Dec. 1, 1925. 1,563,350

W. E. FIELD ET AL

SEPARABLE CUFF BUTTON

Filed July 14, 1925

Fig. 1.

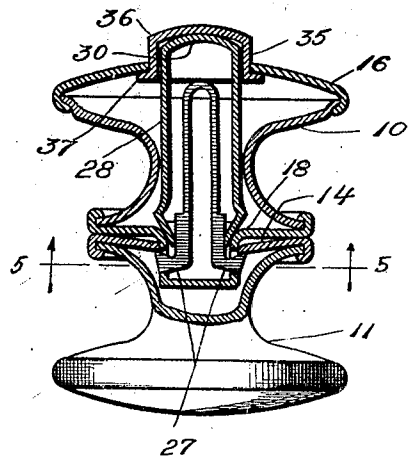


Fig. 2.

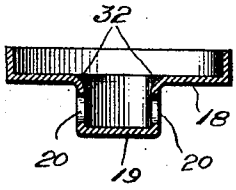


Fig. 3.

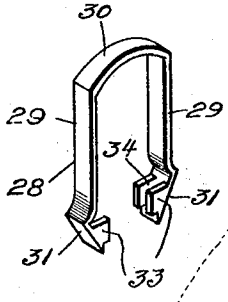


Fig. 4.

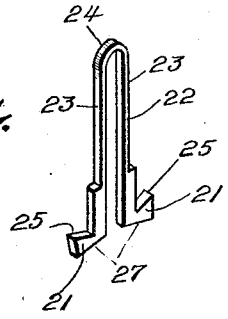


Fig. 6.

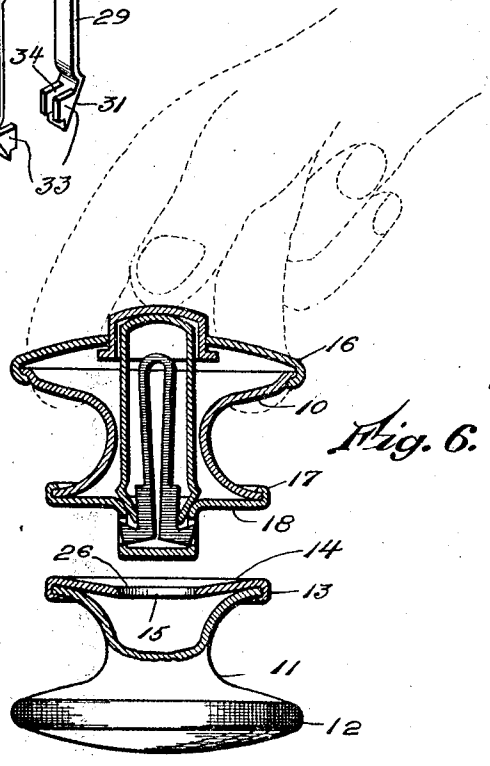
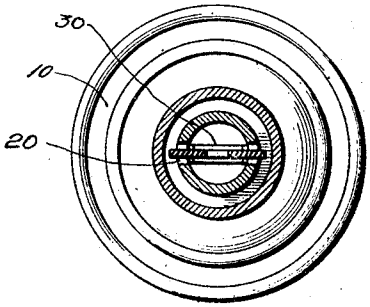


Fig. 5.



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UNITED STATES PATENT OFFICE.

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SEPARABLE CUFF BUTTON.

Application filed July 14, 1925. Serial No. 43,526.

To all whom it may concern:

Be it known that we, WALTER E. FIELD and FRED C. STOWE, citizens 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 Separable Cuff Buttons, of which the following is a specification.

This invention relates to an improved construction of cuff button of the separable type; and has for its object to provide a button of this character comprising stud and socket members, each having inner and outer heads, a protuberance or projection being formed on the stud member to enter a corresponding opening in the socket member and the protuberance being provided with latch or engaging members extending laterally therefrom to releasably engage a portion of the socket member, a resilient push piece being carried by the button part, which is adapted to be compressed by an axial movement to act upon and withdraw the latch and release the button members to be separated.

A further object of the invention is to provide the resilient push piece with inclined end portions to slidably engage portions of the member in which it is mounted to be contracted by an axial movement, which contracting action serves to withdraw the latch members from engagement with the opposite button member to permit the button members to be separated.

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 side elevation partly in section illustrating the two button members of our improved construction as releasably locked together.

Figure 2 is a sectional side elevation of the end plate of the stud member showing the protuberance formed from this plate.

Figure 3 is a perspective view of the resilient push piece showing its inclined end portions.

Figure 4 is a perspective view of the spring latch member.

Figure 5 is a sectional end view on line 5—5 of Figure 1, showing the latch members in engaged position.

Figure 6 is a sectional side elevation of the button members, showing them separated one from the other and the latch in the stud member as contracted to permit such separation.

It is found of advantage to provide readily operable means whereby the button members in this separable type of cuff button are positively locked together against accidental separation but which may be readily separated by manual manipulation of the central pin or member and also be readily snapped together without the necessity of manipulating the release pin, and to accomplish this object, we have provided a resilient latch member having lateral extensions on the ends of its arms to project laterally through openings in the protuberances on the stud member to engage parts of the socket member and to provide a separate push piece having a pair of resilient arms with tapered, inclined portions adapted to engage abutment portions in its button member, whereby an inward movement of the push button causes these arms to be contracted and acted upon to withdraw the latch members, permitting the button members to be separated; and the following is a detailed description of the present embodiment of our invention showing one construction by which these advantageous results may be accomplished:

With reference to the drawings, 10 designates the stud member and 11 the socket member of a separable cuff button, the socket member being provided with an outer head 12 and an inner head 13. This inner head is provided with an end plate 14 having a central opening 15 for the reception of a protuberance of the stud member, and this plate is preferably formed concaved on its end surface for the purpose of guiding the protuberance of the stud into the opening therethrough, to facilitate connecting the button members together.

The stud member of the button is provided with an outer head 16 and an inner head 17, the inner head being provided with

an end plate 18, see Figure 2, drawn or swaged to provide a hollow protuberance 19 adapted to extend into the opening in the socket member. The side walls of this protuberance are provided with opposite slots 20 through which project oppositely extending engaging projections 21 on the latch member 22.

This latch member is preferably cut from resilient stock; such as steel or spring brass, into yoke shape, the resilient arms 23 of which are connected by an end bridge 24. The extremities of these laterally extending engaging ends 21 of the latch being preferably formed slightly inclined so that their edges 25 will extend into engagement with the sides of the plate 14 of the opposite button member and yet will be adapted to be contracted by engagement with the walls 26 about the opening 15 when forced therethrough, without the necessity of withdrawing these members by action of the presser button, presently described; also the inner end portions 27 of these projections are slightly inclined outwardly so that a separating tension on the button members will serve to spread or separate these latch members into locked position.

In order to move the engaging ends of the latch inwardly to contracted or released position, we have mounted a push piece 28 in this stud member, the same having a pair of resilient side arms 29 connected by a bridge 30, the end portions of these arms being inclined inwardly as at 31 to engage the opposite walls 32 at the entrance of the protuberant shell 19, and the side edges 33 of these inclined portions are turned inwardly forming a slot or recess 34 on the inner surface thereof, which embrace the spring arms of the latch to retain the parts in working engagement with each other. In the outer head 16 of the stud member, we have provided an opening 35 and in this opening we have mounted a press button 36 having inner flange 37. This press button engages the bridge portion 30 of this push piece 28 and when the button is pressed inwardly these inclined portions 31 of the push piece in riding on the edge 32 of the head-plate 18 are caused to be contracted or compressed inwardly toward each other and as their extremities are in sliding engagement with the edges of the latch arms, these latch arms also contract withdrawing their end portions from engagement with the opposite button members thereby permitting these members to be freely separated one from the other.

Our improved form of separable cuff button is very simple and practical in construction, is effective in its operation and by its use button members may be readily pressed and positively locked together against inadvertent separation, and may be readily disconnected by a simple manual pressure upon the projections on the head of one of the button members.

The foregoing description is directed solely towards the construction illustrated, but we desire it to be understood that we 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.

We claim:

1. A separable cuff button comprising stud and socket members, each having inner and outer heads, a protuberance on the stud member to enter an opening in the socket member, a latch member having arms with portions extending laterally out through openings in said protuberance to releasably engage a portion of the socket member, and a separate resilient push piece having side arms embracing said latch arms and contractible by an axle movement upon engagement with a fixed portion of the button to act upon and withdraw the latch to release the button members.

2. A separable cuff button comprising stud and socket members, each with inner and outer heads, a protuberance on the stud member to enter an opening in the socket member, a U-shaped spring latch having the end portions of its arms extending outwardly through openings in said protuberance to releasably engage said socket member, and a separate push piece having resilient side arms in the stud member arranged to embrace those of said latch arms to be compressed by an axial movement to withdraw the latch and release the button members.

3. A separable cuff button comprising stud and socket members, each with inner and outer heads, a protuberance on the stud member to enter an opening in the socket member, a spring latch having portions extending oppositely out through openings in said protuberance to releasably engage said socket member, and a resilient push piece having inclined end portions in slidable engagement with a fixed portion of the button member in which it is mounted to be compressed by an axial movement and withdrawing the latch members to permit separation of the button members.

4. A separable cuff button comprising stud and socket members, each with inner and outer heads, a protuberance on the stud member to enter an opening in the socket member, a latch member in spring loop form having laterally-extending end portions projecting outwardly through openings in said protuberance to releasably engage the wall about the opening in the socket member, and a push piece having a pair of spring arms inclined on their end portions to engage fixed

abutment portions on the button members, whereby an inward movement thereof contracts said ends to withdraw the latch members to release the button members.

5. A separable cuff button comprising stud and socket members, each having inner and outer heads, a hollow protuberance on the inner head of the stud member, said socket member having a plate with an opening for the reception of said protuberance, a pair of spring arms having lateral projections extending through openings in the walls of said protuberance to engage said head-plate about its opening, and a separate push piece having a pair of springs arms inclined inwardly on their end portions to engage relatively fixed portions of said head-plate whereby an inward movement of said push piece contracts its ends to engage and withdraw said spring arm projections to permit separation of said button members.

6. A separable cuff button comprising stud and socket members, each having inner and outer heads, said stud member having a protuberance with openings in its side walls and shaped to fit a recess in the inner head of said socket member, a pair of normally spaced spring arms in said stud member having lateral projections extending outwardly through said openings to engage the walls surrounding said recess, an axially movable U-shaped piece in said stud member having its ends engaging said arms and having inclined portions to slidingly engage a portion of the inner head of said stud to force said arms toward each other and move their projections to release position.

In testimony whereof we affix our signatures.

WALTER E. FIELD.
FRED C. STOWE.