Feb. 25, 1941. R. C. BANGS 2,233,071

JEWELRY CLASP

Filed Feb. 9, 1940

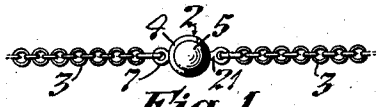


Fig. 1.

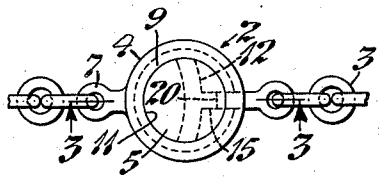


Fig. 2.

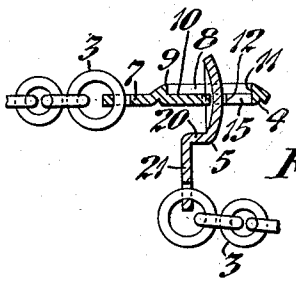


Fig. 4.



Fig. 3.

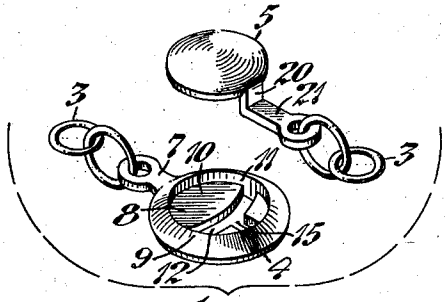


Fig. 5.

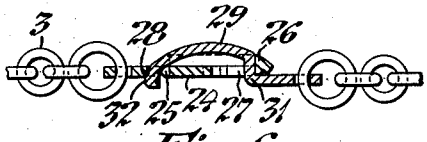


Fig. 6.

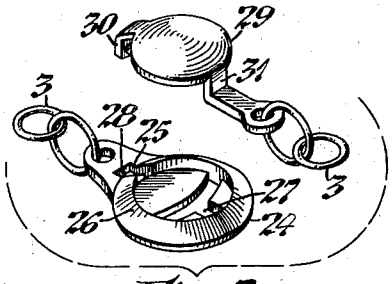


Fig. 7.

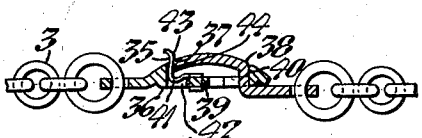


Fig. 8.

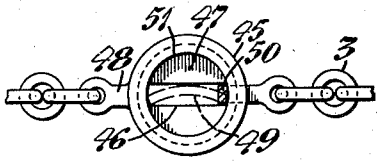


Fig. 9.

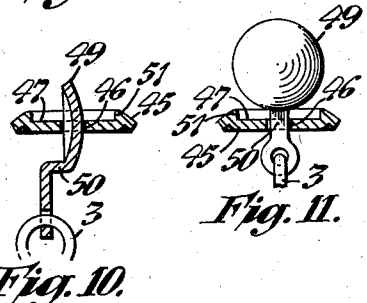


Fig. 10.

Fig. 11.

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Patented Feb. 25, 1941

2,233,071

UNITED STATES PATENT OFFICE

2,233,071

JEWELRY CLASP

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Application February 9, 1940, Serial No. 318,127

4 Claims. (Cl. 24—201)

The present invention relates to articles of jewelry and more particularly to clasps or fastening devices for detachably connecting the ends of chains, necklaces, bracelets or like articles.

One of the objects of the present invention is to provide a clasp of the type indicated having its parts adapted to be easily and quickly connected and disconnected by merely passing one part endwise through an opening in another part.

Another object of the invention is to provide a clasp of the type indicated in which the parts are adapted to seat one on the other in overlying relationship and to cooperate to give the appearance of a single member.

Another object of the invention is to provide a clasp of the type indicated having detent-means for retaining the members seated one on the other.

Still another object of the invention is to provide a clasp of the type indicated of pleasing and ornamental appearance and of simple and compact construction to adapt it for economical manufacture.

Further objects of the invention are set forth in the following specification which describes several alternative forms of construction of the clasp, by way of example, as illustrated by the accompanying drawing.

In the drawing:

Fig. 1 is a plan view of a clasp incorporating the novel features of the present invention and shown as connecting the opposite ends of a chain;

Fig. 2 is an enlarged plan view of the clasp illustrated in Fig. 1;

Fig. 3 is a longitudinal sectional view on line 3—3 of Fig. 2 showing the cover-member or tongue seated in a recess in the base-member or bottom plate and forming a continuation thereof;

Fig. 4 is a view similar to Fig. 3 showing the manner in which the cover-member or tongue is attached to or detached from the plate-member by passing it endwise through a slot in the latter;

Fig. 5 is a perspective view of the parts of the clasp shown in extended relationship;

Fig. 6 is a longitudinal sectional view of a clasp of modified construction showing a depending lip on the tongue in engagement with a detent-shoulder on the plate;

Fig. 7 is a perspective view of the parts of the clasp illustrated in Fig. 6 shown in extended relationship;

Fig. 8 is a longitudinal sectional view of a clasp of further modified construction showing the spring-detent on the plate in engagement with the edge of the tongue;

Fig. 9 is a part-sectional plan view of a clasp of still further modified construction showing the single relatively wide slot in the plate-member and the cooperating depending strap on the tongue;

Fig. 10 is a longitudinal sectional view of the clasp illustrated in Fig. 9 showing the manner in which the tongue is passed endwise through the slot; and

Fig. 11 is a view similar to Fig. 10 showing the tongue turned at right-angles from the position shown in Fig. 10 to adapt it to be rocked to seat on the plate.

In the present drawing Figs. 1 to 5 illustrate a clasp 2 incorporating the novel features of the present invention and adapted for detachably connecting the ends of a chain, necklace, bracelet or the like. The present improved clasp 2 comprises only two parts, a base-member or bottom plate 4 adapted for permanent connection with one end of the chain 3 or the like and a cover-member or tongue 5 permanently connected to the opposite end of the chain and adapted to be interlocked with the plate. Although the member or plate 4 may take other forms, as herein illustrated it is of circular contour with a pierced lug 7 projecting from one side for connection to one end of the chain 3. The plate 4 has a circular recess 8 located centrally thereof and forming a raised rim or marginal edge-portion 9, a depressed flat seat 10 and an annular shoulder 11 between the seat and marginal edge-portion. As herein illustrated the face of the marginal edge-portion is generally curved or crowned.

In accordance with the present invention an arcuately-shaped opening or slot 12 is provided in the plate 4 extending across the depressed seat 10 centrally of the recess 8 from one side of the annular shoulder 11 to the other side, see Figs. 2 and 5. Thus the slot 12 divides the seat 10 into two opposite sections. A shorter slot 15 is also provided in the seat 10 of the plate 4 extending from the center of the longer slot 12 to the annular shoulder 11 in alinement with the pierced lug 7. Preferably, the plate 4 is punched from sheet-stock and stamped to form the recess and curved contour of its marginal edge, but it is to be understood that the plate may be made in any other suitable manner, for example, as by die-casting it.

The cover-member or tongue 5 is herein shown

as also of circular contour to adapt it to fit closely within the circular recess 8 in the plate 4 and engage against the seat 10. The tongue 5 is of a thickness corresponding to the height of the annular shoulder 11 in the plate 4 and is crowned to adapt its outer face to form a continuation of the face of the marginal edge-portion 9, see Fig. 3. Integral with the tongue 5 is a strap 20 having a depending portion and a right-angular portion 21 pierced at its outer end for permanent connection with the opposite end of the chain 3 or the like. The depending portion of the strap 20 is of a length corresponding to the thickness of the seat 10 of the plate 4 to adapt the upper face of its portion 21 to closely fit against the bottom of the plate when the tongue 5 is seated in the recess 8, see Fig. 3. In this position of the tongue 5 the depending portion of the strap 20 lies in the short slot 15 adjacent the annular shoulder 11. One form of the invention having been described in detail above, the method of interlocking the tongue 5 with the plate 4 is explained as follows:

With the plate 4 and tongue 5 of the clasp 2 disconnected as illustrated in Fig. 5 the bracelet chain 3 or the like is placed in position and its ends brought together. The edge of the tongue 5 is positioned in alinement with the slot 12 and passed endwise therethrough in the manner indicated in Fig. 4, the curvature of the slot corresponding to the curvature of the crowned tongue to permit this relative movement. When the depending portion of the strap 20 on the tongue 5 engages with the bottom of the plate 4 the tongue is rocked to position the depending portion of the strap 20 in the shorter slot 15 and then drawn rearwardly to cause the tongue to enter the recess 8 to overlie and rest against the opposite sections of the seat 10. Such rocking movement of the tongue 5 brings the right-angular portion 21 of the strap 20 into engagement with the bottom of the plate 4 to bear thereagainst whereby to hold the tongue seated in the recess 8. Thus, the tongue seats closely within the annular shoulder 11 with its crowned upper face forming a continuation of the curved marginal edge-portion 9 of the plate 4.

To disconnect the tongue 5 from the plate 4 the right-angular portion 21 of its strap 20 is rocked with respect to the plate and slid forwardly in the shorter slot 15 to aline the edge of the tongue with the curved longer slot 12. The tongue is then withdrawn endwise through the slot 12 in the manner indicated in Fig. 4 to disconnect the members.

In Figs. 6 and 7 a modified form of construction is illustrated having detent-means for holding the tongue seated in the recess in the bottom plate-member. The plate-member 24 of this modified construction is identical with that illustrated in Figs. 1 to 5, except that it has a rectangular slotted aperture 25 in its marginal edge portion 26 arranged in alinement with the shorter slot 27. The edge formed by the slotted aperture 25 at the bottom of the plate 24 thus provides a shoulder 28. The tongue 29 is also generally similar to the tongue 5 illustrated in Figs. 1 to 5, but it has a depending lip 30 diametrically opposite the depending strap 31 which is recessed or notched to form a detent-projection 32.

The parts of the clasp illustrated in Figs. 6 and 7 are attached and detached in the same manner as explained with respect to the clasp illustrated in Figs. 1 to 5. Upon rocking movement of the tongue 29, however, the depending lip 30 enters the aperture 25 and its projection 32 engages under the shoulder 28 on the plate 24, the lip yielding slightly during the relative movement of the parts. Thus, the engagement of the lip 30 on the tongue 29 with the shoulder 28 on the plate 24 acts to yieldingly hold the two parts of the clasp connected.

In the modified form of construction illustrated in Fig. 8 a spring-detent 35 is provided on the plate 36 for engagement with a shoulder 37 on the tongue 38. As shown in this latter view the detent 35 is in the form of a leaf-spring having one end attached to the seat 39 of the plate 36 centrally thereof and projecting upwardly adjacent the annular shoulder 40. Preferably, the spring-detent 35 has a bowed portion 41 extending into a recess 42 in the seat 39 to adapt the spring to flex freely and its terminal end 43 curled outwardly. The edge of the tongue 38 is recessed at 44 to adapt it to receive the curled end 43 of the spring-detent 35 and provide the shoulder 37 for engagement therewith. Thus, the yielding engagement of the curled end 43 of the spring-detent 35 with the shoulder 37 at the recessed portion 44 of the tongue 38 acts to yieldingly hold the latter seated on the plate 36. The tongue 38 may be released to disconnect the clasp by manually pressing the curled end 43 of the spring-detent 35 away from the shoulder 37 on the tongue.

In the modified form of construction illustrated in Figs. 9 to 11 the plate 45 is generally similar to the plate illustrated in Figs. 1 to 5, but is provided with a relatively wide slot 46 extending across the seat 47 in alinement with the attaching lug 48. The tongue 49 in this modified form of construction is identical with that illustrated in Figs. 1 to 5.

To connect the parts of the clasp the tongue 49 is alined with the slot 46 in the plate 45 and passed endwise therethrough in the manner indicated in Fig. 10 to position the depending strap 50 in the slot, the latter being sufficiently wide to adapt the tongue to pass freely therethrough as indicated by dash lines in Fig. 9. The tongue 49 is then turned at right-angles from the position illustrated in Fig. 10 to that illustrated in Fig. 11, and the depending strap 50 is slid along the slot 46 until it engages the annular shoulder 51 which surrounds the seat 47. The tongue 49 is then rocked in the usual manner to cause it to overlie the plate-member 45 and rest on the seat 47. With this latter form of construction it is unnecessary to provide a short lateral slot or to curve the slot 46 and a more positive lock is provided than in the previously-described forms.

It will be observed from the foregoing description that the present invention provides an improved form of clasp comprising only two members adapted to be locked together by sliding one part endwise through the other part. It will also be observed that the present invention provides a clasp of pleasing and ornamental appearance and of simple and compact construction to adapt it for economical manufacture.

While several embodiments of the invention are herein described and illustrated, it will be understood that further modifications may be made in the structure and arrangement of the parts of the clasp without departing from the spirit or scope of the invention. Therefore, without limiting myself in this respect, I claim:

1. A jewelry clasp comprising a bottom member having a seat on one face thereof, and a relatively wide slot extending across the seat and di-

viding it into separate sections, an upper member provided with a tongue having a right-angular strap depending from its edge and of a width to adapt it to turn in the slot in the seat, said tongue being adapted to pass endwise through the slot in the bottom member and to be turned at right-angles and its strap being adapted to slide in the slot whereby to permit the tongue to be rocked to engage the seat on the bottom member.

2. A jewelry clasp comprising a bottom member having a central recess forming a flat seat and a right-angular wall surrounding the seat, said bottom member having a transverse slot extending across its flat seat, and an upper member having a tongue adapted to pass endwise through the slot in the bottom member and rockable into the recess therein, said tongue being of a thickness equal to the height of the right-angular wall and interlocking with the latter to detachably connect the members together with the outer face of the tongue forming a continuation of the bottom member.

3. A jewelry clasp comprising a bottom member having a raised annular rim forming a recessed flat seat and a right-angular wall surrounding the seat, said bottom member having a slot extending across said seat and a shorter slot extending from the first-named slot to the right-angular wall surrounding the seat, and an upper member having a circular crowned tongue provided with a strap depending from its edge, said crowned tongue being adapted to pass endwise through the first mentioned slot and said depending strap being adapted to be received in the shorter slot to permit the tongue to rock into engagement against the flat seat and interlock with the right-angular wall surrounding the seat, and said tongue being of a thickness equal to the height of the right-angular wall whereby its outer crowned face forms a continuation of the outer face of the raised rim on the bottom member.

4. A jewelry clasp comprising a bottom member having a raised annular rim forming a recessed flat seat and a right-angular wall surrounding the seat, said bottom member having a slot extending across said seat and a shorter slot extending from the first-named slot to the right-angular wall surrounding the seat, and an upper member having a circular crowned tongue provided with a strap depending from its edge, said crowned tongue being adapted to pass endwise through the first mentioned slot and said depending strap being adapted to be received in the shorter slot to permit the tongue to rock into engagement against the flat seat and interlock with the right-angular wall surrounding the seat, said tongue being of a thickness equal to the height of the right-angular wall whereby its outer crowned face forms a continuation of the outer face of the raised rim on the bottom member, and cooperating detent means on the bottom member and tongue for holding the tongue against the seat on the bottom member.

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