May 22, 1951 M. C. ORCHARD ET AL 2,553,782

CLASP

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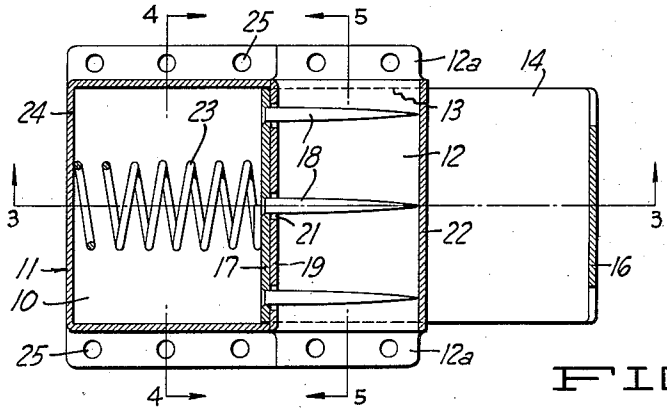


FIG_1_

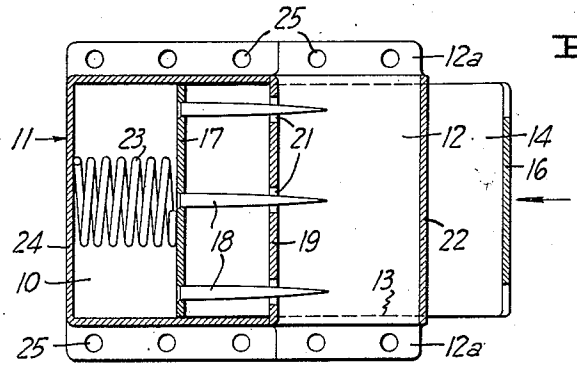


FIG_2_

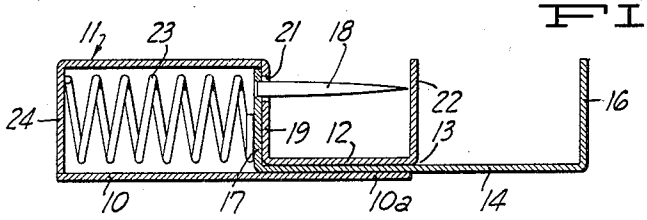


FIG_3_

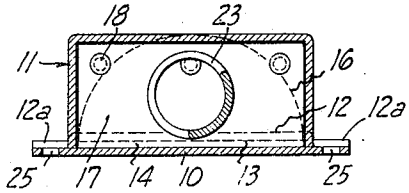


FIG_4_

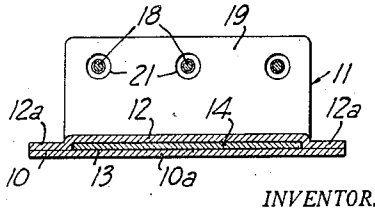


FIG_5_

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CLASP

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3 Claims. (Cl. 24—162)

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This invention relates generally to clasps or retaining devices suitable for application to various articles of apparel.

It is a general object of the invention to provide an improved clasp of the above character which will be relatively simple to apply and release, and which when applied will afford a retention capable of withstanding considerable pull.

Another object of the invention is to provide a device of the above character which is relatively simple in construction and which can be readily manufactured in various materials.

Further objects of the invention will appear from the following description in which the preferred embodiment of the invention has been set forth in detail in conjunction with the accompanying drawing.

Referring to the drawing:

Figure 1 is a plan view in section, illustrating a clasp incorporating the present invention.

Figure 2 is a view like Figure 1 but showing the pins of the clasp in a retracted position.

Figure 3 is a cross-sectional view taken along the line 3—3 of Figure 1.

Figure 4 is a cross-sectional view taken along the line 4—4 of Figure 1.

Figure 5 is a cross-sectional view taken along the line 5—5 of Figure 1.

The clasp illustrated in the drawing consists of a base plate 10, upon which the box-like shell 11 is mounted. The portion 10a of the base plate 10 extends beyond one end of the shell and serves to mount a retaining strap or plate 12. The edge portions 12a of the plate 12 are attached to the adjacent edge portions of the base 10, as by soldering, welding or the like. Plate 12 serves together with the base portion 10a to form a guideway 13 for accommodating the slide plate 14. A finger engaging member 16 is attached to one end of the plate 14, another member 17 is attached to the other end of plate 14, and is disposed within the shell 11. Both members 16 and 17 are in effect wall-like portions extending at right angles to the main portion of plate 14. To facilitate manufacture members 16 and 17 can be formed integral with plate 14 as illustrated. Member 17 serves to mount one or more retaining pins 18, which extend generally parallel to the base plate 10. One end wall 19 of the shell 11 is provided with openings 21 to accommodate the pins 18. Another wall 22 is carried by the base of the clasp, and occupies a position contiguous to the points of the pins 18, when the latter are fully projected. For ease

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of manufacture it is convenient to make both members 19 and 22 integral with the retaining plate 12.

Within the shell 11 there is a compression spring 23 having its one end seated upon the end wall 24 of the shell, and its other end engaging the movable wall 17. That end of the spring which engages the wall 24 can be extended to retain the same generally centralized within the shell.

The edge portions of the base plate 10, which extend beyond the sides of the shell 11, can be provided with perforations 25 or otherwise formed to facilitate attachment to various types of materials.

Operation of our clasp can be described as follows: The compression spring 23 normally urges the pins 18 to the projected position illustrated in Figures 1 and 3. In this position the ends or points of the pins 18 are contiguous to the wall 22. When it is desired to attach the clasp the operator applies pressure to the member 16 to move the slide plate 14 together with pins 18 against the force of the compression spring 23. Figure 2 illustrates the retraction of the pins 18 in this operation. Material is now placed between the points of the pins 18 and the wall 22, and the member 16 is released. This permits the spring 23 to force the pins 18 through the material, to form a secure attachment. If the material is of such a character that the spring 23 applies insufficient force to cause the pins to penetrate, then additional manual force can be applied to the member 16. To release the device it is only necessary to apply pressure to the wall 16 to retract the pins 18. While the pins are being retracted the wall 19 forms a positive means to strip the material from the pins.

To apply the device to an article of apparel, the base plate 10 can be attached to one part of the article, as by stitching through the perforations 25, thus placing the device in a convenient position to enable another part of the apparel to be attached or detached as desired. As a specific example the base can be attached to one part of a fur neckpiece, whereby another part of the fur can be attached to prevent accidental dislodgement of the neckpiece from the wearer.

We claim:

1. In a device of the character described, a base plate, a shell carried by the base plate, a wall forming one end of said shell and carried by the base plate, said wall being provided with perforations, a slide plate slidably carried by said base plate, a wall-like member mounted upon said

slide plate and disposed within said shell, spring means within said shell urging said wall-like member toward the wall which is provided with perforations, retaining pins mounted upon said wall-like member and projecting through said openings, and another wall-like member carried by the base plate and disposed contiguous to the projected points of said pins.

2. In a device of the character described, a base plate, a shell mounted upon the base plate, the base plate having a portion projecting beyond one end of the shell, a member mounted upon the projecting portion of said base plate and forming a guideway therewith, a slide plate slidably disposed in said guideway, a wall-like member mounted upon one end of said slide plate and disposed within said shell, pins mounted upon said last named member and extending from said shell in a direction substantially parallel to the sliding movement of said slide plate, spring means within the shell and serving to urge said pins toward projected position, a wall carried by said base plate and forming an end of the shell, said last named wall having openings to accommodate said pins, and another wall carried by said base

plate and positioned contiguous to the points of said pins, when said pins are in projected position.

3. A device as in claim 2 in which another wall-like member is mounted on the other end of the slide plate and is normally spaced from the wall which is contiguous to the points of the projected pins.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
392,367	Saxton	Nov. 6, 1888
883,634	Fox	Mar. 31, 1908

FOREIGN PATENTS

Number	Country	Date
24,818	Great Britain	of 1903
109,120	Switzerland	of 1925