

(No Model.)

F. E. HALL.
BUTTON.

No. 445,523.

Patented Jan. 27, 1891.

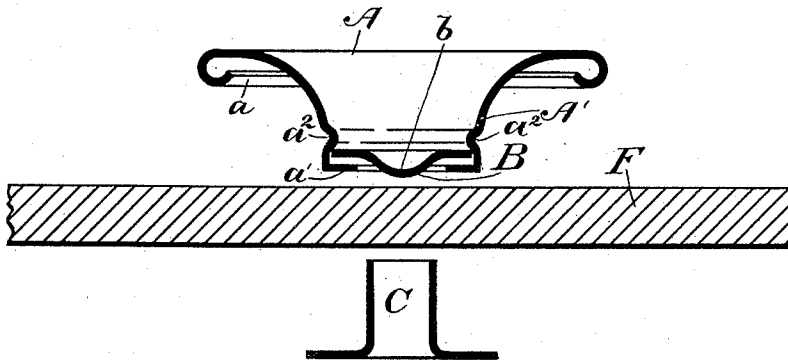


Fig. 1.

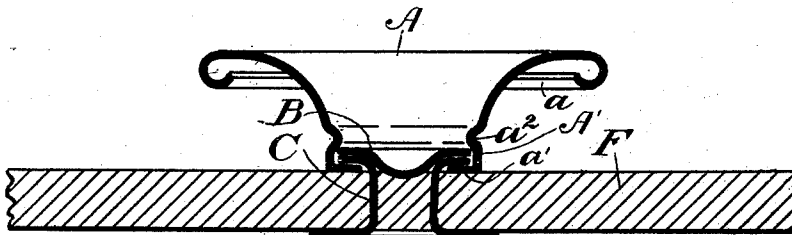


Fig. 2.

Witnesses
E. N. Gilman
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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. 445,523, dated January 27, 1891.

Application filed November 10, 1890. Serial No. 370,838. (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 certain improved features of construction in buttons of the class wherein the fastening of the buttons to the cloth or other material is mechanical, a riveting-eyelet being employed to pass up from beneath through the material and clinch within the piece forming the button head and shank, or that part of the button above the material.

My object is to produce a button so simple that it may be cheaply made and at the same time strong and durable. To this end there are only three pieces entering into its construction—viz., a button-head provided with a shank integral therewith, said shank serving to raise the button-head the proper distance above the material to which the button is attached, the head and shank piece resting on the top surface of said material, an anvil-piece within said shank, and a flanged riveting-eyelet passed up from beneath and clinched into the shank. The top of the button head and shank being open, the anvil-piece serves the double purpose of effecting the clinching together of the parts and serving as a finish to the inside shank of the button.

Of the accompanying drawings, Figure 1 shows in section on a large scale the construction of the two main parts of the button previous to and in relative position for clinching together, the material being shown between them. Fig. 2 is a similar sectional view of the complete button in place on the material.

A is the button-head, and A' the shank integral therewith, the piece A A' being struck up in the shape shown, its top being preferably rolled over outwardly, as at a , and having the inwardly-turned flange a' , leaving a hole of sufficient size for the clinching-eyelet to enter.

B is the anvil-piece having the downwardly-projecting convex anvil-surface b . This anvil-piece is first placed in position in the

bottom of the button-shank, which is then rolled in, as at a^2 , to form a shoulder for the anvil-piece to rest against.

C is the flanged clinching-eyelet, the body of which is of such a diameter as to just enter the hole in the flange a' of the button-shank. The parts being placed in the relative position shown in Fig. 1 with the material between them, they are pressed together between suitably-shaped dies, with the result that the sharp mouth of the clinching-eyelet pressing upward into the material, and the convex portion b of the anvil-piece pressing downward, coact to shear a hole through the said material, rendering a separate punch unnecessary. The eyelet C having penetrated the material encounters the anvil-surface b and is rounded outward against it, being held firmly between said anvil-piece on top and the inward flange a' of the button-shank A', which serves as a retaining-flange. During the clinching the anvil B bears firmly upward against the shoulder a^2 , but after the clinching is accomplished there is no upward strain upon the anvil-piece. The said anvil-piece, however, serves the purpose of giving a top finish to the inside of the button-shank by closing the hole through the clinching-eyelet, thus adding much to the fine appearance of the whole. The shank A', integral with the head A, serves the purpose of raising the head the proper distance above the material.

Being made in three parts only, the button, on account of its simplicity of construction, is extremely cheap while at the same time strong.

I claim—

A button provided with a button head and shank made in one piece, said head and shank piece having an inwardly-turned retaining-flange a' next the material and a rolled-in shoulder a^2 in the shank thereof, in combination with a separate flanged anvil-piece B within said shank, and a flanged clinching-eyelet C, substantially as described.

In witness whereof I have hereunto set my hand.

FRANK E. HALL.

Witnesses:

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