Jan. 3, 1928. 1,654,732

E. L. JOHNSON ET AL

EXTENSION DEVICE FOR FLEXIBLE BRACELETS

Filed Aug. 27, 1926

Fig. 1.

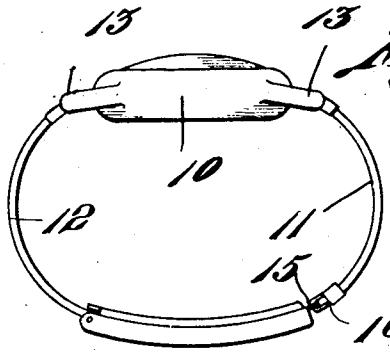


Fig. 2.

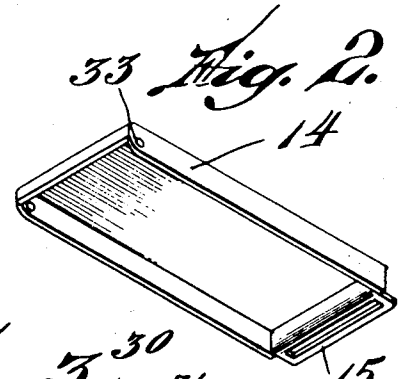


Fig. 3.

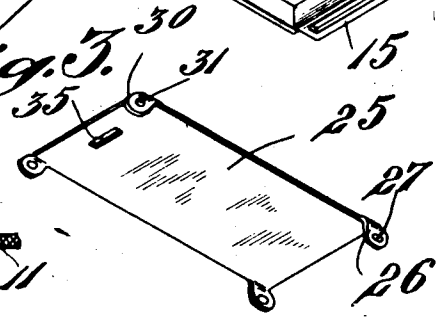


Fig. 6.

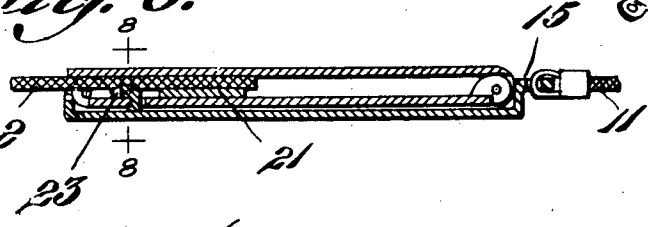


Fig. 7.

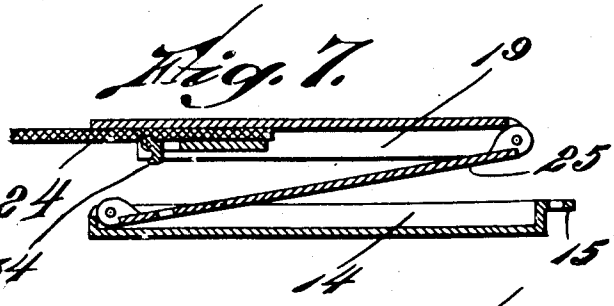


Fig. 5.

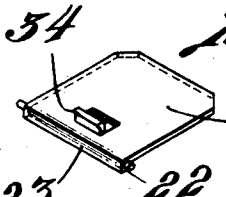
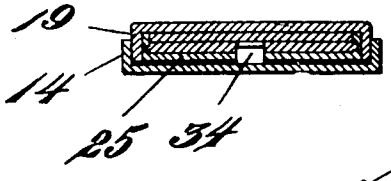


Fig. 8



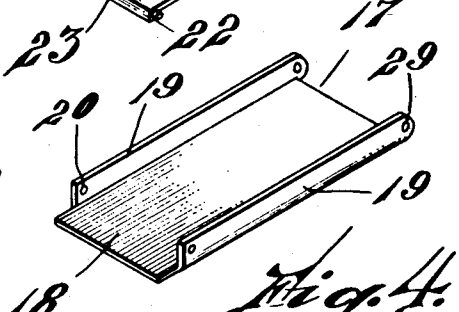


Fig. 4.

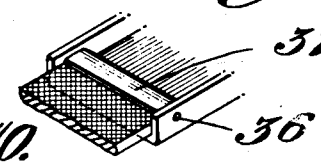


Fig. 10.

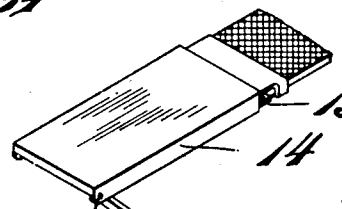


Fig. 9.

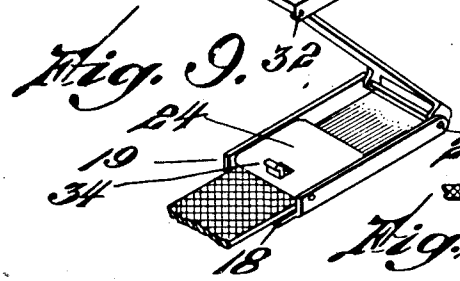
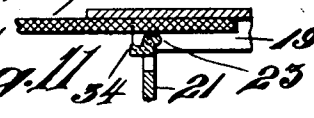


Fig. 11.



Inventors.
Emil L. Johnson.
Olof Lundsten.
BY Barlow & Barlow
ATTORNEYS.

Patented Jan. 3, 1928. 1,654,732

UNITED STATES PATENT OFFICE.

EMIL L. JOHNSON AND OLOF LUNDSTEN, OF ATTLEBORO, MASSACHUSETTS.

EXTENSION DEVICE FOR FLEXIBLE BRACELETS.

Application filed August 27, 1926. Serial No. 131,900.

This invention relates to an extension device for bracelets, more particularly watch bracelets, for holding a wrist watch to the arm of the wearer, and the object of this invention is to provide a plurality of sections hinged together to be folded one upon the other to cause the bracelet to fit snugly to the wrist of the wearer and which may be unfolded to lengthen the bracelet to permit it to be withdrawn from the arm of the wearer over the hand without detachment of any of the parts, and in which simple and effective means between the side edges of the sections are provided for retaining the sections in folded position.

A further object of this invention is to provide means for adjusting the effective working length of the bracelet for adapting it to fit wrists of different sizes.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings:—

Figure 1 is a side elevation illustrating the improved device in its relation to a wrist watch and bracelet.

Figure 2 is a perspective view of the under side of the top section of the device.

Figure 3 is a perspective view of the intermediate section.

Figure 4 is a perspective view of the bottom section of the device.

Figure 5 is a perspective view of the gripping member which is pivotally mounted in the bottom section.

Figure 6 is a sectional side elevation of the assembly in closed position with portions of the bracelet attached thereto.

Figure 7 is a sectional side elevation of the same showing the device partially unfolded.

Figure 8 is a sectional end elevation on line 8—8 of Figure 6.

Figure 9 is a perspective view of the sections partially unfolded and showing the bracelet as attached to each of the end sections.

Figure 10 is a perspective view of a fragmental detail showing the modification of a means for securing the bracelet to one of the end sections.

It is found in bracelet construction, especially watch bracelets, desirable to provide a device interposed between the ends of the watch bracelet by which the effective working length of the bracelet for holding the watch snugly on the wrist of the wearer may be extended, to permit the bracelet to be passed over the hand of the wearer, without detaching any of the parts from each other or from the wrist watch. It is also found desirable to provide in one of the sections of the extension device means by which the effective working length of the bracelet may be adjusted to fit different sized wrists of the wearers; and in order to provide a device for accomplishing these results, we have constructed a plurality of sections which are hinged together to be unfolded to end-to-end position to temporarily lengthen the bracelet, which sections may be folded one over the other and releasably held in folded position; and in one of the sections a gripper is mounted to grip the bracelet and releasably secure the same in any adjusted position along the length of the section; and the following is a detailed description of the present embodiment of this invention showing one construction of extension member by which these advantageous results may be accomplished.

With reference to the drawings, 10 designates a wrist watch, to the bails of which bracelet parts 11 and 12 are attached by any suitable means. The bracelet may be of leather, mesh fabric or any other suitable material; and between the ends of the parts 11 and 12 an extension device is provided which comprises a top section 14 having an integral bail 15 to which the end portion of the part 11 is secured by means of a loop 16 carried thereby. The bottom section 17 is of a shape similar to that of the top section 14 and has a bottom wall 18 and side walls 19, between which side walls the extensions or pins 22 of a gripper 21 are pivoted in the openings or bearings 20. The edge 23 of the gripper is turned downwardly and in such a position that when swung on the pivot pins 22, it moves toward or from the bottom portion 18 to engage the end portion 24 of the bracelet part 12 to force it into engagement with the bottom wall 18 and securely hold the strap part in adjusted position in the section. It will be apparent that the gripper may be raised or swung about pivot 22, as illustrated in Figure 11,

to release the strap part 24 and permit it to be moved further into or out of the section 17 as is desired, to adjust the wrist size of the bracelet.

The top and bottom sections of the device are connected together through an intermediate section 25 which is of sheet stock and provided with ears 26 having openings 27 to receive pivots 28 which also extend through and pivot in the openings 29 in the side walls of the bottom section; while at its opposite end of the intermediate section ears 30 have openings 31 to receive pivot pin 32 to hingedly connect that end of the intermediate section to the top section in opening 33. It will thus be seen that by the hinge connection between the sections, they may be collapsed or folded one over the other, as will be clearly apparent from Figure 10. Further, the side walls of one of the channel-shaped end sections are of a size to fit over side walls of the other end section whereby the folding of the device may be in compact form. In the present instance, the side walls of the top section receive the side walls of the bottom section, as is illustrated in Figure 8. The sections are held in folded position by means of a detent or projection 34 raised from stock of the gripper which snaps into opening 35 in the intermediate plate to releasably retain that end of the plate thereto; and when the sections are in folded position, the gripper is prevented from moving to released position.

In some instances, instead of providing a bail 15 integral with the top section, a rivet 36 is provided, set inwardly slightly from the end of the section to extend through an eye or end-piece 37, as illustrated in Figure 10, to secure the end of the bracelet thereto.

It will be understood, that in use, the sections will each be slightly curved, as illustrated in Figure 1, but as the curvature performs no functional result in this construction, for the sake of convenience, the illustration other than of Figure 1 is not shown on the arc of a circle.

From the foregoing it will be seen that we have provided a plurality of sections which may be unfolded to temporarily lengthen the bracelet to permit it to be passed over the hand of the wearer, and in which means are provided for securing the bracelet in any adjusted position whereby the bracelet may be adjusted to fit the wrist of the wearer.

The foregoing description is directed solely towards the construction illustrated, but we desire it to be understood that we reserve the privilege of resorting to all the mechanical changes to which the device is susceptible, the invention being defined and limited only by the terms of the appended claims.

We claim:

1. In a flexible bracelet, an extension device comprising a plurality of sections hinged together to be unfolded to temporarily lengthen the bracelet, means for releasably securing said sections in folded position, means for securing the bracelet to one of said sections, a cam-acting gripper pivotally carried by the other of said sections, between which and that section a bracelet is adapted to extend to be gripped by a movement of the gripper on its pivot whereby the bracelet may be adjusted as to wrist size in said section, said gripper being located between said sections when in folded position.

2. In a flexible bracelet, an extension device comprising a plurality of channel-shaped sections connected together to be unfolded to temporarily lengthen the bracelet, means for securing the bracelet to one of said sections, a gripper pivotally mounted in the side walls of the other of said channel-shaped sections, between which and the bottom wall of the section the bracelet is adapted to extend, an offset portion carried by said gripper for engaging the bracelet and forcing it against the bottom wall of the section to secure the bracelet in place, and means for securing said sections in folded position with the gripper between them to prevent release of the gripper.

3. In a flexible bracelet, an extension device comprising a plurality of sections hinged together to be unfolded to temporarily lengthen the bracelet, means for securing said bracelet to one of said sections, a gripper carried by the other of said sections to secure the bracelet in adjusted position between it and the section, a projection raised from the stock of said gripper, and the next adjacent section having an opening to snap over said projection to secure said section in folded position.

4. In a wrist watch bracelet having two parts, an extension device comprising an end section having a top wall and side walls, another end section having a bottom wall and side walls, a gripper member pivoted between the side wall of one of said sections and having a cam-shaped surface for engaging one of said parts to press it into or against a portion of the section for adjustably securing the part in position, means for securing the other strap part to the other end section, an intermediate section hinged to each of said end sections to be folded between them, the side wall of the end sections being of a size to fit one within the other, and cooperating detent and recess means between said intermediate section and one of said end sections for securing them in folded-over position.

5. In a flexible bracelet, an extension device comprising a plurality of sections hinged together and adapted for unfolding to temporarily lengthen the bracelet, means

for securing one end of said bracelet to one of said sections, a gripper carried by another of said sections for securing the other end of said bracelet in adjusted position therein, and means carried by said gripper between the outer margins of the gripper carrying section for securing the gripper carrying section to another of said sections when in folded position.

In testimony whereof we affix our signatures.

EMIL L. JOHNSON.
OLOF LUNDSTEN.