March 6, 1928.

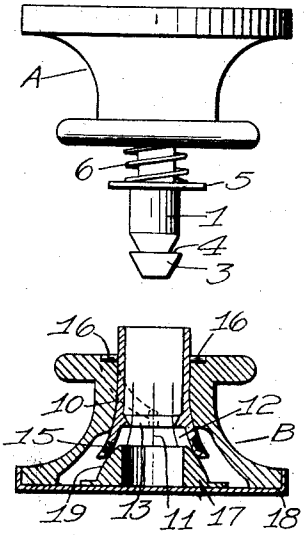
1,661,520

G. WULLUM

CUFF BUTTON

Filed April 4, 1927

FIG. 1.



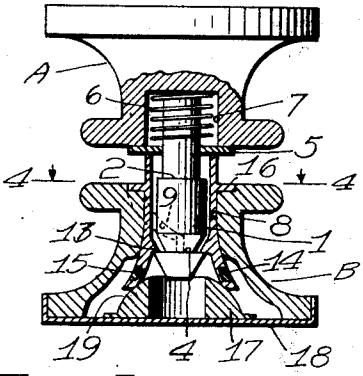


FIG. 2

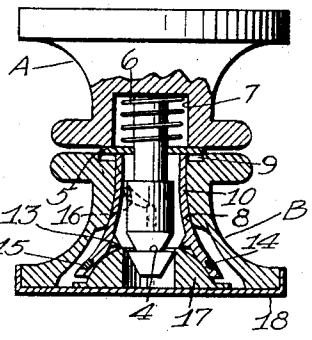


FIG. 3.

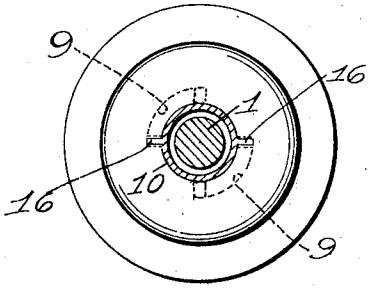


FIG. 4.

INVENTOR
G. WULLUM
BY Munn & Co.
ATTORNEYS

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UNITED STATES PATENT OFFICE.

GERHARD WULLUM, OF CHICAGO, ILLINOIS.

CUFF BUTTON.

Application filed April 4, 1927. Serial No. 180,885.

My invention relates to improvements in cuff buttons, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide an improvement over my Patent No. 1,564,657, issued December 8, 1925, and my copending application, Serial No. 111,353, filed May 24, 1926, and allowed November 27, 1926. The improvement consists in providing a device which is more efficient for the purpose intended, and which is more certain in operation.

A further object of my invention is to provide a device of the type described in which the cooperating parts when pressed together slightly become engaged, and when pressed together more firmly will be released.

A further object of my invention is to provide a device of the type described in which the parts cannot be disengaged but become more firmly locked together when force is applied to pull them apart.

A further object of my invention is to provide a device of the type described which has novel means for retarding the movement of the locking mechanism for permitting the cooperating parts to be released from one another when pressed toward each other.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings, forming part of this application, in which

Figure 1 is spaced-apart views of the male and female members of my cuff button, the female member being shown in section,

Figure 2 is a sectional view of my cuff button with the cooperating parts engaged,

Figure 3 is a sectional view of my cuff button with the cooperating parts in position for disengagement, and

Figure 4 is a section along the line 4—4 of Figure 2.

In carrying out my invention I provide a male member A and a female member B. The male member A is provided with a reduced portion 1 having a shoulder 2 and a frusto-conical head 3. The reduced portion 1 tapers inwardly toward the head 3 providing a recess 4. A washer 5 is disposed concentric with the reduced portion 1 and normally held in engagement with the shoulder 2 by means of a compression spring 6 which is disposed concentric with the reduced portion 1. A spring-receiving compartment 7 is provided for receiving the spring 6.

The female member B is provided with a central opening 8, the walls of which taper outwardly. Diametrically-opposed guideways 9 are disposed in the wall of the opening 8. A sleeve 10 has cuts 11 for a portion of its length equally spaced therearound and forming a plurality of prongs 12. The prongs 12 are provided with inwardly extending integral lugs 13. The sleeve 10 is provided at its lower extremity, viewing Figures 1, 2 and 3, with a circumferentially-disposed groove 14 which extends through the prongs 12, and in which is disposed a resilient ring 15. Diametrically-opposed retaining members 16 are integral with the sleeve 10 and receivable in the guideways 9. The outer extremities of the guideways 9 are smaller than the diameter of the retaining members 16, thus providing a stop for the retaining members.

A spreading ring 17 is centrally mounted upon a cover 18. The cover 18 is secured to the female member B by any suitable means. The spreading ring 17 is provided with an arcuate-shaped engaging surface 19.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. The male member A and the female member B are inserted in the cuff of a shirt sleeve in precisely the same manner as the ordinary type of separable cuff links, whereupon the reduced portion 1 of the male member is projected into the sleeve 10 of the female member. By slight pressure inwardly upon the male and female members, the members will be moved into the locked position shown in Figure 2. If the user endeavors to separate the male and female members by pulling outwardly thereupon, the prongs 12 will engage with the wall of the opening 8 and more permanently lock the members together.

If the user is desirous of disengaging the male and female members, he may do so by forcing inwardly as far as possible and then immediately releasing the members. During the inward movement of the members, the washer 5 engages with the sleeve 10 and by continued movement inwardly, the retaining members 16 are forced downwardly in a circuitous path within the grooves 9. Dur-

ing this movement, the sleeve 10 is rotated and the prongs 12 are forced outwardly by their engagement with the arcuate-shaped surface 19 of the spreading ring 17, see Figure 3. The outward movement of the prongs 12 moves the integral lugs 13 free from the annular recess 4. By releasing the male and female members, the compression spring 6 which is in engagement with the male member A and the washer 5 forces the male member free from the female member. By releasing the male and female members, the sleeve 10 is also free to move outwardly, but is checked in its outward movement by the engagement of the retaining members 16 with the walls of the slots 9. Therefore, the speed of the travel of the male member away from the female member is greater than the speed of the travel of the sleeve 10 outwardly. The resilient ring 15, together with the resiliency of the prongs 12, is the means for moving the sleeve 10 outwardly.

I claim:

1. A cuff button of the type described comprising a male member, a head portion for said male member, said male member having an arcuate-shaped groove adjacent said head portion, a female member having an arcuate-shaped groove extending downwardly therein, a sleeve carried by said female member, a retaining member integral with said sleeve and receivable in said groove, and retaining lugs receivable in the recess in said male member for locking said male member to said female member.

2. A cuff button of the type described comprising a male member, a head portion for said male member, said male member having an arcuate-shaped groove adjacent said head portion, a female member having an arcuate-shaped groove extending downwardly therein, a sleeve carried by said female member, a retaining member integral with said sleeve and receivable in said groove, retaining lugs receivable in the recess in said male member for locking said male member to said female member, prongs integral with said sleeve, said retaining lugs integral with said prongs, and means adapted to force said prongs outwardly for removing said integral lugs from said recess for freeing said head portion and said male member when said male member and said female member are forced inwardly a predetermined distance, said retaining member being moved within said slot and retarding the movement of said sleeve, said prongs, and said retaining lugs into their normal positions.

3. A device of the type described comprising a male member, a reduced portion integral with said male member, a head portion integral with said reduced portion, said reduced portion having a recess disposed adjacent said head portion, a female member having an opening therein, a sleeve movably disposed in said opening, retaining members integral with said sleeve and receivable in arcuate-shaped inwardly extending slots in said female member, resilient prongs integral with said sleeve, a resilient ring carried by said prongs, inwardly extending retaining lugs integral with said prongs and receivable in said recess when said reduced portion is disposed within said sleeve a predetermined distance, means for forcing said prongs and said retaining lugs outwardly for freeing said head portion when said male member and said female member have been moved inwardly a predetermined distance, and means disposed concentric with said reduced portion for forcing said male member and said reduced portion free from said sleeve and said female member, said retaining members retarding the movement of said sleeve, said prongs and said retaining lugs into their normal positions.

GERHARD WULLUM.