June 29, 1926. 1,590,337

S. A. WITTE

CUFF BUTTON

Filed Feb. 18, 1926

Fig. 1.

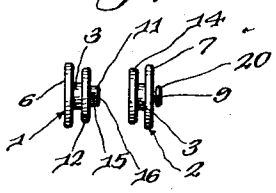


Fig. 3.

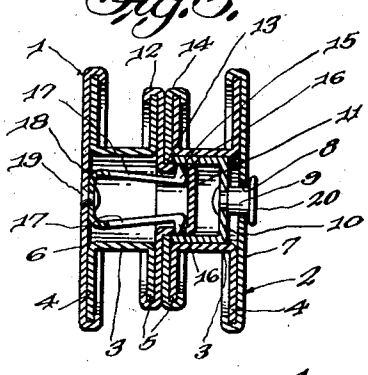


Fig. 2.

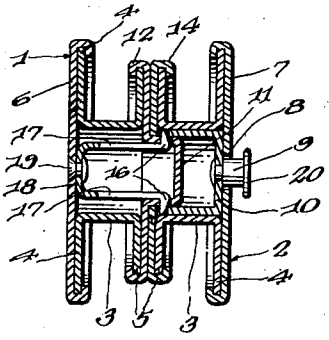


Fig. 4.

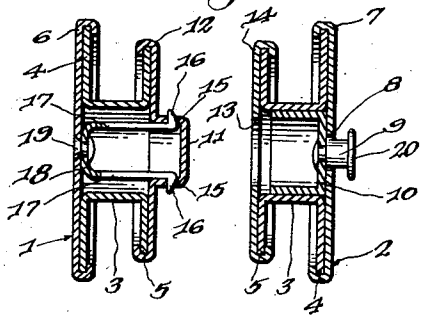


Fig. 5.

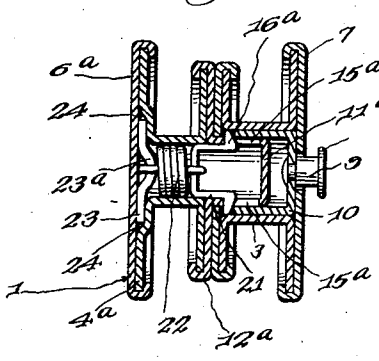
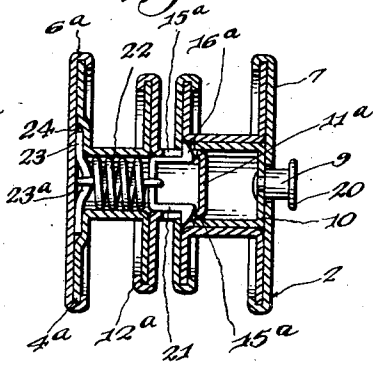


Fig. 6.



Samuel A. Witte

INVENTOR

Patented June 29, 1926. 1,590,337

UNITED STATES PATENT OFFICE.

SAMUEL A. WITTE, OF CHICAGO, ILLINOIS.

CUFF BUTTON.

Application filed February 18, 1926. Serial No. 89,094.

This invention relates to cuff buttons and more particularly to cuff buttons of the separable type comprising two members or sections and means for releasably securing the sections together.

One of the main objects of the invention is to provide a separable cuff button of simple and inexpensive construction which presents a neat appearance. A further object is to provide simple and efficient means for securing the sections of the button together in such manner as to prevent accidental detachment or separation of the sections. Another object is to provide means for securing the sections together and urging them toward each other while permitting the sections to be moved apart or away from each other. Further objects will appear from the detailed description.

In the drawings:

Fig. 1 is an elevation of the button showing the sections as separated.

Fig. 2 is a central longitudinal section through the button, parts being shown in elevation, with the two sections in operative relation.

Fig. 3 is a view similar to Fig. 2 showing the plunger in its innermost position.

Fig. 4 is a central longitudinal section through the button, parts being shown in elevation, with the sections separated.

Fig. 5 is a central longitudinal section of a modified form of the button, parts being shown in elevation, with the sections in operative relation.

Fig. 6 is a view similar to Fig. 5 showing the sections attached to each other but moved apart.

The button includes outer and inner sections 1 and 2, respectively, each of which has a hollow cylindrical body 3 formed from sheet metal and provided at one end with an outer annular flange 4 and at its other end with a flange 5 of less width than flange 4. A cover plate or cap 6 is secured on flange 4 of section 1 by beading, or in any other suitable manner and may be ornamented in any suitable way to form the outer head of the button, and a similar plate or cap 7 is secured on flange 4 of section 2. Cap 7 is provided with a central opening 8 which accommodates a knob 9 secured through the inner end of a cylindrical plunger 10 which fits snugly within body 3 of section 2 and has slidable movement longitudinally thereof. This plunger is open at its outer end and is of proper size to fit snugly about a stud 11 which projects inwardly from base plate 12, secured to flange 5 of section 1, this stud fitting snugly through an opening 13 in base plate 14 secured to flange 5 of section 2.

The stud is provided with slots 15 through its peripheral wall through which project heads 16 provided at the inner ends of arms 17 of a resilient elongated U-shaped securing member 18 secured by a rivet 19, or in any other suitable manner, to cap 6. The heads 16 project outwardly laterally of the arms 17 and have their outer faces disposed at right angles thereto, the inner faces of the heads tapering outwardly of the stud and the heads being of approximately V-shape and tapering outwardly away from the stud in width. Heads 16 are of proper length to project through slots 15 an appreciable distance beyond stud 11 so that the outer faces of these heads project over the inner face of base plate 14 when the sections are in operative relation. The heads thus act as locking members and coact with base plate 14 to secure the two sections of the button together. As the outer faces of the heads 16 are parallel with the inner face of plate 14 which is at right angles to body 3 of section 2, this provides simple and efficient means for securing the sections together in such manner as to positively prevent the sections from being accidentally pulled apart or detached from each other. This eliminates one of the most serious objections to buttons of this type now in common use in which the sections pull apart very easily after the button has been in use for a comparatively short length of time.

To release the sections of the buttons from each other plunger 10 is forced inwardly into the position illustrated in Fig. 3. During this inward movement the plunger contacts with the inclined faces of heads 16 and forces them inwardly of the stud 11. When the plunger reaches its innermost position, its outer end is in contact with the inner face of plate 14 and heads 16 are confined within stud 11, the bore of the plunger being in register with opening 13. This releases the two sections from each other and permits them to be easily pulled apart. To facilitate return of the plunger to its inner or inoperative position so as to permit ready insertion of the stud 11 through opening 13 and movement of heads 16 into operative

position, I provide a flange 20 or equivalent element at the inner end of knob 9, beneath which the finger nail can be easily inserted. With the plunger in its inner or inoperative position, when the two sections are moved into operative relation the heads are forced toward each other as they enter opening 13 and then spring outwardly after they have passed through this opening into operative positions, as illustrated in Fig. 2.

In the modified form illustrated in Figs. 5 and 6, I employ a comparatively short U-shaped securing member 21 the bight portion of which is connected by a tension coil spring 22 to the central bowed portion 23^a of an anchor member 23, the end portions of which fit into recesses 24 formed in the outer face of flange 4^a and are confined between the flange and cap plate 6^a. Base plate 12^a is provided with an elongated stud 11^a having elongated slots 15^a through which locking heads 16^a project. In this form of the button, spring 22 permits the sections to be pulled apart an appreciable distance until heads 16^a reach the inner ends of slots 15, as illustrated in Fig. 6. This permits the cuff to be pulled upwardly upon the arm so as to prevent soiling of the cuff, as when washing the hands. When the cuff is pulled up on the arm a sufficient distance to force the sections of the button apart spring 22, due to its elasticity, acts to urge the sections of the button toward each other thus holding the cuff snug about the arm and preventing it from slipping downwardly upon the arm during washing of the hands, which is a decided advantage. After the hands have been washed and dried the cuff is slid downwardly along the arm into normal position, and spring 22 acts to return the sections of the button to operative position closely adjacent to each other and to normally hold them in such position, this spring being under slight tension at this time. As heads 16^a project through slots 15 outward movement of member 21 is positively limited by stud 11^a which insures that the heads will be retained in proper position to cooperate with base plate 14 for securing the sections together. In all other respects, the operation of the modified form illustrated in Figs. 5 and 6 is identical with the operation of the form of button illustrated in Figs. 1 to 4.

As it is intended to have section 1 in the outer side of the cuff and section 2 in the inner side of the cuff, I have referred to these sections as the inner and outer sections, respectively, though the sections can be disposed in any preferred relation to the cuff as will be apparent. As will be apparent, and as above indicated, changes in construction and arrangement of parts of the invention may be resorted to without departing from the field and scope of the same, and I intend to include all such variations, as fall within the scope of the appended claims, in this application in which the preferred forms only of my invention are disclosed.

What I claim is:

1. In a separable cuff button, inner and outer sections cooperating when in operative relation to form the complete button, the outer section having a stud projecting therefrom and provided with longitudinally extending slots, the inner section having an opening snugly receiving said stud, a resilient multi-armed securing member mounted in the outer section and provided with locking heads at the free ends of its arms normally projecting through the slots and beyond the outer peripheral surface of the stud, the slots extending beyond the heads to permit movement of the sections toward and away from each other while secured together, and an elastic member connecting the securing member to the outer section and urging the securing member toward said outer section.

2. In a separable cuff button, inner and outer sections cooperating when in operative relation to form the complete button, the outer section having a stud projecting therefrom and provided with longitudinally extending slots, the inner section having an opening snugly receiving said stud, a resilient mult-armed securing member mounted in the outer section and provided with locking heads at the free ends of its arms normally projecting through the slots and beyond the outer peripheral surface of the stud, the slots extending beyond the heads to permit movement of the sections toward and away from each other while secured together, an elastic member connecting the securing member to the outer section and urging the securing member toward said outer section, and means for moving the heads of the securing member into inoperative position and holding them in such position during separation of the sections of the button.

3. In a separable cuff button, inner and outer sections cooperating when in operative relation to form the complete button, each of said sections including a body provided with a base at its inner end, the inner section having an opening through its base in alignment with the body thereof and the outer section having a stud projecting from its base and fitting through said opening, the stud having slots through its peripheral wall, a resilient multi-armed member mounted in the outer section and provided with locking heads at the free ends of its arms normally projecting through and beyond the slots of the stud, said heads having their outer faces parallel to the base of the inner section and projecting over the inner face thereof, the inner faces of the heads being

inclined from the free ends of the arms outwardly of the slots toward the base of the inner section, a plunger operable in the body of the inner section and fitting snugly about said stud, the plunger when moved into its innermost position contacting with the base of the inner section and acting to move the heads inwardly of the stud and to confine said heads within the stud, and an elastic member connecting said multi-armed member to the outer section and permitting the sections to be moved apart while in operative relation to each other, said member urging the sections toward each other.

4. In a separable cuff button, inner and outer sections cooperating when in operative relation to form the complete button, means for detachably securing said sections together while permitting the sections to be moved toward and away from each other, and yielding means urging the sections toward each other.

5. In a separable cuff button, inner and outer sections cooperating when in operative relation to form the complete button, and means for detachably securing said sections together while permitting the sections to be moved toward and away from each other with a rectilineal movement and said means urging the sections toward each other.

6. In a separable cuff button, inner and outer sections cooperating when in operative relation to form the complete button, and means for detachably securing said sections together and urging them toward each other while permitting the sections to be moved toward and away from each other.

7. In a separable cuff button, inner and outer sections cooperating when in operative relation to form the complete button, and means for detachably securing said sections together, said means including an elastic member urging the sections toward each other and permitting said sections to be moved away from each other.

8. In a separable cuff button, inner and outer sections cooperating when in operative relation to form the complete button, and yielding means for detachably securing the sections together and holding them closely adjacent each other while permitting movement of the sections away from each other.

In testimony whereof I affix my signature.

SAMUEL A. WITTE.