Nov. 21, 1939. A. H. LEVESQUE 2,180,534

CLASP OR COUPLING DEVICE FOR BRACELETS, CHAINS, NECKLACES, AND THE LIKE

Filed Feb. 18, 1938

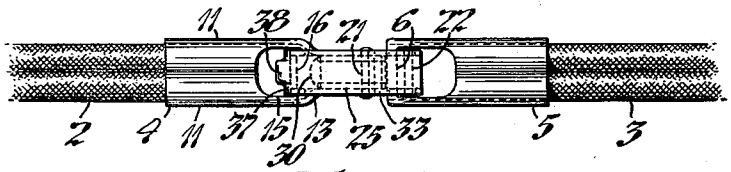


Fig. 1.

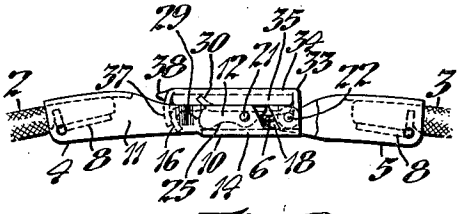


Fig. 2.

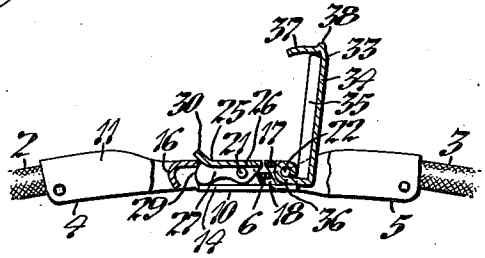


Fig. 3.

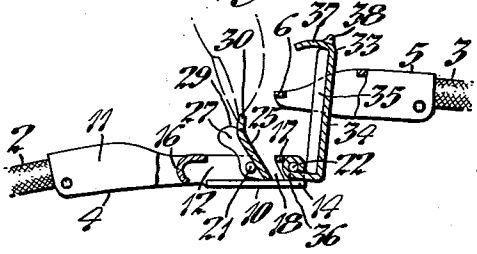


Fig. 4.

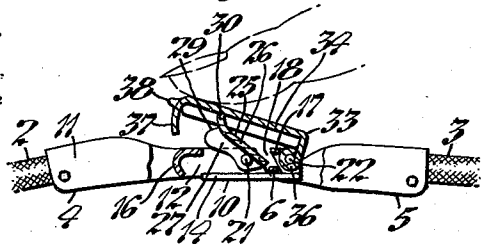
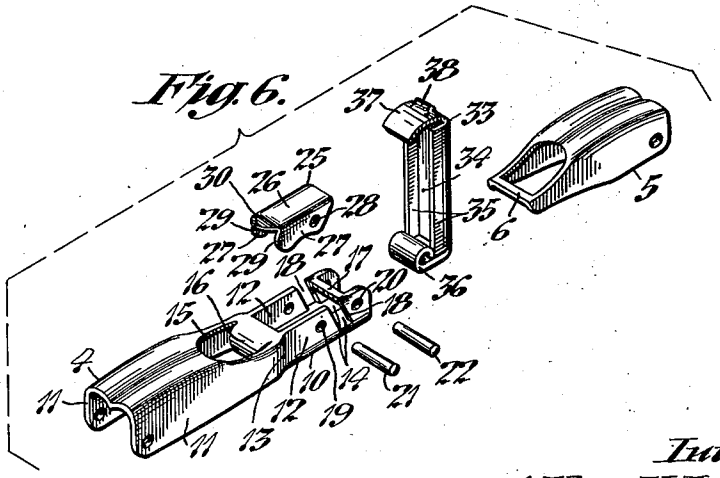


Fig. 5.

Fig. 6.



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Patented Nov. 21, 1939 2,180,534

UNITED STATES PATENT OFFICE

2,180,534

CLASP OR COUPLING DEVICE FOR BRACELETS, CHAINS, NECKLACES, AND THE LIKE

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Application February 18, 1938, Serial No. 191,217

4 Claims. (Cl. 24—241)

This invention relates to improvements in clasps or coupling devices for connecting the ends of wrist-watch bracelets, chains, straps, necklaces and the like.

A particular object of the invention is to provide a clasp of the type indicated having means for preventing accidental or unwarranted uncoupling of the ends of the bracelet, chain or other band either when the clasp is closed or partly opened.

Another object of the invention is to provide a safety catch which is operated automatically to lock the connected part to the clasp when the cover is closed and to securely hold the coupled part connected to the clasp when the cover is opened.

Another object of the invention is to provide a clasp of the type indicated having a safety catch which is automatically adjusted to closed position by the closing of the cover and which must be manually released before the coupled part can be disconnected from the clasp.

Another object of the invention is to provide a device of the type indicated which may be constructed from sheet-metal stampings to render it economical to manufacture, and one which is neat and ornamental in appearance and durable in use.

Further objects of the invention are set forth in the following specification which describes a preferred form of construction of the improved clasp, by way of example, as illustrated by the accompanying drawing. In the drawing:

Fig. 1 is a plan view of the present improved clasp shown as applied to use in connecting the ends of a cord bracelet;

Fig. 2 is a side elevation of the clasp showing its parts in closed position with a portion of one of the terminal members of the bracelet broken away to disclose the manner in which it is coupled to the clasp;

Fig. 3 is a similar side elevational view in part section showing the cover of the clasp opened and the safety catch closed;

Fig. 4 is a similar part-sectional, elevational view showing the manner of manually operating the safety catch to release the coupled terminal member from the clasp;

Fig. 5 is a similar part-sectional view showing the manner in which the closing of the cover of the clasp automatically operates the safety catch; and

Fig. 6 is a perspective view of the several parts of the clasp and the bracelet terminal member illustrated in disassembled relationship.

In accordance with a prevailing style, ladies' watches are worn with bracelets made from two sections of silken cord coupled together by a central clasp. In other cases the cords are of flexible metal mesh or leather and the present clasp is adapted for use with these and other types of bracelets and for connecting the ends of chains, necklaces and the like.

Referring to the drawing, Fig. 1 illustrates two sections of a cord bracelet composed of parallel cord-lengths 2 and 3, to the ends of which are attached metal terminal members 4 and 5. Usually, the terminal members 4 and 5 are of box-like construction having top walls shaped to the conformation of the parallel cords, the ends of which are inserted into the ends of the members and secured thereto by any suitable means; for example by rockable clamping levers 8 illustrated by dotted lines in Fig. 2.

In the present improved construction the terminal member 4 is made integral with the body 10 of the clasp which forms an extension thereof. For this purpose the side walls 11 of the member 4 are continued in narrower parallel flanges 12 which form the sides of the clasp proper. Referring particularly to Fig. 6 of the drawing, the side walls 11 are bowed inwardly at 13 and the flanges 12 are formed with underlying wings 14 which are folded at right-angles thereto with their edges meeting in abutting engagement at the center, thus forming a bottom wall for the clasp body 10. The top wall of the member 4 is pierced or cut away at 15 and a portion of the metal sheared therefrom is bent downwardly and rounded into an arcuate end wall 16 for the clasp. At the forward end of the clasp body 10 the top wall is cut away except for a relatively narrow bridge or tie-piece 17 which extends laterally between the sides of the body member. Adjacent the tie-piece 17 the side flanges 12 are cut away to form two opposite inclined slots 18. At either side of the slots 18 the side flanges 12 are pierced with holes 19 and 20, see Fig. 6, for receiving hinge-pins or rivets 21 and 22.

The safety catch 25 is in the form of a lever having a top wall 26 and depending side walls 27 with holes 28 pierced therethrough for receiving the rivet 21 to pivot the catch between the side flanges 12 of the clasp body 10. The side walls 27 of the safety catch 25 are formed at their forward ends with arcuately-shaped edges 29 adapted to cam in under the edge of the end wall 16 of the body 10, as shown in Fig. 3 of the drawing, to retain the catch 25 in closed

position. At the opposite ends of the catch 25 the side walls 27 are cut away at an angle so that their edges bridge the gaps or slots 18 in the side flanges 12 when the catch is closed down against the bottom of the clasp. The forward end of the top wall 26 of the catch 25 has a curved edge and is curled up slightly to form a finger-hold 30 under which the fingernail may be inserted for lifting the catch in the manner shown in Fig. 4 of the drawing.

The cover 33 for the clasp is in the form of a box-like lever, see Fig. 6, having a top wall 34 and depending side flanges 35. The rearward end wall of the cover 33 is extended downwardly beyond the edges of the flanges 35 and curled around in a circular loop 36 forming a hinge-joint adapted to receive the pin or rivet 22 to pivotally connect the cover to the forward end of the clasp body 10 between its side flanges 12. At the forward end of the cover 33 a strip 37 of the metal is bent downwardly in arcuate form to adapt it to snap over the arcuately-formed portion 16 of the clasp body 10, whereof to retain the cover in closed position on the clasp. The forward end of the cover 33 is struck up to form a projection or protuberance 38 to adapt the fingernail to be inserted thereunder to lift the cover to open the clasp as shown in Fig. 4 of the drawing.

The parts of the clasp are assembled by placing the safety catch 25 between the flanges 12 of the body member 10 and inserting the pin 21 through the holes 19 and 28 to pivotally mount the catch. The cover 33 is mounted in the same manner by placing its hinge-loop 36 between the flanges 12 of the clasp body 10 and inserting the pin 22 through the holes 20 and the opening in the loop. After the catch 25 and cover 33 are thus pivotally mounted on the clasp body 10 the pins 21 and 22 are headed over at their ends to permanently secure them in place. The terminal members 4 and 5 are attached to the ends of the cords 2 and 3 by inserting the latter thereinto and securing the cords in place by means of the clamping levers 8. It will be noted that the terminal member 5 takes substantially the same form as the member 4 except that the cut-out portion at its forward end is shaped to provide a crossbar 6 which serves as the means for engaging it with the clasp.

To connect the ends of the bracelet, chain, band or necklace the cover 33 is lifted to the position shown in Fig. 4 and the catch 25 also raised until its forward end impinges against the bottom wall 14 of the clasp body 10. The loop-like end of the terminal member 5 is then slipped over the end of the cover 33 and its crossbar 6 placed in the slots 18 in the side flanges 12 of the clasp body 10. The cover 33 is then closed down toward the body member 10 by pressing the finger against its top in the manner illustrated in Fig. 5. As the top wall of the cover 33 engages against the forward end of the catch 25 it will rock the latter downwardly to cam the edges 29 of its side flanges 27 in under the edge of the portion 16 of the clasp. Finally, as the catch 25 snaps into the position shown in Fig. 2 the cover 33 will be completely closed with the edges of its side flanges 35 abutting against the upper edges of the flanges 12 of the clasp body 10 and with its arcuate end portion 37 snapped over the rounded portion 16 of the body member to retain the cover in closed position. With the parts in this relationship the clasp will have a closed formation with the cover 33 overlying its open top and the flanges 12 and 35 cooperating to close its sides except for the slots 18 in which the crossbar 6 of the terminal member 5 is held. The two ends of the bracelet or other band will thus be securely held together and any pressure tending to disengage the crossbar 6 of the terminal member 5 from the clasp will be resisted by the rearward end of the safety catch 25 which, when the latter is in closed position, overlies the crossbar 6 as shown in Fig. 2. In other words, upward pressure of the crossbar 6 will only tend to hold the catch 25 in closed position so that the catch serves to prevent any pressure being exerted against the cover 33 to swing the latter open.

When it is desired to disconnect the ends of the bracelet the cover 33 is lifted to the position shown in Fig. 3, whereafter the catch 25 may be rocked as shown in Fig. 4 to open the slots or notches 18. The crossbar 6 of the terminal member 5 can then be disengaged from the slots 18 and lifted off over the end of the cover 33 to entirely release it from the clasp.

It will be observed from the foregoing that the present invention provides an extremely simple yet novel form of clasp having a safety device for preventing disconnection of the coupled parts until the manual operation of two separate elements. In other words, the cover must first be lifted and then the safety catch operated before the parts can be disconnected. Moreover, when the clasp is closed any tendency of the parts to become disconnected is resisted by the safety catch without dependence on the cover 33 and it is impossible to unclasp the parts until the safety catch is manually operated. On the other hand, in closing the clasp it is only necessary to operate one element, that is, the cover 33 which acts automatically to move the safety catch into closed position to lock the parts in connected relationship. Should the cover be accidentally opened, as for example by becoming caught in the garments of the wearer of the bracelet, the coupling still remains secure until the safety catch 25 is operated. Thus, the invention provides a double factor of safety to prevent accidental disconnection of the ends of the bracelet which might cause the watch to be dropped on the ground and broken.

While the improved clasp is herein shown as embodied in a preferred form of construction, it is to be understood that various modifications may be made in structure and arrangement of its parts without departing from the spirit and scope of the invention. Therefore, without limiting myself in this respect, I claim:

1. A clasp for wrist-watch bracelets, bands, chains, necklaces and the like comprising a channel-shaped body-member having a bottom wall, side walls and an open top, said side walls having slots adjacent one end for receiving the loop of a terminal member, a catch pivoted intermediate its ends between the side walls of the body-member and having a top portion at one side of its pivot adapted to overlie the slots in the sides of the body-member to retain the loop of the terminal member therein, said catch having an abutment depending from its top portion at the opposite side of its pivot and adapted to engage the bottom wall of the body-member to hold it in closed position with respect to the slots in the body-member, said catch being rockable to move its top portion into the body-member to open the slots, and a cover hinged to the body-member and adapted to rock into closed position overlying the catch.

2. A clasp for wrist-watch bracelets, bands, chains, necklaces and the like comprising a channel-shaped body-member having a bottom wall, side walls and an open top, said side walls having slots adjacent one end for receiving the loop of a terminal member, a catch having a top portion and depending side walls disposed between the side walls of the body-member, said catch being pivoted intermediate its ends between the side walls of the body-member and so constructed and arranged that the end of its top portion overlies the slots in the side walls of the body-member when the bottom edges of its walls are in engagement with the bottom wall of the body-member, and a cover hinged to the body-member and adapted to rock into closed position thereon and to engage the catch to rock the latter into position to close the slots in the body member.

3. A clasp for wrist-watch bracelets, bands, necklaces and the like comprising a channel-shaped body-member having a bottom wall, side walls, a wall extending transversely of the body-member, and an open top, said side walls having slots adjacent one end for receiving the loop of a terminal member, a catch pivoted intermediate its ends between the side walls of the body-member and having a top portion at one side of its pivot adapted to overlie the slots in the sides of the body-member to retain the loop of the terminal member therein, said catch having an abutment depending from its top portion at the opposite side of its pivot and adapted to engage the bottom wall of the body-member to hold it in closed position with respect to the slots in the body-member, said catch being rockable to move its top portion into the body-member to open the slots and said abutment thereon being so constructed and arranged as to frictionally engage the transverse wall on the body-member to retain the catch in its closed position overlying the slots in the body-member.

4. A clasp for wrist-watch bracelets, bands, necklaces and the like comprising a channel-shaped body-member having a bottom wall, side walls and an open top, said body-member having slots in its side walls adjacent one end to receive the bail of a terminal member and a transverse wall adjacent its opposite end generally curved between the upper and lower edges of the side walls, a catch pivoted intermediate its ends between the side walls of the body-member and having a top portion at one side of its pivot adapted to overlie the slots in the side walls of the body-member to retain the loop of the terminal member therein, said catch being rockable to move its top portion into the body-member to open the slots and having depending side walls with curved edges engageable with the edge of the transverse wall and the bottom wall of the body-member to retain the catch in its closed position overlying the slots therein, and a cover hinged to the end of the body-member adjacent the slots and having a curved lip at its free end adapted to snap over the curved end wall of the body-member to retain it in closed position thereon.

ARTHUR H. LEVESQUE.