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FOLDABLE EXTENSION DEVICE FOR A BRACELET STRAP

Filed March 3, 1932

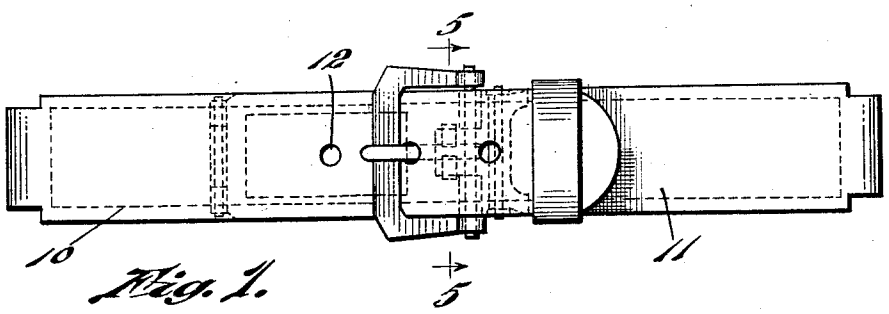


Fig. 1.

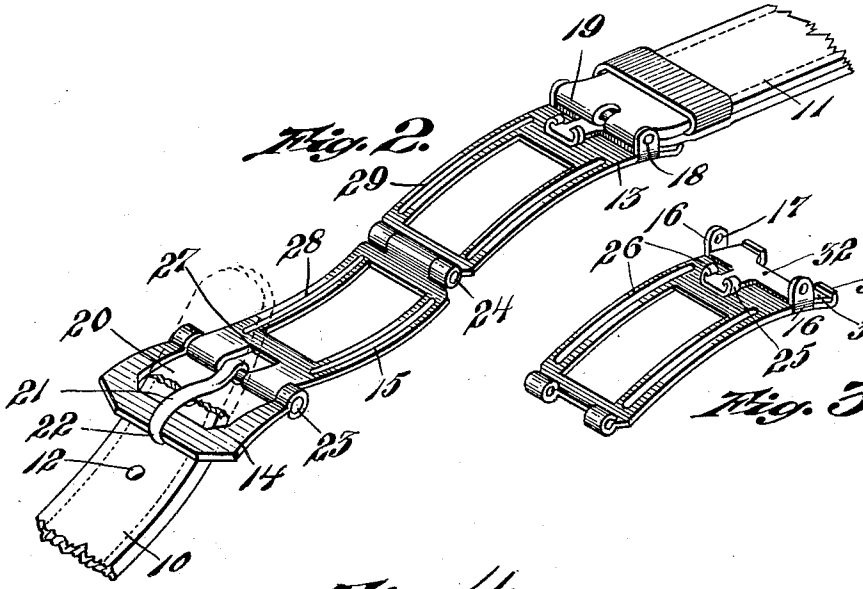


Fig. 2.

Fig. 3.

Fig. 4.

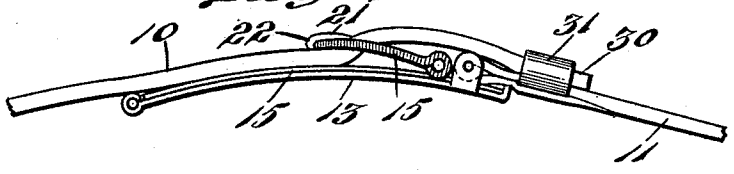
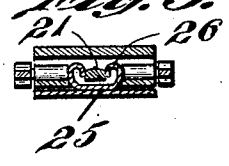


Fig. 5.



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UNITED STATES PATENT OFFICE

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FOLDABLE EXTENSION DEVICE FOR A BRACELET STRAP

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This invention relates to a foldable extension device for a bracelet strap and has for one of its objects to provide a construction which may be easily opened by pulling upon the adjustable end of the strap, which pull ordinarily releases the tongue from the strap, but in this case unlocks the foldable sections permitting them to unfold one in relation to the other.

Another object of this invention is the provision of a buckle construction in which the buckle tongue will be releasably securely held in desired position through an opening in the strap.

Another object of this invention is the provision of securing means for maintaining the foldable sections of the extension device in position without interference with the buckle tongue.

A further object of the invention is the provision of means cooperating with the buckle tongue to hold the sections in folded position.

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:

Fig. 1 is a top plan view of the bracelet strap with my improved extension device mounted therein.

Fig. 2 is a perspective view with portions of the strap broken away and showing the device in unfolded position.

Fig. 3 is a perspective view of one end section of the device.

Fig. 4 is a side elevation of the bracelet strap with the device in folded position, shown in Fig. 1.

Fig. 5 is a section on line 5—5 of Fig. 1, showing the relation of the clasp for holding the parts in folded position.

It has been found desirable in the use of wrist watch straps to use in addition to the common tongue buckle which may engage any one of a plurality of openings in a strap, an extension formed by the unfolding of different sections one from the other to enlarge the encircling sizes of the strap to permit the bracelet to be removed from the wrist over the hand without detachment or separation of any of the parts making up the encircling length; and in order that this may be accomplished, I have provided a lock for the tongue of the buckle which will securely hold this tongue in position so that when the end of the strap is engaged and pulled, which ordinarily would withdraw the tongue from its opening in the strap, the pull will open and unfold the sections and the parts will remain in their desired adjusted position for the folded position of the device, and at the same time, I have utilized this tongue and a catch device which will receive and engage this tongue to hold the parts in folded position; and the following is a detailed description of the present embodiment of this invention illustrating the preferred means by which these advantageous results may be accomplished.

With reference to the drawings, 10 designates one strap part and 11 another strap part. The strap part 10 is provided with a series of holes or openings 12 and between the ends of these strap parts there is provided a foldable extension device consisting of a plurality of sections, one end section being designated 13, another end section being in the form of a buckle designated 14 and an intermediate section being designated 15.

The strap part 11 is secured to the end section 13 by means of ears 16 having openings 17 therein to receive a pivot pin 18 through the loop or bight portion 19 of the strap part 11.

The strap part 10 is secured to the end buckle 14 comprising a frame and tongue and serving as the other end section, by passing the strap through the opening 20 in this frame and positioning the tongue 21, which is pivoted on this frame, through any selected opening 12, after which the tongue which is the desired length, is snapped over the peripheral edge of the section 14 by means of the hook 22 on this end of the tongue to securely hold the tongue in locked position.

The tongue is pivoted on the pin 23 which

secures sections 14 and 15 together, while the pin 24 secures the opposite end of the intermediate section 15 in hinged relation with the section 13. By this hinged connection between the sections they are permitted to fold one upon the other as illustrated in Fig. 4 and are held in this relation by means of the catch 25 having a pair of separated inwardly rolled fingers 26 to extend through the opening 27 in the end of the intermediate section 15 and engage the tongue 21 as well as engage the side edges of this opening 27 to secure the parts in folded position. By this means I provide a double lock for holding the sections in folded position as either engagement alone may be made to suffice.

The plate sections 13 and 15 are of sheet stock which are stiffened by means of ribs formed on one side as 28 on section 15 and with corresponding grooves on the other as designated 29 on section 13 which ribs stiffen these sections and nest one with the other that a compact arrangement of the parts may be had, and lateral movement of the sections prevented when in folded position.

When in folded position, as illustrated in Fig. 4, the end 30 of the strap part 10 extends through a loop 31 secured to the strap part 11 and when it is desired to unfold the buckle sections, it is merely necessary to withdraw the strap end 30 from the loop 31 and pull the same upwardly in the same manner that it is customary to withdraw the tongue 21 from its opening in the strap, but as this tongue is held down by means of its hook snapping over the edge of the frame of the buckle part 14 this pull will not withdraw the tongue but will instead lift this section and the intermediate section from engagement with the catch 25 to release the holding of the foldable parts and permit their unfolding to the position illustrated in Fig. 2.

The catch is formed on a separate piece of material 32 which is held in position beneath the bight of the strap 19 and the pin extending therethrough and is prevented from longitudinal and transverse movements by reason of the lateral projecting portions 33 extending between the turned up lips 34 and the ears 16 on the sides thereof.

The foregoing description is directed solely towards the construction illustrated, but I desire it to be understood that I 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.

I claim:

1. A buckle comprising a frame having an opening therethrough to receive a strap part with holes therein, a tongue secured to said frame to extend through any one of the holes in said strap part, said tongue and frame being relatively resilient in a direction extending along the longitudinal axis of the tongue, and said tongue being of such a length and being so formed at its end as to snap over a portion of said frame and releasably secure the tongue and frame in frictional engagement.

2. A buckle comprising a frame having an opening therethrough to receive a strap part with holes therein, a tongue pivoted on said frame to extend across said opening and through any one of the holes in said strap part, said tongue and frame being relatively resilient in a direction extending along the longitudinal axis of the tongue, and said tongue being of such a length and being so formed at its ends as to snap over the outer peripheral edge of the frame to releasably secure the tongue and frame in frictional engagement.

3. A buckle comprising a frame having an opening therethrough to receive a strap part with holes therein, a tongue pivoted on said frame to extend across said opening and through any one of the holes in said strap part, said tongue and frame being relatively resilient in a direction extending along the longitudinal axis of the tongue, and said tongue being hook-shaped at its end and of such a length as to snap over a portion of said frame and releasably secure the tongue and frame in frictional engagement.

4. A buckle comprising a frame having an opening therethrough to receive a strap part with holes therein, a tongue pivoted on said frame to extend across said opening and through any one of the holes in said strap part, said tongue and frame being relatively resilient and said tongue being hook shaped at its end and of such a length as to snap over the outer peripheral edge of the frame to releasably secure the tongue and frame in frictional engagement.

5. In an extension device, a plurality of sections hinged together to fold one on another, one end section comprising a frame having an opening therethrough to receive a strap part having holes therein, a tongue mounted on said frame to extend through one of the series of holes in the strap part, said tongue and frame being relatively resilient in a direction extending along the longitudinal axis of the tongue, and said tongue being of such a length and being so formed at its end as to snap over a portion of said frame and releasably secure the tongue and frame in frictional engagement.

6. In an extension device, a plurality of sections hinged together to fold one on another, one end section comprising a frame having an opening therethrough to receive a strap part provided with holes therein, a tongue pivotally mounted on said frame to extend through one of the series of holes in the strap part, means for releasably locking the free end of said tongue to the frame, and

means cooperating with the tongue to hold the sections in folded position.

7. In an extension device, a plurality of sections hinged together to fold one on another, one end section comprising a frame having an opening therethrough to receive a strap part having a series of holes therein, a tongue pivoted on said frame to extend through a selected one of the series of holes in the strap part, and cooperating means on another of said foldable sections so constructed and arranged as to engage said tongue to hold said sections in folded position.

8. In an extension device, a plurality of foldable sections, one end section comprising a frame having an opening therethrough to receive a strap part having a series of holes therein, a tongue pivoted on said frame to extend through a selected one of the series of holes in the strap part, and a resilient catch on another of said sections so constructed and arranged as to engage said tongue to hold said sections in folded position.

9. In an extension device, a pair of end sections and an intermediate section hinged together to fold one on the other, one end section comprising a frame having an opening therethrough to receive a strap part having a series of holes therein, a tongue on said frame to extend through a selected one of the series of holes in the strap part, the other end section having a catch thereon so constructed and arranged as to be engageable with said tongue to hold the sections in folded position.

10. In an extension device, a pair of end sections and an intermediate section hinged together to fold one on the other, one end section comprising a frame having an opening therethrough to receive a strap part having a series of holes therein, a tongue on said frame to extend through a selected one of the holes in said strap part, the other end section having a catch thereon so constructed and arranged as to be engageable with said tongue to hold the sections in folded position, and said intermediate section having an opening through which the catch extends to engage said tongue.

11. In an extension device, a pair of end sections and an intermediate section hinged together to fold one on the other, one end section comprising a frame having an opening therethrough to receive a strap part having a series of holes therein, a tongue on said frame to extend through a selected one of the holes in said strap part, the other end section having a catch thereon so constructed and arranged as to be engageable with said tongue to hold the sections in folded position, and said intermediate section having an opening through which the catch extends to engage said tongue, said catch also engaging the edge of the opening in the intermediate section to hold the section in folded position.

12. In an extension device, a pair of end sections and an intermediate section hinged together to fold one on the other, one end section comprising a frame having an opening therethrough to receive a strap part having a series of holes therein, a tongue on said frame to extend through a selected one of the holes in the strap part, the other end section having a catch thereon, and said intermediate section having an opening in which the joint end of the tongue is located and through which the catch extends to snap past the edges thereof and hold the sections in folded position.

In testimony whereof I affix my signature.

JOHN SAND.