April 26, 1927. 1,626,296

J. V. PILCHER

SEPARABLE BUTTON

Original Filed July 8, 1925

Fig. 1.

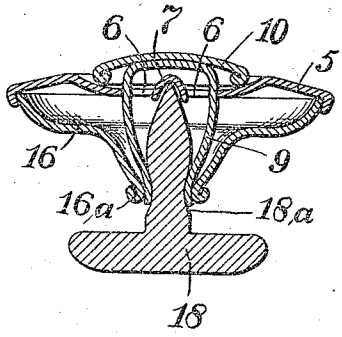


Fig. 2.

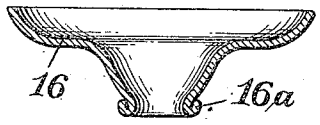


Fig. 3.

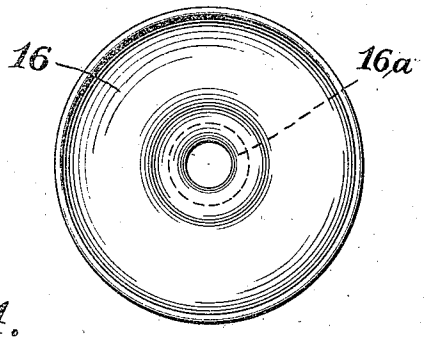
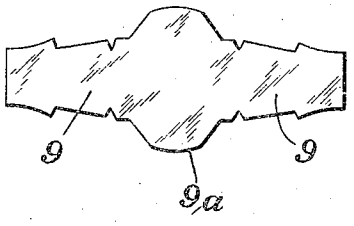


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN V. PILCHER, OF LOUISVILLE, KENTUCKY.

SEPARABLE BUTTON.

Application filed July 8, 1925, Serial No. 42,246. Renewed March 3, 1927.

My said invention is an improvement on the button disclosed in my United States Letters Patent No. 14,342, reissued August 7, 1917, and aims to provide a construction which may be more easily and economically manufactured, which will enable the button parts to be separated by a reduced length of movement in the locking key, and in which the part receiving the thrust of the key will be of ample strength.

With these several objects in view, the invention includes the novel features of construction and arrangement and combination of parts hereinafter described and particularly defined by the appended claims.

In order that the invention may be more readily understood, reference is made to the accompanying drawings, in which:—

Figure 1 is a transverse vertical section through a complete assembled button.

Fig. 2 is a sectional view of the lower half of the shell or female member.

Fig. 3 is a plan view of the same, and

Fig. 4 is a plan view of the key blank before it is bent into the shape shown in Fig. 1.

In this drawing the female member is shown as comprising a shell formed by a top member 5 having two slots 6 cut through it, leaving a cross bar 7 which is bent into the arched form shown in Fig. 1, and through which the two legs 9 of the key member are inserted, as in my aforesaid patent, the cap member being secured to the main shell member 16 by having its edges spun around the edges of the latter. The shell or lower member 16 is provided with a tapered lower portion of substantially truncated conical form and the lower edge is curled upon itself to form a strengthening or reinforcing bead, as indicated at 16^a.

The male member of the button is indicated at 18 and it has a shank portion adapted to penetrate the open lower end of the female member, which shank is provided with an annular reduced portion 18^a which, when the upper end of the shank is juxtaposed to the bridge piece, coincides with the beaded portion 16^a of the shell. The legs of the cap piece of Fig. 4, after it has been bent into the shape shown in Fig. 1 and inserted through the slots, are adapted to engage with the shank just above its point of minimum contraction, and by being wedged between the shank and the contracted lower end of the shell will hold the male member against withdrawal.

I have found that by providing the shell with a reinforcing bead at its lower end, the shell 16 may be made from a single piece of sheet metal, which greatly facilitates the manufacture over the construction shown in my reissued patent aforesaid, and reduces the cost, and I have also found that the male member may be released by a much less degree of movement.

The key is operated for releasing the male member in the manner as disclosed in my aforesaid patent, by a cap member 10 which has over-turned side edges which engage the head of the key piece. In my aforesaid patent the head of the key piece was provided with side portions curved to correspond to the curvature of the edge of the cap piece and considerable difficulty was experienced in effecting a proper and permanent junction, due to the tendency of the corners or ends of said curved portions to pull out from under the turned over edge of the cap. I have found that this objection can be avoided by making the cap engaging portion 9^a of the key piece relatively narrow, which gives an amply firm connection and enables the key piece to be formed up into the proper shape more readily.

Having thus described my invention, what I claim is:—

1. In a separable button, a female or head member having a sheet metal body provided with a tapered portion having an outwardly overturned lower edge forming an external annular bead, a male member having a stud to enter the opening defined by said annular bead, said stud having an annular rebate, and a key piece having legs lying between the lower end of the said tapered portion and the reduced portion of the stud, with means for operating the key piece.

2. A separable button according to claim 1, in which a cap having an inwardly turned flange is provided for operating the key piece, and the key piece has a head comprising laterally projecting wings having converging side edges, and relatively narrow rounded edges at the termini of the converging edges for engaging the flange of the cap.

In testimony whereof I affix my signature.

JOHN V. PILCHER.