(No Model.)

J. COSTELLO.

BUTTON.

No. 361,490. Patented Apr. 19, 1887.

Fig. 1.

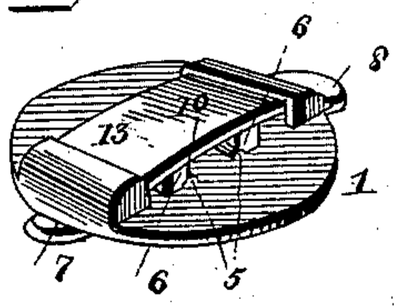


Fig. 2.

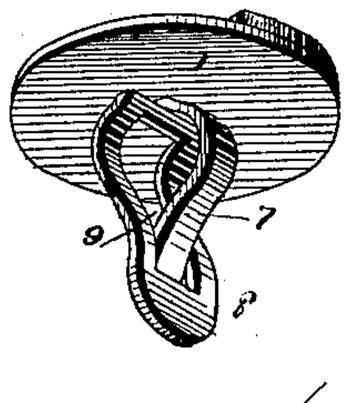


Fig. 3.

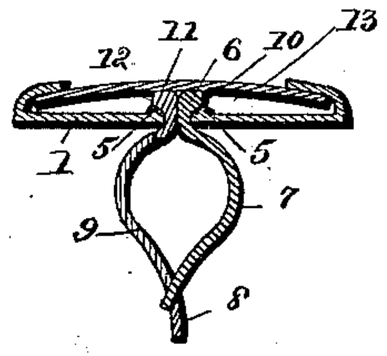


Fig. 4.

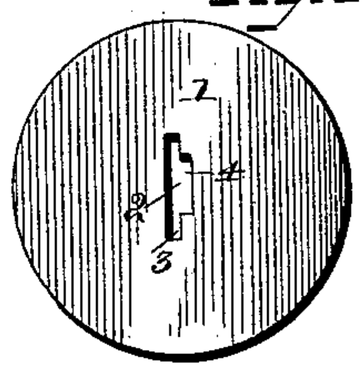


Fig. 5.

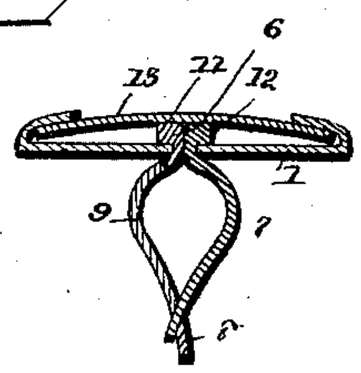


Fig. 6.

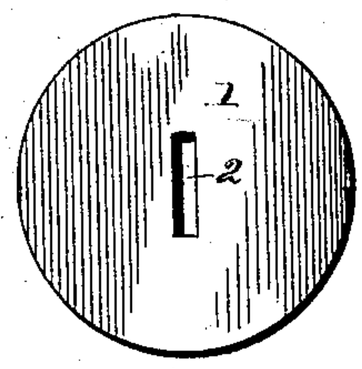


Fig. 6a

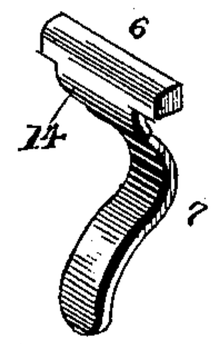


Fig. 7.

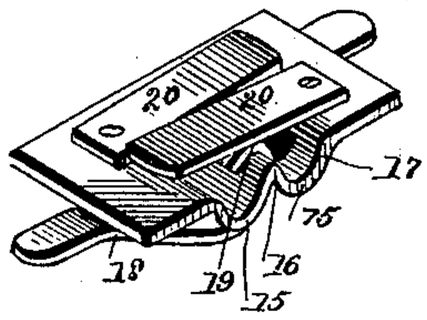


Fig. 8.

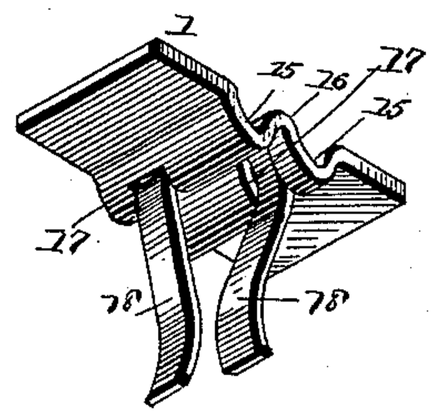


Fig. 9.

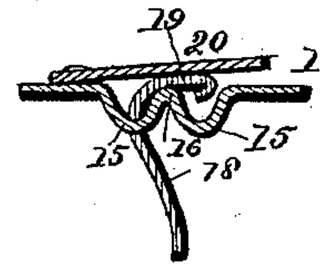


Fig. 10.

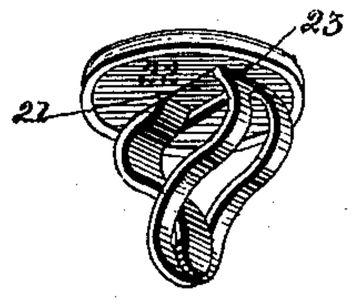
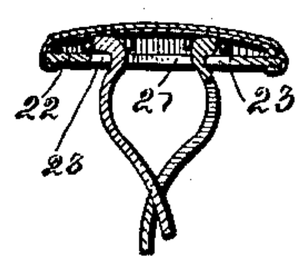


Fig. 11.



WITNESSES

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Benj. G. Court.

John Costello,

INVENTOR

by Louis Bagger & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

JOHN COSTELLO, OF ATTLEBOROUGH, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JAMES F. SIMMS, OF SAME PLACE.

BUTTON.

SPECIFICATION forming part of Letters Patent No. 361,490, dated April 19, 1887.

Application filed February 14, 1887. Serial No. 227,539. (No model.)

To all whom it may concern:

Be it known that I, JOHN COSTELLO, a citizen of the United States and a resident of Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Buttons; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figures 1 and 2 are perspective views, respectively, from above and below, of as much of my improved button as will illustrate my invention. Fig. 3 is a sectional view of the same. Fig. 4 is a view of the under side of the back plate of the button. Fig. 5 is a sectional view of a modified form of the button. Fig. 6 is a view of the back plate of this form. Fig. 6ª is a view of one of the arms. Fig. 7 is a perspective view from above, and Fig. 8 is a perspective view, from below, of another modification of the button. Fig. 9 is a sectional view of this form, and Figs. 10 and 11 are respectively a perspective view, seen from below, and a sectional view, of still another modification.

Similar numerals of reference indicate corresponding parts in all the figures.

My invention has relation to that class of buttons in which two arms or levers are pivoted in the back of the head of the button and may be tilted straight down for insertion into the button-hole and to opposite sides for securing the button, suitable springs bearing against the heads of the arms and holding them in their proper positions; and it consists in the improved construction and combination of parts of such a button, as hereinafter more fully described and claimed.

In the accompanying drawings the numeral 1 indicates the back plate of the head, which plate is formed with a slot, 2, in its center, the said slot consisting of a longer portion, 3, and a shorter central portion or extension, 4, of the same width as the longer portion. Two transverse ribs or rods, 5, are formed upon the upper side of the back plate at the outer edges of the slot portions formed by the rolled edges of the same, and serve as fulcra for the wide heads 6 of the arms 7 and 8. One narrow arm, 7, projects with its outer portion through the short slot portion, and is curved in a direction off from the head, and the wider arm, 8, has a longitudinal slot, 9, and projects through the longer slot portion, the narrow arm fitting in the slot of the wide arm, and the wide arm having a curve in the opposite direction to the narrow arm.

The heads of the arms are formed with transverse grooves or bearings 10, with which they fit and turn upon the transverse rods or ribs, and two sides of the heads are formed with flat faces 11 and 12, at right angles to each other, bearing with these faces against a flat spring, 13, secured above the back plate and serving to retain the arms in their two positions by bearing against the faces of the heads, having sufficient spring to admit of the arms being tilted and the edge between the faces being forced under it.

When the button is to be inserted into the button-hole, the two arms are tilted down, the narrow arm tilting within the slot in the wide arm and bearing with its end against the closed end of the slot, and the arms may now be inserted through the button-hole, the flat faces of the heads bearing against the spring keeping the ends of the arms together.

After the arms have been inserted they may be tilted to the sides, and the spring will force them to project in opposite directions, retaining the button in the hole.

By corrugating the meeting faces of the heads and upper curved portions of the arms the said arms may be made to tilt together, the corrugations of one arm meshing with the corrugations of the other arm.

In Figs. 5 and 6 are shown views of a modified form of this button, in which the slot is of the same width at all places, and the head of the narrow arm formed with a short extension, 14, of the same width as the wide arm, which extension passes through the slot, and the bearings of the heads of the arms turn upon the edges of the slot without having any ribs or rods to turn upon. The other parts of the button are the same as in the first described

form, and all the parts operate in the same manner.

In Figs. 7, 8, and 9 are shown views of still another modification, in which the back plate of the button is formed with two outward bulges, 15, separated by an inward bulge or rib, 16, and the opposite ends of these bulges are formed with small slots 17, having the oppositely-curved arms 18 inserted through them, the arms having their inner ends, 19, bent to hook over the separating bulge or rib, and bearing with their upper sides against two springs, 20, secured with their opposite ends at opposite sides of the bulges upon the upper side of the back plate. The arms may be tilted downward in the same manner as in the other forms and inserted through the button-hole, and may be tilted to the sides securing the button.

In Figs. 10 and 11 are shown views of another modified form of the button, in which the arms and their heads are of the same construction as the arms shown in the first two forms, but in which the upper ends of the arms are inserted through a slot, 21, transverse to the heads of the arms, and formed in a spring-plate, 22, the ends of the slot having narrow extensions 23 extending to near the edge of the plate, the spring-plate being of the same construction as the spring-plate shown and described in my allowed application, Serial No. 219,160, filed November 17, 1886, and allowed January 18, 1887; and the flat faces of the heads of the arms bear against a backing plate, 24, similar to the plate described in the above-mentioned application. The operation of this button is similar to the operation of the other forms, and needs no further explanation.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a button, the combination of a back plate of the head, having a slot formed with a short extension at its center of the same width as the longer portion, and having ribs or rods formed at the outer edges of the slot and extension, two divergingly-curved arms having transverse heads at their upper ends formed with two flat faces at right angles to each other, and formed with rounded bearings fitting upon the ribs or rods, the said arms projecting through the slots with their outer curved portions, and having one wide and longitudinally-slotted portion and one narrow portion passing through the respective wide and narrow slots, and having the narrow arm projecting in and sliding in the slot of the wide arm, and a flat spring secured to the back plate to bear against the flat faces of the arms with its under side, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN COSTELLO.

Witnesses:

PHILIP E. BRADY,

JOHN REYNOLDS.