No. 886,121. PATENTED APR. 28, 1908.

T. D. GIGUERE.

BRACELET.

APPLICATION FILED MAY 10, 1907.

Fig. 1.

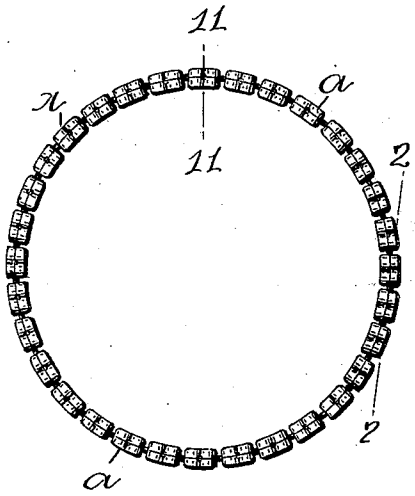



Fig. 2.

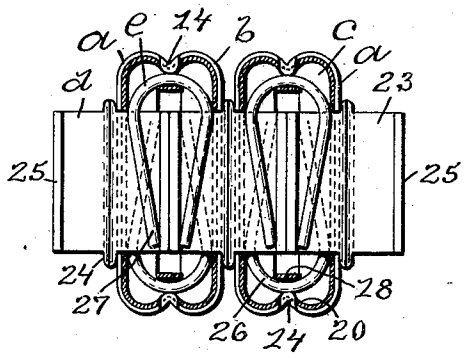



Fig. 3.

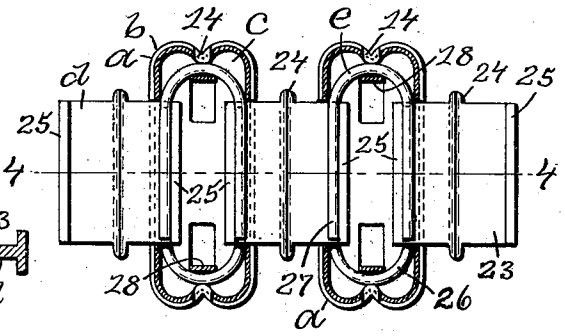



Fig. 4

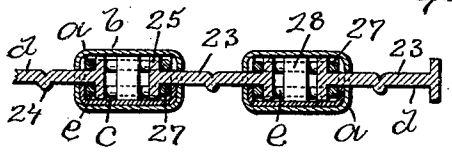
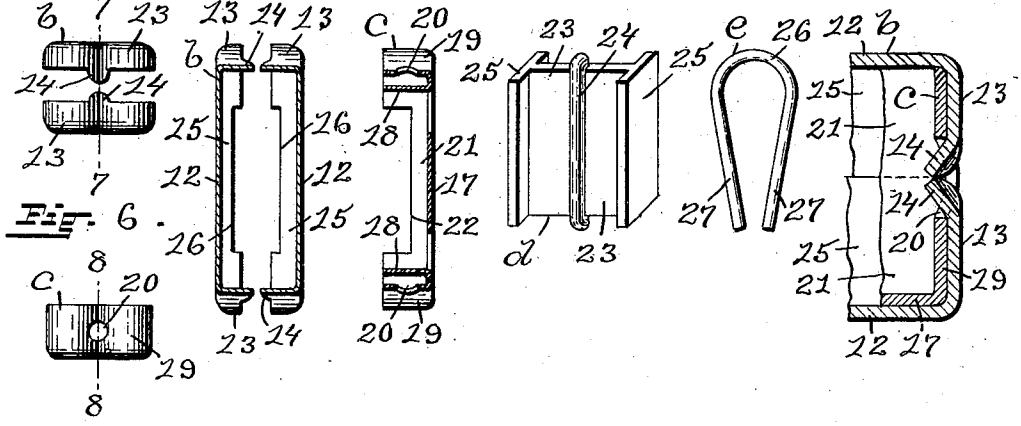



Fig. 5. Fig. 7. Fig. 8. Fig. 9. Fig. 10. Fig. 11




WITNESSES:

Chas. D. Luther.

Ada E. Fogerty.

INVENTOR:

Thomas D. Giguere

by Joseph A. Miller

ATTORNEY.

THE NORRIS PETERS CO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

THOMAS D. GIGUERE, OF NORTH ATTLEBORO, MASSACHUSETTS, ASSIGNOR TO ANNIE M. HALE AND EDWIN E. HALE, EXECUTORS OF THE ESTATE OF O. M. DRAPER, OF NORTH ATTLEBORO, MASSACHUSETTS.

## BRACELET.

No. 886,121. Specification of Letters Patent. Patented April 28, 1908.

Application filed May 10, 1907. Serial No. 372,982.

*To all whom it may concern:*

Be it known that I, THOMAS D. GIGUERE, a citizen of the United States, residing at North Attleboro, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Bracelets, of which the following is a specification.

This invention has reference to an improvement in bracelets and more particularly to an improvement in expansible bracelets composed of a plurality of spring actuated units.

The object of my invention is to improve the construction of an expansible bracelet composed of a plurality of spring-actuated units, whereby the units are simplified in construction, are more durable and the cost of manufacturing the same reduced.

Another object of my invention is to construct the spring-actuated units of an expansible bracelet and to form the complete bracelet from the same, without the use of solder.

A further object of my invention is to reduce the thickness of the spring-actuated units of an expansible bracelet.

My invention consists in the peculiar and novel construction of the units of an expansible bracelet, said units having details of construction as will be more fully set forth hereinafter and claimed.

Figure 1 is an edge view of an expansible bracelet composed of a series of my improved spring-actuated units in the contracted or normal position. Fig. 2 is an enlarged detail sectional view of two units taken on line 2 2 of Fig. 1 looking from the face toward the back, with the units in the contracted position. Fig. 3 is an enlarged detail sectional view similar to Fig. 2, showing the units in the expanded position. Fig. 4 is an enlarged sectional view taken on line 4 4 of Fig. 3 through the units in their expanded position. Fig. 5 is an enlarged separated end view of the two-part shell of a unit, showing the fingers for securing the parts of the shell to the box frame. Fig. 6 is an enlarged end view of the box frame, showing the hole in the end for the fingers on the shell. Fig. 7 is an enlarged separated sectional view taken lengthwise on line 7 7 of Fig. 5 of the two-part shell. Fig. 8 is an enlarged sectional view of the box frame taken lengthwise through the same on line 8 8 of Fig. 6. Fig. 9 is an enlarged perspective view of the connecting link. Fig. 10 is an enlarged face view of one of the U springs, and Fig. 11 is a greatly enlarged detail sectional view taken on line 11 11 of Fig. 1, showing the means of securing the shell to the box frame without solder.

In the drawings, Fig. 1 illustrates an expansible bracelet composed of a series of spring-actuated units *a a*, each unit *a* consisting of a double shell *b* composed of two coinciding members, a box frame *c*, an **I**-shaped connecting link *d*, and two **U** springs *e e*.

Each member of the shell *b* is stamped up from sheet metal to form a rectangular shallow box having the bottom 12 forming either the inner or outer face of the bracelet, the ends 13 13 having the fingers 14 14 and the sides 15 15 in which are the oppositely-disposed elongated openings 16 16 extending in from the edge and forming, when the members are brought together, oppositely-disposed elongated narrow slots in the sides of the shell for the connecting links *d d*.

The box frame *c* is stamped up from sheet metal to form a rectangular box having the bottom 17 from which is cut out and bent up the two spring-retaining fingers 18 18, the ends 19 19 in which are the holes 20 20 for the fingers 14 14 on the ends of the shell members, and the sides 21 21 in which are the oppositely-disposed elongated openings 22 22 extending in from the edges for the connecting links *d d* and coinciding with the openings 16 16 in the members of the shell *b*.

The **I**-shaped connecting links *d d* each have a central web 23 which represents the stem of the letter **I**, a central beading 24 on the web which engages with the sides of the shell *b b* and limits the contracting movement of the units or spaces the same and the double lips 25 25 representing the ends of the letter **I**, as shown in Fig. 9. The thickness and width of the links coincide with the slots in the side of the shells *b b*.

The **U** springs *e e* are each constructed from spring wire bent to form the closed end 26 and the spring arms 27 27, as shown in Fig. 10.

In assembling the units to form a bracelet a spring *e* is placed in a box frame *c* with the closed end 26 of the spring between the end of the frame and a retaining finger 18. The ends of the connecting links *d d* are now placed in the frame *c* in a position for the arms 27 27 of the spring *e* to straddle the ad-

jacent portions of the lips 25 25 on the connecting links and for the central webs 23 23 of the links to extend through the openings 22 22 in the sides 21 21 of the frame. A spring *e* is now placed in the box frame *c* in an opposite position to the first spring with the closed end 26 between the end of the frame and a retaining finger 18 and in a position for the spring arms 27 27 to straddle the adjacent lips 25 25 on the ends of the connecting links *d d*, thus bringing the webs 23 23 of the links between the springs. These parts are now placed in the members of the shell *b* and the shell *b* secured to the box frame, without solder by bending or forcing the fingers 14 14 on the ends of the shell members into the holes 20 20 in the ends of the frame *c*, as shown in Figs. 2, 3 and 11. These operations are repeated as many times as there are units in the bracelet. The bracelet can now be expanded by pulling the units apart against the tension of the spring arms 27 27 of the springs *e e*, which engaging with the sides 21 21 of the box frame *c* limits the expansion of the units, as shown in Figs. 3 and 4. When released the units assume their normal contracted position, as shown in Figs. 1 and 2, through the tension of the spring arms 27 27 of the springs *e e* on the double lips 25 25 of the connecting links *d d*.

It is evident that the shell *b* and box frame *c* could be shaped to have any design or configuration desired without materially affecting the spirit of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent;—

1. A bracelet composed of a plurality of units each consisting of a two-part shell, a frame in the shell, **I**-shaped connecting links extending through the slots in the frame and shell, and **U**-shaped springs in the frame the arms of which straddle and bear on the ends of the connecting links, whereby the units are held in their normal or contracted position, and means for spacing the units.

2. A bracelet composed of a plurality of units each consisting of a two-part shell, a box frame in the shell, **I**-shaped connecting links extending through the slots in the frame and shell and having central webs for spacing the units, and **U**-shaped springs in the frame the arms of which straddle the adjacent ends of the connecting links, whereby the units are spaced and held in their normal or contracted position under spring tension.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS D. GIGUERE.

Witnesses:
G. E. SMALLUND,
E. M. MCLEAN.