

UNITED STATES PATENT OFFICE.

AXEL KILSTROM, OF PROVIDENCE, RHODE ISLAND.

CLASP.

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The invention relates to improvements in clasps such as those used on bracelets and necklaces, and it is one object of such invention to provide a novel form of clasp in which one of the sections is provided with self applied catch-means for engagement with the other section, and in which a releasing device for said catch means, forms an additional means for connecting the two sections of the clasp against accidental separation.

Another object of the invention is to provide a clasp of simple and inexpensive, yet efficient and desirable construction.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, the description being supplemented by the accompanying drawings.

Figure 1 is a plan view of a clasp constructed in accordance with the invention.

Figure 2 is a central longitudinal section on line 2—2 of Fig. 1.

Figure 3 is a longitudinal sectional view at a different plane as indicated by line 3—3 of Fig. 2.

Figure 4 is a view similar to Fig. 3 but showing the two sections of the clasp separated from each other.

Figure 5 is a sectional view on line 5—5 of Fig. 4.

Figure 6 is a perspective view of the catch releasing device.

The drawings above briefly described, illustrate the preferred form of construction, and while this construction will be hereinafter rather specifically described, it is to be understood that within the scope of the invention as claimed numerous modifications may be made.

The numeral 7 designates a sheath forming one section of the clasp, the other section 8 being provided with a spring metal plate 9 for insertion into the open end of the sheath 7, this open end being designated at 10. Near the other end of the sheath 7, the latter is provided with a shoulder 11 which faces in a direction away from the open end 10. This shoulder may well be formed by increasing a portion of the thickness of one of the side walls of the sheath, the relatively thin and thick portions of this wall being designated by the characters 12 and 13 respectively. If desired, the thin wall portion 12 may have a slot 14 coincident

with the shoulder 11, but this is not absolutely essential.

The plate 9 is stamped to provide it with a laterally projecting catch-lug 15, with a pair of spring fingers 16 projecting beyond and disposed at the opposite edges of said lug, and with a spring tongue 17, the latter being bowed from the plane of the plate, in the opposite direction from the direction in which the lug 15 projects. The plate 9 is also formed, at the end thereof adjacent the remainder of the section 8, with opposite projecting lugs or ears 18, receivable in notches 19 in the edge walls of the sheath 7. When this plate 9 is inserted into the sheath, the tongue 17 is placed under tension by engagement with the interior of said sheath and by the time the ears 18 have been seated in the notches 19, this tension comes into play to snap the catch-lugs 15 into engagement with the shoulder 11 and possibly also into a portion of the slot 14. The fingers 16 then are inwardly spaced from the thin wall portion 12, as seen in Fig. 2.

Extending across the sheath 7, is a shaft 20 for releasing the catch-lug 15, said shaft being preferably flat and being interposed between the fingers 16 and the wall portion 12, with the fingers bearing on said shaft when the two sections of the clasp are interengaged, as disclosed in Figs. 2 and 3. As soon as this shaft is turned however to the position of Fig. 5, it lifts the fingers 16 sufficiently to disengage the lug 15 from the shoulder 11, thus permitting the plate 9 to readily slide from the sheath 7.

The shaft 20 passes through openings in the edge walls of the sheath 7 and is provided at one end with a suitable stop 21 which prevents withdrawal in one direction from said opening, the other end of the shaft being provided with an operating arm 22 which, when the two sections of the clasp are interengaged, extends longitudinally at one edge of the sheath 7, this arm being provided with a hook 23 which then engages one of the ears 18. Thus, the arm 22 and the hook 23 serve to connect the two sections of the clasp, and said sections are also connected by engagement of the lug 15 with the shoulder 11. Thus, a positive lock is provided which effectively prevents accidental disconnection of the two clasp sections. When hook 23 is engaged with one of the ears 18, one flat side of the shaft 20 is then

in contact with the fingers 16, so that the lateral pressure exerted on the sheath 7 by the tongue 17, causes the fingers to yieldably hold the shaft in this position and consequently retains the arm 22 in such position that the hook 23 will remain engaged with the ear. When the clasp is to be released, the arm 22 is swung to a position at right angles to the plane of the sheath 7, so that its hook disengages from the ear 18 and at the same time the shaft lifts fingers 16 and effects the disengagement of the lug 15 from the shoulder 11.

The device is exceptionally simple and inexpensive, yet will be efficient, reliable and in every way desirable. On account of these existing advantages, the details disclosed are preferably followed. However, within the scope of the invention as claimed, variations may be made.

I claim:

1. A clasp comprising two sections slidably engaged with each other, self applied catch means on one section engageable with the other section, a rotary releasing device for said catch means mounted on one section, said releasing device having a portion engageable with the other section to constitute an additional tie between the two sections, spring means for holding said catch means in operative position, said spring means including a member engaging said releasing device to yieldably hold the latter in engagement with said other section.

2. A clasp comprising two sections slidably engaged with each other, self applied catch means on one section engageable with the other section, a rotary angular rod

mounted in said other section for releasing said catch means, spring actuated means engaging said rod to hold it yieldably in operative position, said releasing rod having a notched arm, and the other section a lug for engagement by said arm to constitute an additional tie between the two sections.

3. A clasp comprising a sheath having an open end and a shoulder facing away from said end, a plate insertable into said sheath through its open end and having a lateral catch-lug and spring means for moving the plate laterally to engage said lug with said shoulder, a shaft extending across said sheath and having a flat side normally engaged by a portion of said plate, an operating arm for said shaft disposed at the exterior of the sheath and normally extending longitudinally of the latter, and a lateral ear on said plate projecting to the outer side of said sheath, said arm having a hook portion engaging said ear.

4. A clasp comprising a sheath having an open end and a shoulder facing away from said end, a plate insertable into the sheath through the open end thereof, said plate having a lateral catch-lug and spring means for engaging said lug with said shoulder, and a releasing shaft for said catch-lug, said shaft extending across said sheath in position to laterally move said plate to free the lug from the shoulder when the shaft is rotated, said shaft having an operating handle at the exterior of the sheath.

In testimony whereof I have hereunto affixed my signature.

AXEL KILSTROM.