April 7, 1925. 1,532,632

A. L. NEWMAN

CLASP FOR BRACELETS AND LIKE ARTICLES OF JEWELRY

Filed Jan. 11, 1924

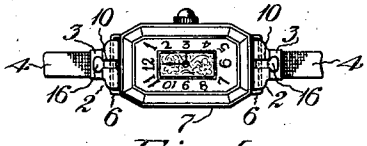


Fig. 1.

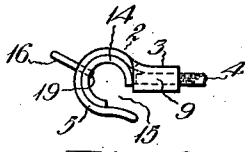


Fig. 2.

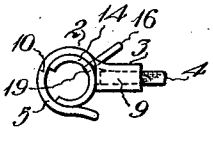


Fig. 3.

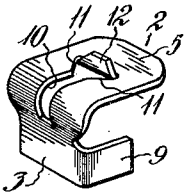


Fig. 5.

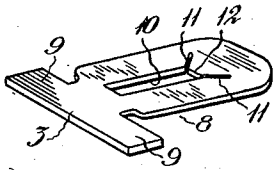


Fig. 4.

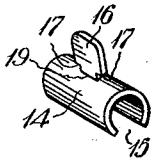


Fig. 6.

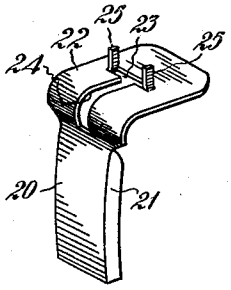


Fig. 8.

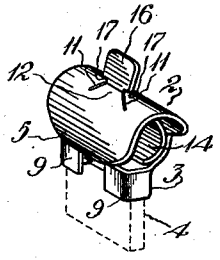


Fig. 7.

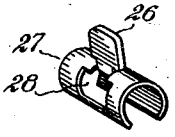


Fig. 9.

Inventor:
Alvyn L. Newman
By Pennington and White
Attorneys.

Patented Apr. 7, 1925. 1,532,632

UNITED STATES PATENT OFFICE.

ALMYR L. NEWMAN, OF WARWICK, RHODE ISLAND, ASSIGNOR, BY MESNE ASSIGNMENTS, TO A. L. NEWMAN COMPANY, OF CRANSTON, RHODE ISLAND, A CORPORATION OF RHODE ISLAND.

CLASP FOR BRACELETS AND LIKE ARTICLES OF JEWELRY.

Application filed January 11, 1924. Serial No. 685,544.

To all whom it may concern:

Be it known that I, ALMYR L. NEWMAN, a citizen of the United States, residing at Warwick, in the county of Kent, State of Rhode Island, have invented certain new and useful Improvements in Clasps for Bracelets and like Articles of Jewelry, of which the following is a specification.

This invention relates to clasps for watch-bracelets and particularly to an improved safety lock or securing-means for such clasps.

One object of the improvement is to provide a simple, compact clasp of the type specified having means for effectually locking it to the loop on the watch.

Another object of the improvement is to provide a clasp composed of only two parts which may be constructed from sheet-metal stampings and which may be assembled by simple operations without requiring skill or expertness on the part of the workman.

Another object of the improvement is to provide a clasp of the type specified in which the parts are adapted to be held permanently in their cooperative relation without danger of their becoming deranged or getting out of order.

Another object of the improvement is to provide a clasp of the type specified which is firmly locked in position to prevent accidental unfastening and which is proof against wear or breakage under hard use.

Another object of the improvement is to provide a device of the type specified which is economical to manufacture.

Further objects of the improvement are set forth in the following specification which describes several preferred embodiments of the invention as illustrated by the accompanying drawings. In the drawings:

Fig. 1 is a plan view of a wrist watch showing the improved clasp as applied to the ends of the bracelet and hooked into the loops on the watch and locked thereto;

Fig. 2 is a greatly enlarged side view of the improved clasp showing its locking-means open;

Fig. 3 is a similar view showing the locking means closed to secure the clasp to the loop on the watch;

Fig. 4 is a perspective view showing the blank from which the main portion of the clasp is constructed;

Fig. 5 is a perspective view showing the blank partly formed;

Fig. 6 is a perspective view showing the locking-member of the clasp;

Fig. 7 is a perspective view showing the parts of the device assembled in the complete clasp; and

Figs. 8 and 9 perspective views showing modifications in the form of the clasp and its locking-member.

In accordance with a prevailing fashion wrist watches are worn on link-bracelets, or flexible metal ribbons or straps which are woven, braided or otherwise fabricated from strands of wire. The present improved clasp is adapted for use with such types of bracelets for wrist watches and consists essentially of a hook-member adapted to be inserted through the loop on the side of the watch, and having means for locking the hook or clasp in place to prevent it from becoming detached from the watch.

Referring to Figs. 2 and 3 of the present drawings, the hook-member 2 of the clasp comprises a shank-portion 3 adapted to be attached to the end of the bracelet band or strap 4, and having a widened curved beak 5 projecting forwardly therefrom to adapt it to hook through the loop 6 on the side of the watch 7 as illustrated in Fig. 1. The main hook-portion of the clasp is preferably constructed from a flat blank 8 stamped or punched out from sheet-metal in the form shown in Fig. 4. At one end of the blank is the shank-portion 3 comprising a lateral strip having end-tabs 9 adapted to be bent at right-angles, as shown in Fig. 5, and then folded around the marginal edges of the bracelet strap 4 as illustrated in Figs. 2 and 3. The portion of the blank which forms the hook of the clasp is of substantially oblong shape, as shown in Fig. 4, and is pierced or slotted with a relatively narrow, rectangular opening 10 extending longitudinally thereof. The outer end of the slot or opening 10 is slitted diagonally away from the corners at 11 to provide a substantially V-shaped flap-like tongue 12 which is adapted to be bent upwardly, as illustrated in Fig. 5, to form a wider orifice at this end of the slot.

The locking-member or catch for the clasp comprises essentially a tubular sleeve

14 which is cut away longitudinally along its side to provide an opening 15 for receiving the loop 6 on the side of the watch. Projecting radially from the sleeve 14 is a tab or finger-piece 16 which is undercut on its lateral edges to form notched shoulders 17, while also providing a narrowed shank which is riveted through a slot 19 at the center of the sleeve 14.

In assembling the parts of the clasp the blank 8 is first formed into the shape shown in Fig. 5 with the end-tabs 9 projecting at right-angles to the shank 3, and with its hook-portion bent over in partly curved form. The triangular or V-shaped tongue 12 is also bent upwardly to provide the enlarged opening at the end of the slot 10 whereby to allow the locking-member or catch 13 to be placed in position in relation thereto. The locking-sleeve 14 is first placed beneath the bent over hook-portion of the clasp-member and the tab or finger-piece 16 then inserted upwardly through the enlarged opening at the end of the slot 10. The sleeve 14 is then rotated to slide the finger-piece 16 into the slot 10 in the hook-member 2 with its narrowed, undercut-portion engaging the sides of the slot and its shoulders 17 overlapping the edges thereof. The end of the hook-portion is then rolled or bent around to form the curved beak 5, as shown in Figs. 2 and 3, and during this operation the triangular tongue 12 is bent back into place, as illustrated in Fig. 7, so as to close the end of the slot 10. It will thus be seen that the notched edges or shoulders 17 on the finger-piece 16 will hold the central sleeve 14 in place within the sides of the curved beak 5 of the clasp and the end of the tongue 12 will act as a stop to limit the turning movement of the sleeve in one direction, its movement in the reverse direction being limited by the opposite end of the slot 10. The clasp is now ready to be attached to the end of the bracelet which may consist either of a strap as shown, or a series of flat flexible links, or may be of any other suitable construction, the joinder between the parts being effected by folding the end-tabs 9 around the edges of the bracelet and soldering or otherwise securing them thereto.

Referring to Fig. 2, the beak 5 of the hook-member 2 is opened to receive the wire loop 6 on the watch 7, illustrated in Fig. 1, by turning the finger-piece 16 toward the outer end of the slot 10 until it brings up against the end of the tongue 12. The clasp can then be hooked through the loop 6 as illustrated in Fig. 1, and to lock it in place thereon the tab or finger-piece 16 is turned back in the opposite direction until it strikes against the rearward end of the slot 10. As the tab is turned back in this manner the sleeve 14 will be rotated within the curved beak 5 of the hook-member 2 to bring it into the position shown in Fig. 3, so that it closes the open end of the hook to prevent the latter from being released or unclasped from the loop 6 on the watch 7. The curved beak 5 of the hook-member 2 is compressed around the exterior of the sleeve 14 to exert tension thereon so that a slight frictional resistance will be applied to the turning movement of the sleeve within the hook to prevent its unwarranted opening.

In Fig. 8 of the drawings I have illustrated a slightly different construction of the main clasp- or hook-member in which its shank is extended to provide a relatively longer box-like casing 20. The sides 21 of the casing 20 are bent or folded around to enclose the usual slide, not herein illustrated, which is attached to the end of the bracelet and normally held telescoped within the casing by means of a spring. The slide may be drawn out of the casing against the action of the spring to expand the bracelet at its ends. This form of expansion-means being commonly employed in the art it need not be herein further described in detail. In the construction of the hook-member 22 shown in Fig. 8 the method of forming the enlarged opening 23 for the insertion of the finger-piece in the slot 24 is varied somewhat from that first described. In this embodiment of the invention the opening takes the shape of a cross-slot 23 formed by shearing away two narrow lateral prongs or flaps 25 and bending them upwardly as shown. After the finger-piece 16 on the locking-member 14, shown in Fig. 6, has been inserted through the cross-slot 23 and slid into the main slot 24 the flaps 25 are bent or rolled back into place to close the opening to prevent escape of the finger-piece as with the construction shown in Fig. 5.

Fig. 9 illustrates a modified construction of the locking-member for the clasp which, in its preferred form, is made entirely in one piece. That is to say, the finger-piece 26 is constructed integral with the locking-sleeve 27, being constituted as a tab punched or sheared away from the metal of the sleeve and bent back from the opening 28 so formed to adapt it to project radially therefrom.

It will be observed from the above that the present invention provides a particularly simple and neat construction for a clasp of the type described having locking or catch-means for securing it to the loop on the watch to prevent accidental release thereof. As before stated, the parts may be constructed from sheet-metal or tubular stock, the main portions being formed in suitable dies so that very little handwork is required either in forming or assembling the elements. The finger-piece which pro-

vides means for opening the locking-member of the clasp also serves as a means for securing the parts permanently together to prevent them from becoming loose or detached, and the arrangement for inserting the finger-piece through the slot in the hook-member and thereafter closing the enlarged end of the slot, to prevent its release therefrom, effects a permanent union between the parts without pins, pintels or other jointed connections. The improved clasp is most efficient in use for the purpose described, being proof against breakage or getting out of order, and also adapted for securely fastening the bracelet to the watch without danger of its becoming unclasped. Furthermore, the improvement provides a clasp of exceptionally strong and rugged structure which also has a particularly neat and finished appearance and which can be manufactured at relatively small cost.

Various modifications other than shown may be made in the form and structure of the device without departing from the spirit or scope of the invention; therefore, without limiting myself to the exact disclosure herein made, I claim:

1. An article of the type specified comprising a clasp-member having a hooked beak, an open-sided tubular sleeve rotatable within the hook to close the opening of the beak, and a finger-piece on said sleeve projecting through a slot in the hook and having its outer portion enlarged to overlap the edges of the slot, the finger-piece being inserted through an enlarged opening at the end of the slot formed by cutting away the metal to provide a flap-like tongue which is afterward bent back to close the end of the slot and to act as a stop to limit the turning movement of the sleeve.

2. An improved clasp for use with watch-bracelets or for similar purposes comprising a hook-member formed with a shank adapted to be attached to the end of the bracelet and provided with a circular hooked beak extending forwardly therefrom, a tubular open-sided sleeve rotatable within the hook to adapt it to close the opening of the beak, and a finger-piece projecting radially from the sleeve through a slot in the hook, said finger-piece provided with undercut edges adapted to overlie the sides of the slot, and said hook cut away diagonally at the ends of its slot to provide a tongue adapted to be bent upwardly to admit the finger-piece through the slot and to afterward be bent back into place to hold the parts in permanent connection with the finger-piece slidable along the slot and prevented from escape therefrom by the bent over tongue which acts as a stop to limit the turning movement of the sleeve.

3. An improved clasp for watch-bracelets and like articles of jewelry comprising a hook-member having a shank consisting of a lateral strip provided with end-tabs adapted to be folded around the end of the bracelet, a circular hook-portion projecting forwardly from the cross-strip and formed with a longitudinal slot having diagonal slits at its corners providing a triangular tongue which may be bent upwardly to form an enlarged opening at the end of the slot, a locking member consisting in a tubular open-sided sleeve rotatable within the circular hook of the clasp-member, and a finger-piece projecting substantially radially from the sleeve with an enlargement at its outer end adapted to be inserted through the enlarged opening at the end of the slot and to overlap the edges of the slot when the finger-piece is slid therethrough to turn the sleeve within the hook, the tongue at the end of the slot in the hook-member being bent back into place to prevent release of the finger-piece whereby to hold the sleeve in place within the hook.

4. In an article of the type specified, the combination of a clasp-member having a circular hooked beak formed with a longitudinal slot, and an open-sided tubular sleeve rotatable within the hook to close the mouth of the beak, said sleeve provided with an integral finger-piece sheared away from the metal of the sleeve and bent back to project radially with respect thereto to adapt it to extend through the slot in the hook to provide means for rotating the sleeve.

In testimony whereof I affix my signature.

ALMYR L. NEWMAN.