April 22, 1941. E. E. JUNG 2,239,004

BUTTON

Filed March 28, 1940

Fig. 1.

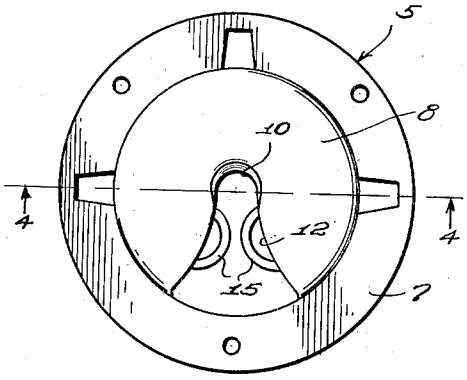
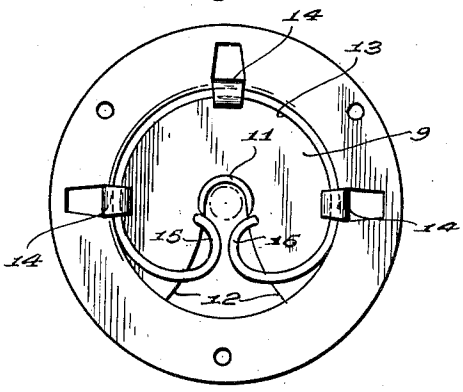


Fig. 2.



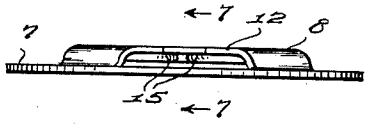


Fig. 3.

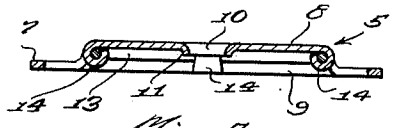


Fig. 4.

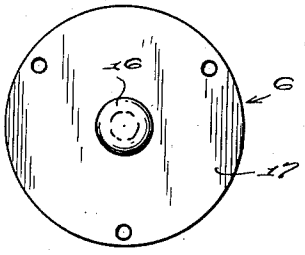


Fig. 5.

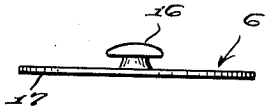


Fig. 6.

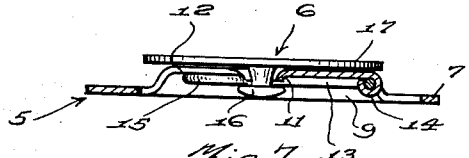


Fig. 7.

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UNITED STATES PATENT OFFICE

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BUTTON

Emil Eugen Jung, Philadelphia, Pa.

Application March 28, 1940, Serial No. 326,517

1 Claim. (Cl. 24—224)

This invention relates generally to the class of inventions known as buckles, buttons and clasps, and more particularly to a detachable or separable button; and among the objects of the invention is to provide a separable button embodying a minimum number of parts without, in any wise detracting from the utility of a button of this general character.

The invention together with its objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawing wherein—

Figure 1 is a top plan view of the female part of the button.

Figure 2 is a bottom plan view of the female part of the button.

Figure 3 is an edge elevational view of the female part of the button.

Figure 4 is a sectional view taken substantially on the line 4—4 of Figure 1.

Figure 5 is a plan view of the male part of the button.

Figure 6 is an edge elevational view of the male part of the button, and

Figure 7 is a sectional view taken substantially on the line 7—7 of Figure 3 and showing the two parts of the button completely assembled.

Referring more in detail to the drawing it will be seen that the button comprises a female part indicated generally by the reference numeral 5 and a male part indicated generally by the reference numeral 6.

The male part 5 of the button comprises a body in the form of a circular plate or disk 7 of material diameter, and having the center portion thereof pressed out to provide a hollow formation 8 presenting a substantially circular recess 9 opening at the bottom or underside of the button.

The formation 8 is provided at the center thereof with a substantially circular opening 10, the formation 8 at the opening 10 being bent inwardly to provide a flange 11 extending from one side to the other of the inner end of a slot 12 that extends inwardly from the peripheral edge of the formation 8 to merge with the flanged edge of the opening 10; the slot 12 flaring towards the outer or entrance end thereof as it approaches the periphery of the formation 8.

The recess 9 presented by the formation 8 serves to house within the confines of the female part 5 of the button a resilient ring 13 that is secured within the recess 9 through the medium of fingers 14 struck from the body 7 and bent about the ring 13 interiorly of the recess 9 as shown.

The ring 13 is split and the ends thereof formed by the split are directed inwardly toward the aperture 10 to present a pair of coacting arcuate arms 15 that, as shown, have the convex sides thereof next to each other; the arms 15 serving to retain within the opening 10 the headed stud 16 forming part of the male member 6 of the button, when said parts 5 and 6 are assembled.

The male member 6 of the button comprises a circular body plate 17 that is of less diameter than the body plate 7 of part 5 and slightly larger in diameter than the formation 8 of the part 5; the plate 17 being equipped at the center thereof with the headed stud 16 that may be formed integral with the plate 17 or positively secured or united therewith in any suitable manner.

The parts 5 and 6 of the button are assembled together by placing the headed stud 16 in alignment with the slot 12 and then by moving the parts 5 and 6, or either of them laterally relative to one another in the direction of length of the slot 12 for causing the stud 16 to pass through the slot and between the arms 15 of the ring 13 to enter the opening 10 in the part 5 as the stud 16 clears the arms 15 of the ring. When this has been accomplished the parts are assembled as shown in Figure 7, and the head of the stud will, of course, be of such a diameter, as shown in Figure 7, that axial separation of the parts will be prevented by reason of the head 16 engaging the flange 11 and/or the extremities of the arms 15 of the ring 13. Thus it will be seen that the parts 5 and 6 can be assembled or separated only by lateral movement of the parts relative to one another in planes paralleling each other, as distinguished from axial movement of the parts relative to one another.

It is believed that the construction, utility and advantages of a button of this character will be appreciated without a more detailed description, it being observed that a button of this character may be used wherever the need of a button is present, and that to use the button it will not be necessary to resort to buttonholes.

Having thus described the invention what is claimed as new is:

In a separable button, a female part comprising a body having a circular raised part on one face thereof forming a circular recess opening out through the other face, the peripheral part of the raised portion curving downwardly and

outwardly to the surrounding portion of the body, fingers struck from the said surrounding part and said peripheral portion with one end of each finger connected with an edge part of the raised portion, said raised portion having an opening therein, the inner end of which is of substantially semi-circular shape and arranged at the center of the raised portion with the opening extending to a part of the surrounding portion with the side walls of the opening flaring from the semi-circular portion to said surrounding portion and with the side walls of the semi-circular portion pressed inwardly to form a flange, a split ring fitting in the recess and having its major portion fitting against portions of the peripheral part of the raised portion, said fingers being curved inwardly into the recess and around parts of the ring to hold the ring in place, the ends of the ring being curved inwardly to pass under intermediate portions of the opening and said end portions of the ring being oppositely curved with intermediate parts of the curved portions adjacent to each other and the ends of said curved parts extending under the edge walls of the opening adjacent the ends of the flange.

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