May 19, 1936. C. H. KESTENMAN 2,041,354

TERMINAL CLASP OR CONNECTER

Filed Feb. 24, 1934

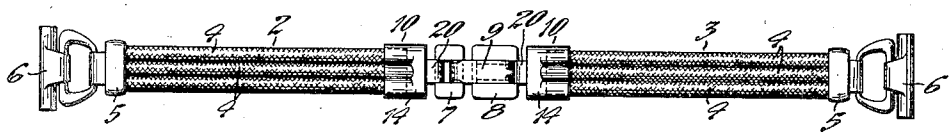


Fig. 1.

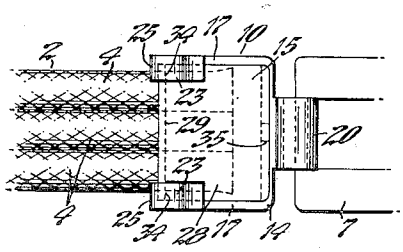


Fig. 2.

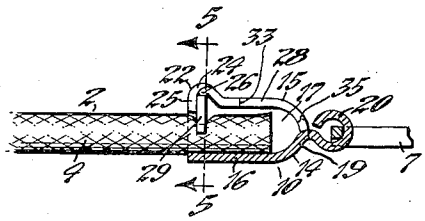


Fig. 3.

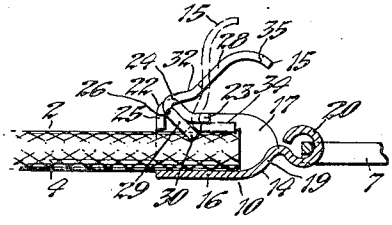


Fig. 4.

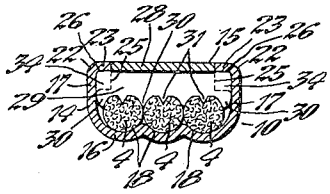


Fig. 5.

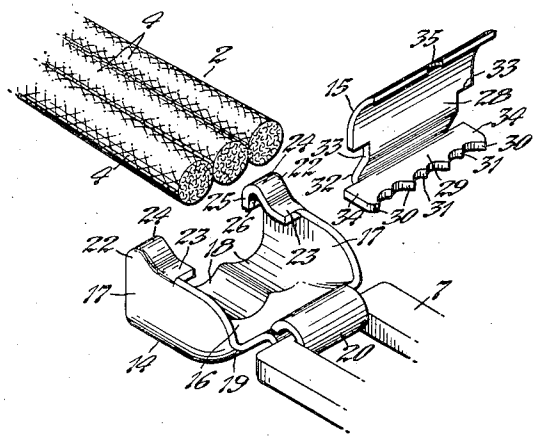


Fig. 6.

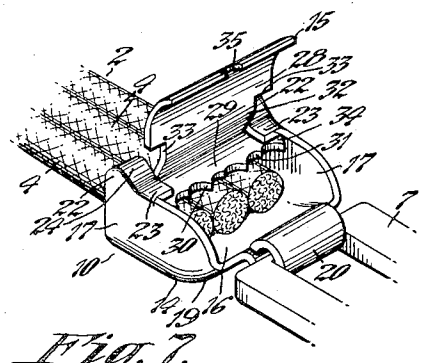


Fig. 7.

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UNITED STATES PATENT OFFICE

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TERMINAL-CLASP OR CONNECTER

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Application February 24, 1934, Serial No. 712,720

5 Claims. (Cl. 24—265)

This invention relates to connecters or terminal-clasps for attaching the ends of cords, straps or the like in the manufacture of bracelets and other articles of jewelry and consists of improvements in the construction of the same.

One object of the invention is to provide a connecter of the type indicated to which the ends of the cord may be attached without requiring that they be threaded into an opening between closely related parts which is liable to cause fraying at the ends of the cord.

Another object of the invention is to provide a connecter of the type indicated comprising an open-sided holder for receiving the ends of the cords or straps and a separate clamping member or jaw which is applicable thereto to clamp or bind the cords in place in the holder.

Another object of the invention is to provide a device of the type indicated which is constructed entirely from sheet-metal parts struck up in dies and readily assembled by the jeweler or other tradesman without the use of tools.

Another object of the invention is to provide a device of the type indicated in which the mechanical gripping means is entirely concealed from view and the connecter is free from sharp edges or projections liable to catch in the clothing of the wearer.

Another object of the invention is to provide a device of the type indicated which is simple in construction, durable in use and proof against derangement or getting out of order.

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

Fig. 1 is a plan view of a wrist-watch bracelet of the cord type showing the improved terminal-clasps or connecters applied to use therewith;

Fig. 2 is an enlarged bottom plan view of the improved connecter showing the ends of several cord lengths secured therein:

Fig. 3 is a side view of the connecter shown partly in section to illustrate the cord-gripping or clamping means;

Fig. 4 is a similar view showing the clamping member released to permit adjustment of the cords in the connecter;

Fig. 5 is a transverse sectional view of the connecter taken on line 5—5 of Fig. 3;

Fig. 6 is a perspective view of the parts of the connecter shown in disassembled relationship; and

Fig. 7 is a perspective view of the complete connecter showing the cords in place and illustrating the method of applying the clamping member to the holding member.

In the construction of terminal-clasps or connecters for watch-straps, cord-bracelets and the like a holder is usually provided for receiving the end of the straps or cords and a clamping member or jaw is pivoted to the holder to adapt it to be swung into position to impinge against and clamp or bind the strap or cords therein. With previous devices of this character it is necessary to thread the end of the straps or cords into place between the holder and its connected clamping member. The opening between the two parts of the clasp is necessarily restricted and therefore it is difficult to insert the ends of the cords thereinto, especially if the latter are in the form of braided strips of leather or twisted or braided strands of silk. Unless extreme care is exercised the ends of the cords will be frayed by contact with the parts of the clasp as they are pushed thereinto and a smooth finished connection cannot be accomplished.

To obviate the defects and deficiencies of previous clasps of this type the present invention contemplates the use of a clamping member which is entirely separate from the main cord-holding member and adapted for connection therewith after the cords are in place in the holder. With the present improved form of device the ends of the cords may be readily and conveniently laid in place in the holder and the clamping member thereafter slid into pivotal connection therewith to be actuated to bind the cords securely in place.

Fig. 1 of the drawing illustrates the two connected sections 2 and 3 of a wrist-watch bracelet composed of a plurality of cords 4 of braided or twisted strips of leather, strands of wire, silk or other flexible material. The outer ends of the sections 2 and 3 of the bracelet are joined to end members 5 carrying hook-like elements 6 for attachment to the bails of a wrist-watch. The inner ends of the bracelet-sections 2 and 3 are secured to connecters 10 constructed in accordance with the present invention, these members being in turn connected to links 7 and 8. One link 7 is joined to the end of a clasp or fastening device 9 of which the other link 8 constitutes the sliding element, these parts being constructed and arranged in the manner as set forth in my prior United States Letters Patent No. 1,892,281, dated December 27, 1932. It is to be understood, however, that the present device may be used as a connecter for attaching cords

or the like to other types of buckles, or to various other articles.

The terminal-clasp or connecter 10 comprises an open-sided member or holder 14, into which the ends of the cords 4 may be readily placed, and a separate clamping member 15 adapted for pivotal connection thereto and operative to bind the cords in place. The cord-holder 14, shown in detail in Fig. 6, is constructed in the form of a scoop-shaped shell having a top portion 16 with sides 17 folded downwardly therefrom; it being understood that in the detailed views of the drawing the parts are shown in inverted position. The top portion 16 of the shell 14 is struck up to form longitudinally-extending concave grooves or flutes 18, see Fig. 5, for receiving the ends of the cords 4 of the bracelet. Three grooves 18 are herein shown for this purpose, but a greater or lesser number may be provided, depending upon the type of bracelet to which the connecter is to be applied. In some instances the connecter 10 may be used with flat or round single straps or bands and in place of the grooves 18 herein illustrated its top 16 is formed flat or cylindrical, as the case may be.

The top portion 16 of the holder 14 is curved downwardly in arcuate contour at one end, as indicated at 19 in Figs. 4, 6 and 7, and the bottom edges of its sides 17 are similarly shaped whereby to present a graceful rounded appearance at this end of the device. Projecting from the rounded end of the holder 14 is a narrow ear 20 which is curled around to form a loop for receiving the end-bar of the link 7 or 8 or any other part of the jewelry or other article to which the connecter 10 is applied.

At the opposite end of the holder 14 the side walls 17 are extended downwardly in ears 22, from which portions of the metal are bent or folded inwardly at 23. The folded strips 23 extend in parallel relation to the top portion 16 of the holder 14 for a short distance and then slope downwardly to terminate in curved hooked portions 24. The hooked portions 24 terminate in vertical abutments 25. By this construction recesses or sockets 26 are provided in which the pivots for the clamping member 15 are received in the manner as later explained.

The clamping member 15, shown in detail in Fig. 6, is constituted by a main portion 28 of suitable width to adapt it to be positioned between the sides 17 of the holder 14. At one end of the member 15 the metal is bent at right-angles to the main portion 28 to form a clamping jaw 29 which is notched along its edge to provide a series of pointed projections or teeth 30 and 31. The projections 30 are longer than the teeth 31 to adapt them to assume a position between the sides of the several cords placed in the holder 14 when the clamping member 15 is connected therewith, see Fig. 5. The shorter teeth 31 are adapted to bite into the material of the cords 4 to hold the latter in their adjusted position within the holder 14.

The main portion 28 of the clamping member 15 is shaped to conform to the marginal edges of the sides 17 of the holder 14, being bent at an angle at 32 to follow the contour of the ears 22. The lateral edges of the clamping member 15 are cut away at 33 adjacent the ends of the jaw 29 to accommodate the strips 23 on the sides of the ears 22 of the holder 14 when the clamping member is placed in connection therewith. The opposite ends of the jaw 29 are thus constituted as projecting trunnions or pivots 34 which may be engaged in the sockets 26 on the holder 14 to adapt the member 15 to be hingedly connected therewith.

At its opposite end the clamping member 15 is bent into arcuate form to follow the contour of the marginal edges of the sides 17 of the holder 14. To facilitate the opening of the clamping member 15 a semicircular notch 35 is provided in the curved end thereof into which the end of a pointed instrument may be inserted to pry this end of the clamping member away from the holder 14. The improved device having now been described in detail its method of operation will next be explained.

Cord bracelets and other similar articles of jewelry are usually sold to the jobber or retailer complete with the cords or straps attached to the end members 10. Where a plurality of cords 4 are employed their ends are placed in the hollow or open-sided holder 14, with the latter in inverted position, to cause them to seat in the flutes or grooves 18; the clamping member 15 being detached from the holder for this purpose. The ends of the cords may be readily and conveniently placed in the holder in this manner and the clamping member is then applied thereto by holding it in the position illustrated in Fig. 7 and sliding the ends 34 of its jaw 29 beneath the bent portions or strips 23 on the sides 17 of the holder. As indicated by dash lines in Fig. 4, the clamping member 15 is slid in the holder 14 with its jaw 29 resting flat against the top of the cords 4 until finally the ends of the jaw bring up against the abutments 25. The member 15 may then be rocked or canted slightly to cause the trunnion portions 34 to enter the notches 26 in the hooked portions 24 of the strips 23. When the trunnion ends 34 of the jaw 29 are thus seated in the notches 26 the end of the main portion 28 of the clamping member 15 is forced towards the holder 14 to rock the jaw 29 to engage its teeth 30 and 31 with the sides of the cords 4. The teeth 31 will indent the leather or other material of the cords while the longer teeth or projections 30 assume a position at the sides thereof to separate the cords and hold them properly seated in the grooves 18; the effect being to bind the cords fixedly against the grooved portion of the holder to securely grip them thereto. As the clamping member 15 is operated in the manner explained its portion 28 will be carried down between the sides 17 of the holder 14 to aline with the edges thereof, thus providing a smooth closure for the bottom of the holder without any projections or protuberances on its under side.

Bracelets of the present type are usually sold to the jobber or retailer with their parts assembled and with the cords of maximum length so that they may be shortened to fit wrists of varying sizes. In fitting the bracelet to the wrist the jeweler or other salesman may conveniently adjust the length of the cord in the manner as next explained.

A pin or other sharp instrument is inserted into the notch 35 in the clamping member 15 to rock the latter into open position as shown by the full lines in Fig. 4. The clamping member 15 is then slid rearwardly to remove it from the cord-holder 14 to release the cords therefrom. After the cords have been cut to the proper length to fit the wrist their ends are placed in the holder 14 and the clamping member 15 reconnected therewith in the manner as previously explained.

If desired the end members may be sold as

separate fittings or findings for use with strap or cord bracelets, for watch-guards, belts and for various and sundry other articles of a like nature.

It will be observed from the foregoing that the present invention provides a particularly simple yet ingenious device for attaching straps and cords to articles of jewelry or the like. Due to the fact that the clamping member may be completely removed from the cord-holder the cords may be inserted in the latter by simply laying their ends in place between its sides without threading them through an opening. Consequently, the danger of fraying or raveling at the ends of the cords is obviated and the device rendered much more easy and convenient to apply to use even by those not particularly skilled in the operation.

The improved clasp or connecter comprises only two simple parts constructed from sheet-metal struck up in dies and assembled in cooperating relationship without the use of tools. The complete connecter has a particularly finished and artistic appearance and conforms closely to the shape of the straps or cords to which it is applied without being bulky or obtrusive. The mechanical clamping means for the cords are entirely enclosed and covered on the under side of the device to further enhance the attractive appearance of the article.

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

1. A connecter for straps, cords or the like comprising a holder having an enclosing top and side walls with inwardly-directed flanges, said flanges having concavo-convex portions offset with respect to the plane of the flanges to form bearing sockets, and a clamping member having a lever portion adapted to fit between the flanges for rocking movement therebetween and a jaw portion projecting at an angle to the lever portion and extending beyond the sides of the lever portion to form trunnions, the trunnions on said clamping member being adapted to slide along the flanges when the ends of the cords are in place in the holder and to seat in the sockets in said flanges to provide for rocking the lever to impinge the jaw against the cords, said bearing sockets and trunnions cooperating to prevent the clamping member from sliding forwardly or rearwardly when in closed position.

2. A connecter for straps, cords or the like comprising a holder having an enclosing top and side walls with inwardly-directed flanges at the end thereof extending through a portion only of the length of the walls, said flanges having arcuate portions offset with respect to the plane of the flanges to form bearing sockets, and a clamping member having an intermediate portion of reduced width to adapt it to be rocked between the inwardly-directed flanges and bridge the opening between the inwardly-directed flanges and side walls, said clamping member having a jaw extending at an angle to its intermediate portion and projecting beyond the sides thereof to form trunnions extending into the bearing sockets, the bearing sockets and trunnions cooperating to prevent the clamping member from sliding forwardly or rearwardly in the holder when in closed position.

3. A connecter for straps, cords or the like comprising a holder of scoop-like form having an enclosing top and sides with a loop at one end, the sides of the holder at one end being formed with flanges bent inwardly therefrom, said flanges being crimped to provide open sided sockets at their ends, said sockets being offset with respect to the plane of the flanges, and a clamping member comprising a strip of material shaped substantially to the contour of the edges formed by the inwardly-bent flanges and the upwardly-extending sides of the holder to adapt it to bridge the opening therebetween, said clamping member having an end portion bent at an angle to form a jaw which projects beyond the sides of the member to provide trunnions adapted to slide along the flanges to seat in the offset sockets thereof, the bearing sockets and trunnions cooperating to prevent the clamping member from sliding forwardly or rearwardly in the holder when in closed position.

4. An end clasp for cord bracelets or the like comprising a holder for receiving the end of the bracelet, said holder having enclosing top and side walls with inwardly-directed flanges extending throughout a portion only of the length of the walls, said flanges being formed with bearing sockets offset with respect to the plane of the flanges, and a removable clamping member having a jaw portion and an actuating lever extending at substantially right-angles to each other, said actuating lever having wide and narrow portions to cooperate with the upper edges of the side walls and the inwardly-directed flanges to close the opening therebetween whereby to provide an enclosing housing, the ends of said jaw portion projecting beyond the narrow portion of the lever to form trunnions for engaging the bearing sockets on the holder whereby when the lever is rocked on its trunnions the jaw engages the end of the bracelet and the lever completely closes the open side of the holder, the bearing sockets and trunnions cooperating to prevent the clamping member from sliding forwardly or rearwardly in the holder when in closed position.

5. A connecter for straps, cords or the like comprising a holder having an enclosing top and side walls with inwardly-directed flanges, a clamping member having a lever portion adapted to fit between the flanges for rocking movement therebetween and a jaw portion projecting at an angle to the lever portion and extending beyond the sides of the lever portion to form trunnions, the trunnions on said clamping member being slidable along the flanges when the ends of the cord are in place in the holder and the lever being rockable to impinge the jaw against the cords, and means on the inwardly-directed flanges engaged by the trunnions to prevent the clamping member from sliding forwardly or rearwardly in the holder when in closed position.

CHARLES H. KESTENMAN.