July 10, 1923. 1,461,524

C. A. GODDARD

CUFF BUTTON

Filed Dec. 5, 1922

Fig. 1.

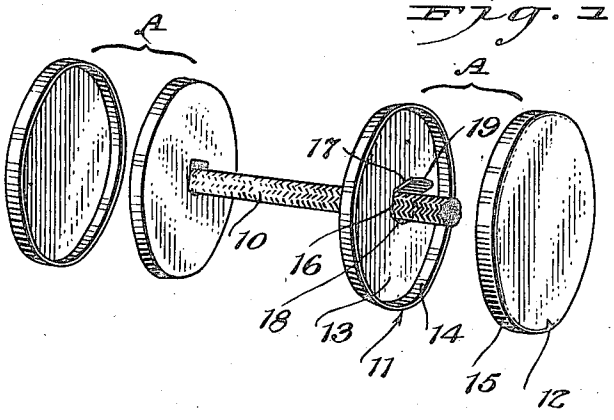


Fig. 2.

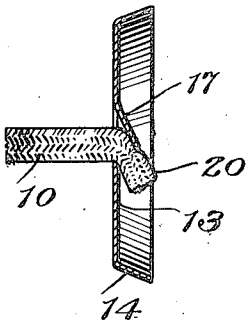


Fig. 3

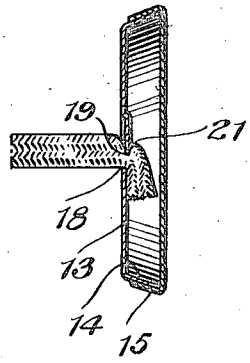


Fig. 4.

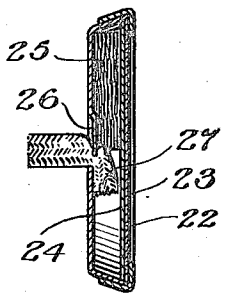


Fig. 6.

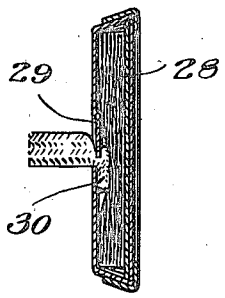
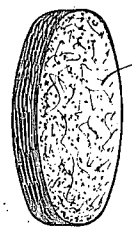


Fig. 5.



Fig. 7.



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UNITED STATES PATENT OFFICE.

CHARLES ALLEN GODDARD, OF CHESHIRE, CONNECTICUT, ASSIGNOR TO THE BALL AND SOCKET MANUFACTURING COMPANY, OF WEST CHESHIRE, CONNECTICUT, A CORPORATION OF CONNECTICUT.

CUFF BUTTON.

Application filed December 5, 1922. Serial No. 604,965.

To all whom it may concern:

Be it known that I, CHARLES ALLEN GODDARD, a citizen of the United States, and a resident of Cheshire, in the county of New Haven and State of Connecticut, have made and invented certain new and useful Improvements in Cuff Buttons, of which the following is a specification.

My invention relates to cuff buttons, and more particularly to that type or style wherein the buttons are joined together by a flexible elastic or extensible member.

This style of button as heretofore made has the ends of the elastic member pinched within a projecting sleeve or socket extending from the rear of each button, or fastened within the body of each button by the forcing together of the front and back members of each button and frictionally engaging the extremity of the elastic member therebetween. While both of these methods of securing the elastic within the button appear to permanently anchor the elastic in place, I have found that in time the elastic tends to work loose, and, furthermore, the actual securement of the elastic in place is a difficult and costly operation. Further, the rearwardly projecting metal sleeve mars the appearance of the button, while in those instances where the elastic has been anchored within the body of the button it has been found practically impossible to properly hold the elastic member in place while the front and back portions of the button are being crimped or secured together.

It is accordingly the object of my invention to provide a button of this character wherein the elastic member will be more securely and more positively anchored within the body of the button and in such manner as to prevent the elastic from becoming cut or torn during the fastening operation.

A further object is to provide a button wherein no difficulty whatever will be had in the assembling of the front and back portions of the button so that the assembling operation may be entirely done by machinery and thus the button manufactured at an extremely low cost.

With the foregoing and other objects in view, my invention consists in the improved button illustrated in the accompanying drawing and hereinafter described and claimed, and in such variations and modifications thereof as will be obvious to those skilled in the art to which my invention relates, it being understood that changes may be made within the scope of what is claimed without departing from the spirit thereof.

The preferred embodiment of my invention is disclosed in the accompanying drawing, wherein:

Figure 1 is a view in perspective of a cuff button in the process of manufacture and embodying the characteristic features of my invention;

Figure 2 is a view in section of a further step in the process of manufacture of my improved cuff button;

Figure 3 is a view in section of one of the completed buttons having the elastic member securely anchored thereto;

Figure 4 is a similar view in section of a somewhat modified form of button;

Figure 5 is a detail view in perspective of one form of body filler;

Figure 6 is a similar view in section of a further modification of one of the buttons which go to make up the complete cuff button or cuff link; and

Figure 7 is a view in perspective of the body filler for the button disclosed in Figure 6.

Referring specifically to the several views, wherein similar reference numerals designate corresponding parts throughout, my improved cuff buttons are each made up of an elastic member 10 and the two identical buttons A, each button in turn being composed of a back member 11 and a front member or cover 12. The back member 11 is composed of a plate or disc 13 having at its edge an outwardly extending and outwardly flared flange 14, while the front member or cover 12 is provided with a rearwardly extending flange 15 adapted to slip over and then engage the flared flange 14 of the back member.

As illustrated in Figure 1, the back member is further provided at or near its center with the opening 16, the displaced metal being bent inwardly from the plate to form a tongue 17. The bottom wall 18 of the opening is preferably wedge shape, so that the tongue 17 will be provided with a correspondingly shaped end 19, and the two will cooperate to securely anchor the elastic 10

to the button, as will more fully hereinafter appear.

After the back and front members 11 and 12 have been properly formed upon suitable stamping machines or die presses, the elastic member 10 is inserted through the openings as illustrated in Figure 1 and the tongues 17 then bent downwardly to engage and cause a corresponding bending of the protruding ends 20 of the elastic member and thus prevent its interfering with the assembling of the cover 12 upon the back member 11. The manner in which the inward bending of the tongue causes a corresponding bending of the protruding extremity of the elastic member is illustrated in Figure 2, and referring particularly to this figure it will be observed that as the tongue 17 is inwardly bent it bears against and then turns or bends the protruding extremity 20 of the elastic member, and this action takes place until the tongue has reached its final position as illustrated in Figure 3. The complete bending of the tongue 17, as illustrated in Figure 3, causes the tongue to extend substantially parallel to the back plate 13 but offset slightly thereinfront. As the tongue is thus slightly offset with relation to the base, the extremity 19 of the tongue is drawn away from, so as to be slightly above, the wedge shaped bottom wall 18 of the opening, and thus the elastic compressed as at 21, this compression of the elastic member taking place without danger of the elastic member being cut but at the same time the extreme point 19 will bury itself within the fabric which surrounds the elastic and thus permanently anchor the elastic member in place and positively prevent its withdrawal from the button.

At the same time as the tongue is being bent inwardly and the elastic anchored in place, the extremity 20 of the elastic is bent downwardly as illustrated in Figures 2 and 3, and the cover or front member 12 may then be assembled upon the back member without interference by the elastic member. The flange 15 is then inwardly bent or crimped so as to engage the outwardly flared flange 14 of the back and the two portions of the button thus permanently and securely anchored together.

With the button as thus constructed all operations may be carried out upon comparatively simple, automatic machinery and the button accordingly manufactured at an exceedingly low cost. The front 12 may be suitably engraved, ornamented or decorated, so that the button will present a neat, pleasing and stylish appearance.

In some instances I may provide the front cover with a central opening as illustrated in Figures 4 and 6, wherein a transparent member is placed directly in back of the cover aperture 23 and an ornamental disc 24 placed in back of the transparent disc, so that varied and pleasing appearances may thus be obtained. In some instances I have found it desirable to incorporate within the body of the button a filler 25 such as illustrated in Figure 4. The filler in this instance is preferably composed of pulp, paper, or other suitable material, may be of substantially circular outline as illustrated in Figure 5, and occupies approximately one-half of the interior of the button. The filler is compressed against the tongue 26 so as to more securely hold the same in place and also engages a limited portion of the protruding extremity 27 of the elastic member. On the other hand, I may prefer to incorporate within the body of the button a filler 28 such as illustrated in Figures 6 and 7 which will completely fill the interior of the button and not only lie against and compress the tongue 29 but will also engage the entire protruding extremity 30 of the elastic member and thus more securely hold the some in place, such changes and modifications coming clearly within the scope of my invention.

From the foregoing it will be observed that I have provided a cuff button wherein the various parts may be economically manufactured and assembled by automatic machinery, so that the entire button may be produced at an exceedingly low cost and wherein the elastic member is firmly and permanently anchored within the body of the button and extends through an opening of relatively less size than the protruding extremity of the elastic member itself.

Having thus described and explained my invention, I claim and desire to secure by Letters Patent:

1. The method of manufacturing cuff buttons consisting in passing the free extremities of an elastic member through openings in the backs of the buttons, bending downwardly against the protruding extremities of the elastic member inwardly extending tongues to thereby cause the tongues to engage and anchor the elastic member to the button backs and in so doing to cause the protruding extremities of the elastic members to bend and lie against the inner wall of the button backs and then assembling upon the said inner wall suitable cover members.

2. An article of manufacture comprising an elastic member, buttons assembled upon the remote extremities thereof and each button comprising a back member having an opening therein receiving the extremity of the elastic member therethrough, a cover or front member secured to said back member, a tongue formed by the metal displaced during the formation of said opening, said tongue lying between the front and back member and engaging the protruding ex-

tremity of the elastic member and securely anchoring it to said back member.

3. An article of the character described comprising an elastic member, buttons assembled upon the remote extremities thereof and each button composed of a back having an opening therein receiving the extremity of the elastic member therethrough, a cover secured to said back, and a tongue formed by the metal displaced during the formation of the opening in the back, said tongue lying between the front and back of said button and offset slightly in front of the back and engaging the elastic member and adapted to approach the bottom wall of the opening as the said tongue is forced toward the plane of the back.

4. An article of the class described comprising an elastic member having buttons attached to the remote extremities thereof, each button being composed of a back having an opening with a wedge-shaped bottom wall receiving the extremity of the elastic member therethrough, a tongue, formed by the metal displaced during the formation of said opening, offset in front of and extending substantially parallel to said back, the extremity of said tongue substantially wedge-shaped and cooperating with the wedge-shaped bottom wall of said opening to securely anchor the protruding extremity of the elastic member in place and to hold the protruding extremity of the elastic member substantially parallel to the back, and a front or cover carried by said back.

5. An article of the class described comprising an elastic member having buttons attached to each extremity thereof, each button comprising a back member having an opening extending therethrough and a tongue made up of the displaced metal from said opening, a front member carried by said back member, the said tongue lying between said front and back members, the extremity of said elastic member extending through the opening in the back member, said tongue being bent into engagement with the elastic member and anchoring the same in place, and a filler member contained between the front and back members and bearing against said tongue and holding the same in place.

Signed at West Cheshire, in the county of New Haven and State of Connecticut, this 29th day of November A. D. 1922.

CHARLES ALLEN GODDARD.

Witnesses:
MILTON N. HALL,
THERON S. FRENCH.