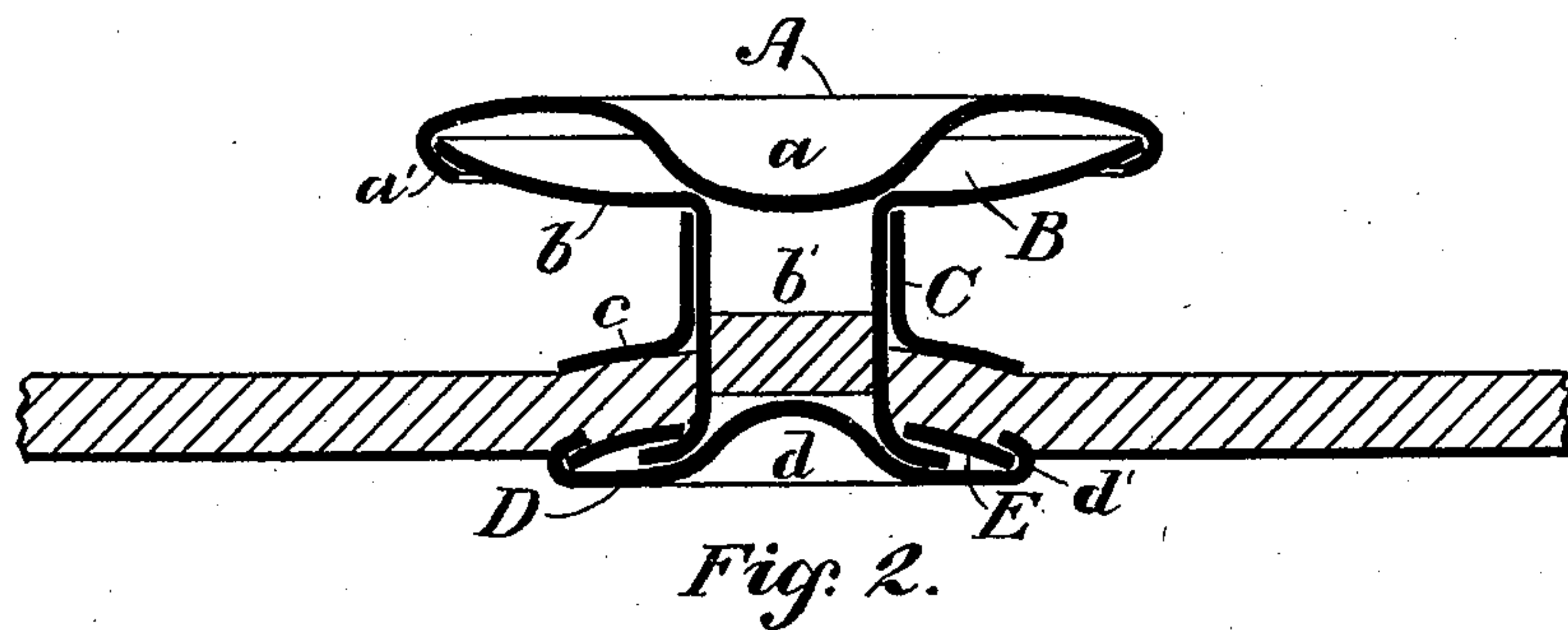
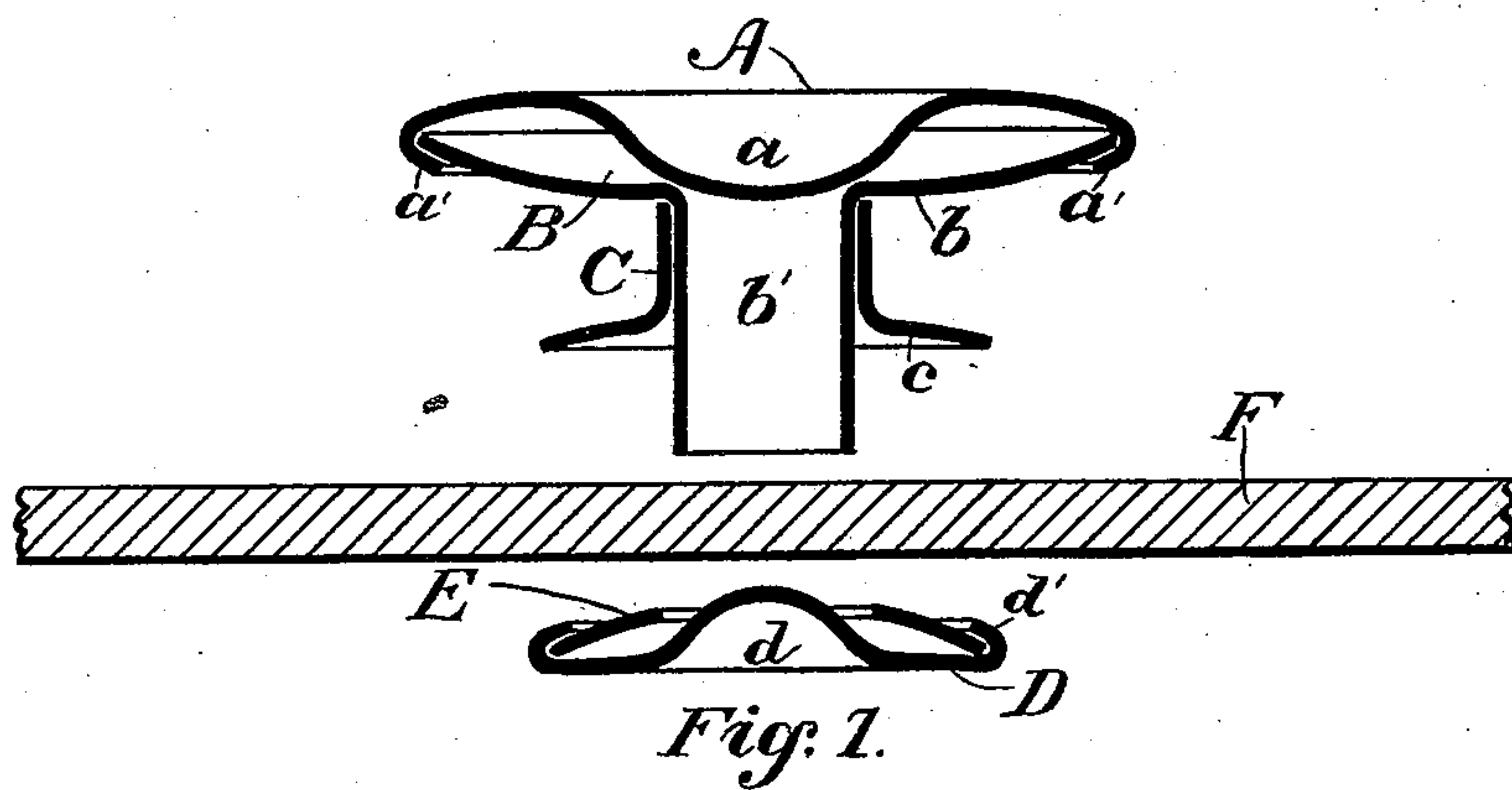


(No Model.)

F. E. HALL.
BUTTON.

No. 450,069.

Patented Apr. 7, 1891.



Witnesses
Albert E. Seach
O. H. Gilman.

Inventor
Frank E. Hall by
J. B. H. D. Owsen
Atty.

UNITED STATES PATENT OFFICE.

FRANK E. HALL, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO THE CONSOLIDATED FASTENER COMPANY, OF PORTLAND, MAINE.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 450,069, dated April 7, 1891.

Application filed December 15, 1890. Serial No. 374,755. (No model.)

To all whom it may concern:

Be it known that I, FRANK E. HALL, a citizen of the United States, residing at Newton, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Buttons, of which the following is a full specification.

My invention consists of a metallic button to be mechanically secured to the material by riveting and constructed in the manner hereinafter described in detail.

Referring to the accompanying drawings, Figure 1 represents in section the two main parts of the button that rest on either side of the material when the button is in place, the said parts being shown in relative position for riveting with the material between them. Fig. 2 shows in section the button secured to the material.

A is the cap of the button-head, the outer edge *a'* of which is clinched in and around the flange *b* of the riveting-eyelet B, the said flange forming the under surface of the button-head. The downwardly-projecting shank *b'* of the eyelet B is the part which passes through the material on which the button is to be mounted, the lower edge of said shank *b'* being the portion that is turned outward and effects the riveting of the parts together in the manner presently to be described.

C is an eyelet, the upwardly-projecting shank of which embraces tightly the downwardly-projecting shank *b'* of the riveting eyelet and is frictionally held thereon, the shank of the eyelet C forming the neck of the button and bearing directly against the bottom of the flange *b* of the riveting-eyelet. The flange *c* of the eyelet C is to rest on the top surface of the material when the button is in place.

The top of the cap A is depressed at *a* to such an extent that at the junction of the shank *b'* with the flange *b* of the riveting-eyelet the said riveting-eyelet is in close contact with the depression *a* to aid in the clinching of the parts together. The parts A, B, and C, assembled together as just described, constitute the part of the button that rests on top of the material. The part resting on the

under surface of the material consists, preferably, of two pieces D and E, D being a flanged anvil-piece provided with the central rounded anvil-nipple *d* and having its flange clinched at *d'* around the outer edge of the retaining-piece E.

The two main parts of the button are placed between suitably-shaped dies in the relative position shown in Fig. 1, with the material F on which the button is to be mounted between them. The shape of the upper die is such as to accurately fit the depression *a* in the cap A, so that when the two parts are pressed together between the dies the shank *b'* of the riveting-eyelet is firmly held against any tendency to bending or buckling upward and is driven straight through the material, the rounded anvil *d* coacting with the sharp mouth of the eyelet-shank *b'* to cut a hole automatically through the said material. Continued pressure serves to turn the under edge of the shank *b'* of the riveting-eyelet outward against the anvil-nipple *d*, its edge being held rigidly under that of the retaining-piece E in the manner shown in Fig. 2. When the button is in place, the material is tightly squeezed between the retaining-piece on the bottom and the flange *c* of the eyelet C on the top.

I desire to cover the employment of the flanged eyelet C to fit the shank *b'* of the riveting-eyelet, the shank of the said eyelet C forming the neck of said button, while the flange *c* thereof presses down upon the top surface of the material, and the top of the shank bears against the under surface of the button-head. It is a very important matter to have the material thus held between two wide flanges, so that the button has an unvarying grip on the material. It is also important to provide the button with a large neck, and yet not have the riveting portion *b'* too large to be struck down from the flange of the eyelet B. This can be done by my improved construction, as the riveting-shank can be made quite small, so that it may not only be easily and cheaply struck down from the flange *b*, but may also be small enough to readily pass through the material and cut its own hole. At the same time the neck of the

button, being formed of a separate eyelet C outside the riveting-eyelet, may be large enough to perform its functions, however small the shank of the riveting-eyelet may be. Furthermore, the height of the button above the cloth is fixed and unvarying, being determined by the height of the shank of the eyelet C, which does not change in riveting the parts together.

10 I claim—

A button consisting of a cap A, provided with a central depression *a*, a downwardly-projecting riveting-eyelet B, held by its flange within said cap, the flange of the riveting-
15 eyelet forming the back of the button-head

and bearing directly against said depression *a*, a separate neck forming flanged eyelet C, fitting the shank *b'* of the riveting-eyelet, a retaining-piece E, and a flanged anvil-piece D, provided with the central rounded anvil-nipple *d*, having its flange clinched around said retaining-piece beneath the material, substantially as described.

In witness whereof I have hereunto set my hand.

FRANK E. HALL.

Witnesses:

WM. B. H. DOWSE,
ALBERT E. LEACH.