June 3, 1930. H. CARLSON 1,761,869

CUFF BUTTON

Filed April 24, 1929

Fig. 1.

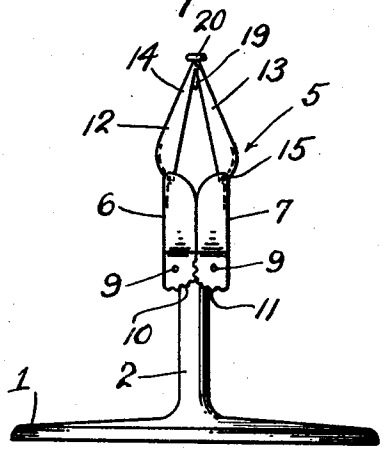


Fig. 2.

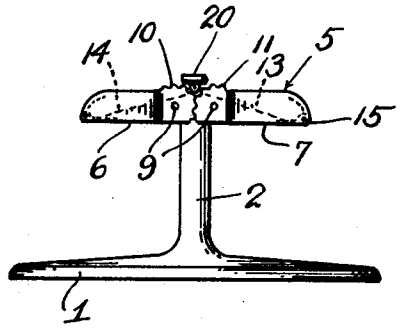


Fig. 3.

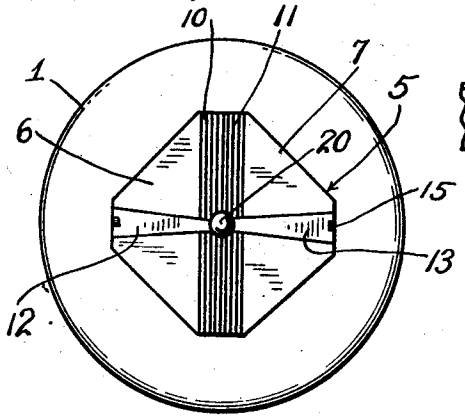


Fig. 4.

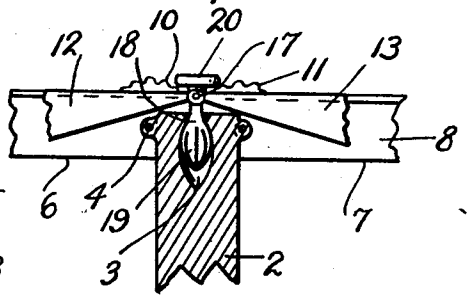
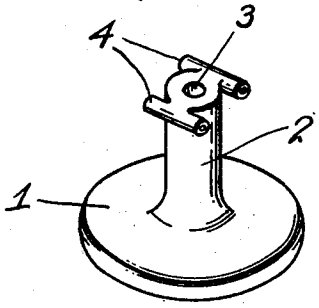


Fig. 5.



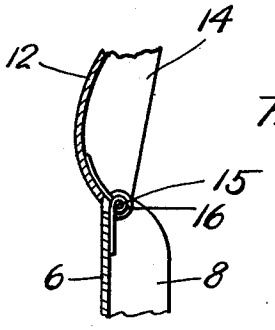


Fig. 6.

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UNITED STATES PATENT OFFICE

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CUFF BUTTON

Application filed April 24, 1929. Serial No. 357,774.

The present invention relates to improvements in buttons and has reference more particularly to a collapsible cuff button.

One of the important objects of the present invention is to provide a cuff button wherein the same includes a rigid base having a shank extending upwardly therefrom, the head of the button being of sectional construction and associated with the upper end of the shank in such a manner as to constitute an extension for the shank when the head of the button is in its collapsed position so as to facilitate the insertion or removal of the button with respect to the button hole of the garment, means being provided for securing the sectional head in a horizontally disposed operative position to prevent the casual displacement of the cuff button from the garment.

A further object is to provide a collapsible cuff button of the above mentioned character which is simple in construction, inexpensive, strong and durable and further well adapted to the purpose for which it is designed.

Other objects and advantages of the invention will become apparent during the course of the following description when taken in connection with the accompanying drawing.

In the accompanying drawing wherein like reference characters indicate corresponding parts throughout the same:

Figure 1 is a side elevation of the cuff button embodying my invention showing the sectional head in a raised extended position.

Figure 2 is a similar view showing the sectional head in a lowered horizontally disposed position.

Figure 3 is a top plan view thereof.

Figure 4 is an enlarged detail showing the means for securing the sectional head in a lowered operative position.

Figure 5 is a detail perspective view of the base and integral shank, and

Figure 6 is a detail of the connection between the plate-like portion of the sectional head and the adjacent arm.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates a substantially circular base and extending upwardly from the central portion thereof is the shank or stud 2. The upper end of the shank is formed with a socket 3, the purpose of which will be hereinafter more fully described.

Formed on the opposite sides of the upper end portion of the shank or stud 2 are the tangentially arranged sleeves 4 as more clearly disclosed in Figure 5 of the drawing.

A sectional head forming a salient part of the present invention is denoted generally by the numeral 5, and the same comprises a pair of substantially triangular shaped plates 6 and 7, respectively, whose base portions are disposed in opposed relation with respect to each other. A downturned flange 8 extends around the edges of each plate and the inner opposed edges of the complementary plate are hingedly connected to the respective tangentially arranged sleeves 4 through the medium of the pivot pins 9 that extend through the depending flanges at the sides of the plates and the respective sleeves 4. Further the inner opposed edge portions of the plates 6 and 7 are formed with coacting segmental gears 10 and 11 respectively, so that the plates will swing in unison for a purpose also to be presently described. The complementary plates are also formed at their inner opposed edges with a centrally located opening that communicates with the socket 3 formed in the shank or stud 2.

While the plates 6 and 7 are of substantially triangular configuration and are adapted to form a square when said plates are disposed in a lowered horizontal operative position, it is to be understood that I do not wish to limit myself to the particular shape of these plates.

Pivotally connected to the apex portions of the triangular shaped plates 6 and 7 are the coacting arms 12 and 13, respectively, and these arms each taper gradually toward their inner ends and depending side flanges 14 are arranged at the longitudinal sides of the arms.

These arms are adapted to fit within suitable cut out portions provided therefor in the upper faces of the respective hinged plates 6 and 7, and the pivotal connection between the

outer ends of the arms and the respective plates shown at 15 in Figure 6. An axial coil spring 16 is associated with the pivot pin 15 for cooperation with the adjacent portions of the respective base plates and the arms connected thereto for normally maintaining the arms in an extended relation with respect to the respective plates of the sectional head 5 as also suggested very clearly in Figure 6 of the drawing.

The purpose of having the upper faces of the pivoted arms lying flush with the upper faces of the respective hinged plates 6 and 7 is to afford a smooth surface while the button is in use.

The inner opposed ends of the transversely extending arms 12 and 13 are hingedly connected together as at 17 and a shank 18 is disposed vertically with respect to the pivotal connection between the inner opposed ends of the arms 12 and 13 and the pivot 17 extends through the shank 18. A resilient head 19 is formed on the lower end of the shank for cooperation with the stop 3, while an actuating knob or handle 20 is formed on the upper end of the shank. This detail is more clearly disclosed in Figure 4 of the drawing.

Normally the parts are arranged as shown in Figure 1 of the drawings, so that the sectional head 5 is extended and disposed in the same direction as the shank or stem 2, and in this manner the arms 12 and 13 will be disposed in converging relation whereby to facilitate the insertion of the head of the cuff button through the button hole in the garment.

After the head of the button has been disposed through the button hole, a downward pressure is exerted on the pivotally connected inner ends of the arms 12 and 13, and this will cause the plates 6 and 7 to swing downwardly in an outward direction so that the plates 6 and 7 will be disposed horizontally as will also the arms 12 and 13, and when the resilient head 19 is forcibly engaged within the socket 3, as shown very clearly in Figure 4, the sectional head will be secured in a lowered horizontally arranged position so that the cuff button cannot be accidentally disengaged from the button hole.

By grasping the knob 20 and forcibly pulling the resilient head 19 outwardly from the socket 3, the sectional head 5 may assume its initial position shown in Figure 1 whereby to permit the cuff button to be readily and easily removed from the button hole.

It will thus be seen from the foregoing description that I have provided a collapsible cuff button that can be readily and easily actuated to dispose the head thereof either in an operative or inoperative position, and due to its simplicity, said button can be constructed at a very low cost.

While I have described the button as being particularly adapted to be used as a cuff button, the same can equally as well be used as a collar button.

While I have shown the preferred embodiment of my invention it is to be understood that minor changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a button of the class described, a base, a shank extending upwardly therefrom, a sectional head pivotally associated with the upper end of the shank and forming a continuation of said shank when disposed in a raised position, said head being disposed parallel with the base when in a lowered horizontal position, coacting means between the sectional head and the shank for securing the head in its last mentioned position, said last mentioned means including a resilient head forming element carried by the central portion of the sectional head, the upper end of the shank being formed with a socket for receiving said resilient head forming element.

2. In a button of the class described, a base, an upstanding shank arranged thereon, a sectional head including a pair of complementary members hingedly connected at their inner opposed edges to the upper end of the shank for vertical swinging movement, a pair of complementary arms hingedly connected together at their inner opposed ends, the outer ends of the arms being hingedly connected to the outer ends of the respective members, said arms and the adjacent members constituting an extension for the shank when disposed in a raised position, said hinged members and the complementary arms being disposed parallel with the base when in a lowered horizontal position, and means for maintaining the sectional head in a lowered horizontal position.

3. In a button of the class described, a base, an upstanding shank arranged thereon, a sectional head including a pair of complementary members hingedly connected at their inner opposed edges to the upper end of the shank for vertical swinging movement, a pair of complementary arms hingedly connected together at their inner opposed ends, the outer ends of the arms being hingedly connected to the outer ends of the respective members, said arms and the adjacent members constituting an extension for the shank when disposed in a raised position, said hinged members and the complementary arms being disposed parallel with the base when in a lowered horizontal position, means for maintaining the sectional head in a lowered horizontal position, said last mentioned means comprising a resilient head forming element carried by the hingedly connected arms, the upper end of the shank being

formed with a socket to receive said resilient head forming element.

4. In a button of the class described, a base, an upstanding shank arranged thereon, a sectional head including a pair of complementary members hingedly connected at their inner opposed edges to the upper end of the shank for vertical swinging movement, a pair of complementary arms hingedly connected together at their inner opposed ends, the outer ends of the arms being hingedly connected to the outer ends of the respective members, said arms and the adjacent members constituting an extension for the shank when disposed in a raised position, said hinged members and the complementary arms being disposed parallel with the base when in a lowered horizontal position, means for maintaining the sectional head in a lowered horizontal position, said last mentioned means comprising a resilient head forming element carried by the hingedly connected arms, the upper end of the shank being formed with a socket to receive said resilient head forming element, and a knob formed on the opposite end of the resilient head for inserting the latter or removing the same from said socket.

5. In a button of the class described, a base, an upstanding shank arranged thereon, a sectional head including a pair of complementary members hingedly connected at their inner opposed edges to the upper end of the shank for vertical swinging movement, a pair of complementary arms hingedly connected together at their inner opposed ends the outer ends of the arms being hingedly connected to the outer ends of the respective members, said arms and the adjacent members constituting an extension for the shank when disposed in a raised position, said hinged members and the complementary arms being disposed parallel with the base when in a lowered horizontal position, coacting segmental gears associated with the hinged edges of the pivoted members whereby said members will move in unison in opposite directions, and an axial coil spring associated with the pivotal connection between the outer end of each pivoted member and its adjacent arm for normally maintaining said elements spaced apart with respect to each other.

In testimony whereof I affix my signature.

HJALMAR CARLSON.