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W. J. ROY

1,750,786

BRACELET CHAIN

Filed Aug. 20, 1928

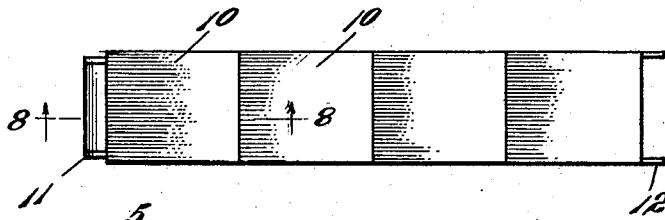


Fig. 1.

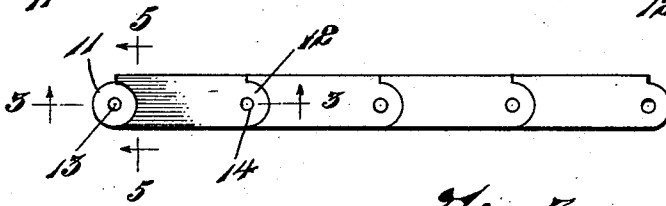


Fig. 2.

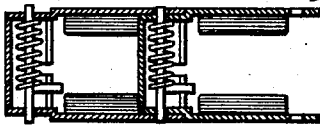


Fig. 3.

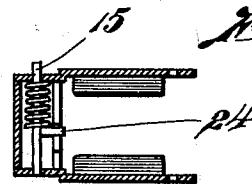


Fig. 4.

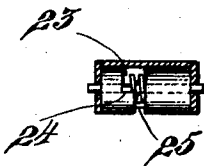


Fig. 5.

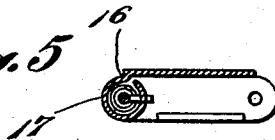


Fig. 6.



Fig. 7.



Fig. 8.

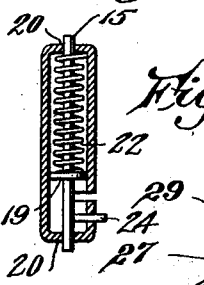


Fig. 9.

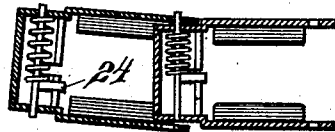


Fig. 10.

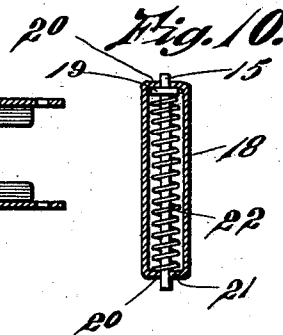


Fig. 11.

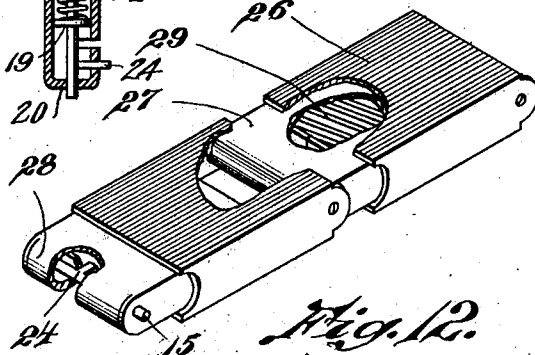


Fig. 12.

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BRACELET CHAIN

Application filed August 20, 1928. Serial No. 300,784.

This invention relates to an improved construction of bracelet or chain formed of a plurality of units flexibly connected together; and the object of this invention is to provide a construction of bracelet or chain having a series of units which may be disconnected by a yielding movement of a resiliently mounted member or pin.

A further object of the invention is the provision of means for retaining the pin in withdrawn position to permit disconnection of the links one from the other.

A further object of the invention is the mounting of a separable member having a resiliently mounted pin in position to extend thru registering openings in the overlapping end portions of adjacent bracelet units.

The invention further consists in the provision of a guide in the connecting member to assist in positioning the pin so that it may always move outward thru the opening provided under influence of its spring.

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 a series of units connected together.

Fig. 2 is a side elevation thereof.

Fig. 3 is a sectional view on line 3—3 of Fig. 2 illustrating the units as connected together by my improved construction.

Fig. 4 is a view similar to Fig. 3 showing the pin in withdrawn position.

Fig. 5 is a sectional view on line 5—5 of Fig. 2 with the pin in its connecting position.

Fig. 6 is a view similar to Fig. 5 with the pin in withdrawn position.

Fig. 7 shows the pin in one of the links withdrawn and the other link as being moved to disconnect the same therefrom.

Fig. 8 is a sectional view on line 8—8 of Fig. 1.

Fig. 9 is a perspective view partially broken away illustrating the slot and notch as formed in the shell for housing the resiliently mounted pin.

Fig. 10 is a sectional view showing a separate connecting member.

Fig. 11 shows the separate member of Fig. 10 as mounted in position in one of the units.

Fig. 12 is a perspective view partially broken away showing the connecting member as applied to an extendible bracelet.

Fig. 13 is a sectional view of another construction of a separate connecting member.

In the practical construction and operation of bracelets, it is found desirable to detachably connect the units of the bracelet one to the other so that by manual manipulation with some such simple tool as a common ordinary pin or the like these units may be disconnected one from the other to replace a broken link or to shorten or enlarge the length of the bracelet to accommodate the same to different sized wrists of wearers; and in order to accomplish this result I have provided a connecting member with a resiliently mounted pin which may be moved to permit disconnection of the units of the bracelet one from the other as desired; and the following is a detailed description of the present embodiment of this invention showing the preferred means by which these advantageous results may be accomplished.

With reference to the drawings, 10 designates the link units which are provided at their ends with ears 11 and 12 to overlap each other and receive thru their registering openings 13 and 14 a pin 15 of the connecting member.

This connecting member may be formed as a separate unit removable from the link, as illustrated in Fig. 10, or the stock of the top wall of the unit may be extended as at 16, illustrated in Fig. 8, to form the shell designated 17 in Fig. 8 and 18 in Fig. 10, to house the pin 15.

In the construction illustrated in Fig. 10, the shell has inturned end portions 20 to provide at one end an abutment 21 against which the spring 22 acts to engage the abutment 19 carried by pin 15 to move and hold the pin into the position which it assumes in extending into the openings 13 and 14 to connect the units one to the other, the abutment also serves as a guide by closely fitting the inner surface of the shell 18 so that the pin 15 will always register with the openings thru the inturned ends 20 of the shell and may be snapped into the registering openings 13 and 14 of the link units when moved to the proper position relative thereto.

The shell may be provided with a slot 23 in which a fingerpiece 24 carried by the pin is movable to permit of manual withdrawing of the pin 15 from the opening in the overlapping end portions of the adjacent units after which withdrawal the pin 15 may be locked in this withdrawn position by rotating the same to move the fingerpiece 24 into the notch 25 extending at right angles to the slot 23. The fingerpiece and slot thru which it works serves as a limiting means to prevent withdrawal of the pin to such an extent as to disconnect its end from the opening thru which it extends.

In the construction using the fingerpiece as above described, the spring for forcing and holding the pin in its working position engages the fingerpiece 24 and one of the ears 11 instead of the abutment 21 described in connection with Fig. 10 and in this construction also the abutment guide 19 may be omitted.

In Fig. 12 each of the units is composed of an outer box link 26 and a slide 27 therein with the slide extended and rolled to form a shell 28 for housing the pin 15, with the fingerpiece 24 shown thru the broken opening therein, each of the slides is moved into contracted position in its box link by a spring 29 acting between suitable abutments.

In the constructions herein shown the shell of the connecting member with its resiliently mounted pin, is formed either separately or as an integral part of the top wall of one of the link units and it may be understood that, where the shell is formed separately, which, in some instances, may be better from a manufacturing standpoint, the same may be forced between the ears 11 with its pin 15 positioned to align with the openings 13 therein and function as tho the shell were rigidly fixed or formed integral with the unit and the same being supported in such a position by the pin when in working position to connect the units one to the other.

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 bracelet chain structure comprising a series of units each having side walls with the end portions of the side walls of one unit overlapping the end portions of the side walls of the next unit, said overlapping portions being provided with registering openings, a member comprising a shell, a pin device slidably mounted in said shell with its ends extending into said openings to connect adjacent units together, a spring within said shell normally urging said pin device to extend into said openings while permitting yielding movement for withdrawal from said openings, a fingerpiece on said pin device extending outwardly thru said shell for withdrawing said pin device from the openings, and means for retaining said fingerpiece in withdrawn position.

2. A bracelet chain structure comprising a series of units each having side walls with the end portions of the side walls of one unit overlapping the end portions of the side walls of the next unit, said overlapping portions being provided with registering openings, a member comprising a shell, a pin device slidably mounted in said shell with its ends extending into said openings to connect adjacent units together, a spring within said shell normally holding said pin device in position to extend into said openings while permitting yielding movement for withdrawal from said openings, a fingerpiece on said pin device extending outwardly thru said shell for withdrawing said pin device from the openings, and a notch in said shell into which said fingerpiece may be positioned to retain it in withdrawn position.

3. A flexible chain structure comprising a series of units, each having side walls with the end portions of the side walls of one unit overlapping the end portions of the side walls of the next unit, said overlapping portions being provided with registering openings, a member comprising a shell, a pin device slidably mounted in said shell with its ends extending into said openings to connect adjacent units together, a spring within said shell normally holding said pin device in position to extend into said openings while permitting yielding movement for withdrawal from said openings, said shell having a slot therein parallel to said pin device with a notch extending at right angles thereto, a fingerpiece on said pin device extending thru said slot and slidable therein, said fingerpiece being movable into said notch to hold the pin device in one position of adjustment in said shell.

4. A bracelet chain structure comprising a series of units, each having side walls with the end portions of the side walls of one unit overlapping the end portions of the side walls of the next unit, said overlapping portions

being provided with registering openings, a removable member comprising a shell, a pin slidably mounted in said shell with its ends extending into said openings to connect adjacent units together, an abutment on said pin of a size to engage the inner surface of said shell and guide the pin in its movement, a spring within said shell acting between one end thereof and said abutment to hold the pin in position to extend into said openings while permitting yielding movement for withdrawal from said openings.

In testimony whereof I affix my signature.

WILFRED J. ROY.