

March 11, 1924.

1,486,451

J. E. POTTER

BUTTON

Filed June 15, 1923

Fig. 1

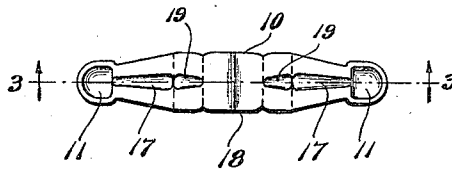
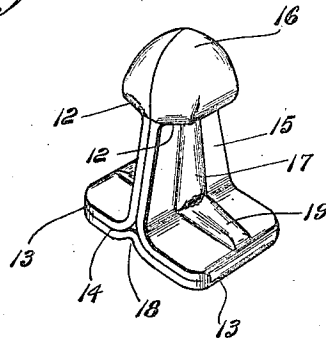


Fig. 2

Fig. 3

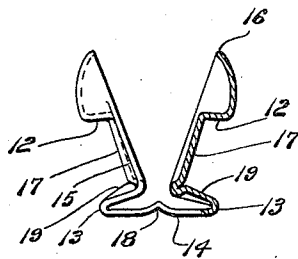
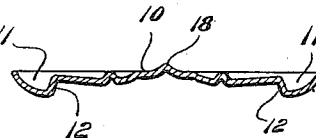


Fig. 4

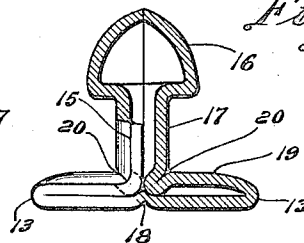


Fig. 5

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UNITED STATES PATENT OFFICE.

JAMES E. POTTER, OF PROVIDENCE, RHODE ISLAND.

BUTTON.

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To all whom it may concern:

Be it known that I, JAMES E. POTTER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Buttons, of which the following is a specification.

This invention relates to an improved construction of button more particularly for use as a temporary button for holding the collar band and soft cuffs of a freshly laundered or new shirt, but the same may be used for any other purpose for which it is adapted, and is an improvement on my prior Patent No. 1,425,131, patented August 8, 1922.

The object of my present invention is to provide a button of this character which is formed by folding sheet metal stock to provide a base portion, a shank portion and a head portion, all from a single strip of metal and to provide a stiffened construction of button to prevent the same from bending.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a perspective view illustrating my improved form of button.

Figure 2 is a view of the strip of a length of sheet stock extended and from which the button is formed, and showing the outwardly-swaged cup-shaped portions at the ends which when folded together form the head of a button; also showing the outwardly-swaged stiffening ribs for the shank portions and the base.

Figure 3 is a sectional view on line 3—3 of Figure 2.

Figure 4 is a view showing a strip as partially bent to form my improved construction of button.

Figure 5 is a greatly enlarged side elevation partly in section illustrating the cooperating ribs in the shank and base portion arranged to stiffen the shank portions particularly at their junction with their base portions.

My improved sheet metal button is formed automatically by fast running machines, from a strip of metal which is fed thereinto, and in order to facilitate rapid

action of the machine it is desired to form the button from as thin stock as possible.

It is found in practice by providing stiffening ribs in those portions of the button which are called upon to withstand the greatest strain that the buttons may be made of stock of the minimum thickness; and the following is a detailed description of one construction of button formed with stiffened portions to accomplish the purpose of this invention.

My improved button is formed from a strip of sheet stock, preferably sheet metal, which is cut into length as at 10, and at the opposite ends of this strip the stock is swaged from the inner face of the strip outwardly into cup-shape as at 11 providing halves of a head having substantially square shoulders 12 on the under side thereof and tapering from the shoulder towards the ends of the stock.

But I do not wish to be restricted to forming a head of this particular shape as heads of other shapes may be formed, if desired.

In addition to swaging portions of the stock outwardly to form the head portions, I also swage portions of the stock outwardly as at 17 forming stiffening, supporting ribs along the sides of the shank portions, and I also form cooperating ribs 19 in the upper fold of the base plate whereby the end portions of both these ribs 17 and 19 abut at the line 20 of junction between the standards and the base plate to materially stiffen the standards along their length and at the junction line; also the rib portion 17 serves to stiffen the head on its line of junction with the standard.

This strip after having been so formed is folded upon itself as at 13 forming a base 14 of a double thickness also forming the shank portion 15 of a double thickness and the enlarged end portions of the shank when brought together cooperate to form a hollow head portion 16 having laterally-extending shoulders 12 on its under side and tapering towards its outer end forming a button-head which is somewhat pointed to facilitate passing the head through button-holes.

By my improved construction the shank portion of the button is substantially rectangular in cross section having flat side walls whereby the button is prevented from turning in the buttonhole and the shoulders

12 extend laterally from the side faces of the shank to engage the fabric about the buttonhole and so effectually prevent the button from dropping out which is the usual
5 fault or trouble with such temporary buttons or holders.

It will be noted that by swaging this stock out from the central plane between the shank portions, I have provided ribs or
10 stiffening portions which extend from the head to the base portion in the shank, which ribs materially stiffen these members and prevent the shank from bending along its length or at its line of junction with
15 the head when the button is subjected to severe, lateral strains, and in abutting against the rib 19 in the base it serves to materially stiffen the standard at its folding point where it joins the base; also in
20 some cases a rib 18 is formed in the base portion, which, by projecting inwardly, is caused to extend into the crease or recess between the shank portions at the base thereof practically closing this space which would
25 otherwise stand slightly open.

The device is extremely simple and practical and is so inexpensive in construction that it will replace the ordinary wooden button or other fastener now employed for
30 this purpose as my improved button may be constructed from a strip of sheet stock and folded into finished shape all in a single operation by folding the stock upon itself and owing to its double formation, it may
35 be made of extremely thin material and still be of ample strength and stiffness for the purpose required.

The foregoing description is directed solely towards the construction illustrated,
40 but I desire it to be understood that I reserve the privilege of resorting to all the mechanical changes to which the device is susceptible, the invention being defined and

limited only by the terms of the appended claims.

I claim:

1. A button formed of sheet stock folded to provide base and shank portions of double thickness, the free ends of the shank portions being enlarged to provide a hollow
50 head, and a longitudinally-disposed stiffening rib in each of the shank portions abutting said base portion to assist in rigidly supporting the shank and base portion in substantially perpendicular relation.

2. A button formed of sheet stock folded to provide base and shank portions of double thickness, the free ends of the shank portions being enlarged providing between them
60 a hollow head, and cooperating stiffening ribs in said base portion abutting said shank portion to assist in supporting said shank portions at the junction with their base portions.

3. A button formed of sheet stock folded to provide base and shank portions of double thickness, the free ends of the shank portions being enlarged providing between them a hollow head, and cooperating abutting stiffening ribs formed in both the shank
70 and base portions serving to assist to rigidly maintain the substantially perpendicular relation between said shank and base portions.

4. A button formed of sheet stock folded to provide base and shank portions of double thickness, the free ends of the shank portions being enlarged providing between them a hollow head, and a central stiffening rib in said base portion and said shank portion having an inwardly-extending
80 fold at the junction between said shank and base portions whereby the shank is supported in substantially perpendicular relation to the base.

In testimony whereof I affix my signature,
JAMES E. POTTER.