W. S. THORNTON.

EXPANSIBLE BRACELET.

APPLICATION FILED OCT. 9, 1907.

914,533.

Patented Mar. 9, 1909.

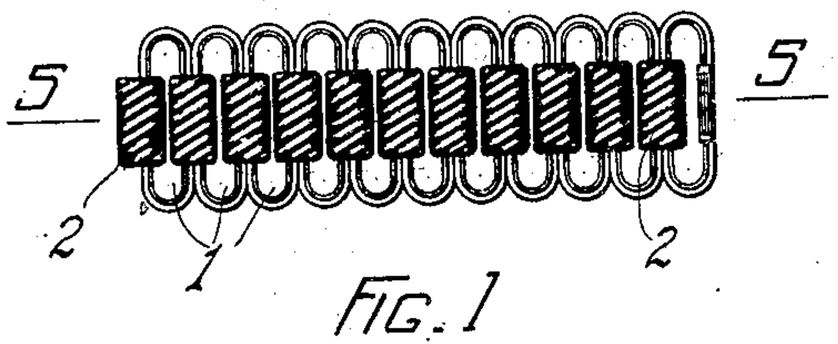

FIG. 1

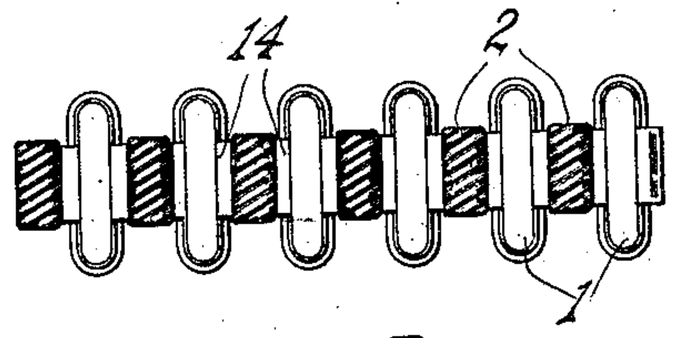

FIG. 3

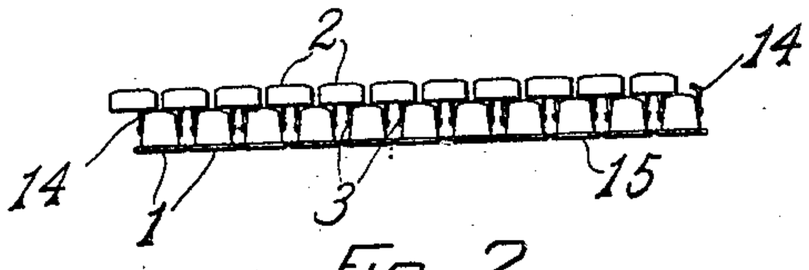

FIG. 2

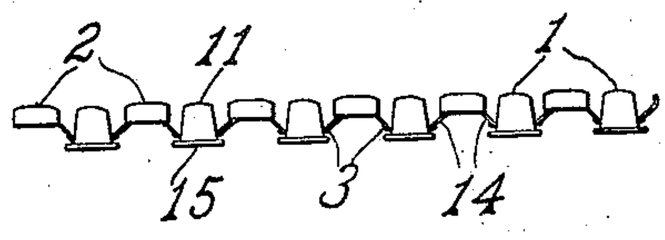

FIG. 4

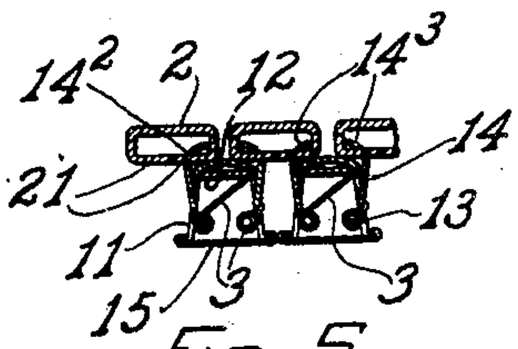

FIG. 5

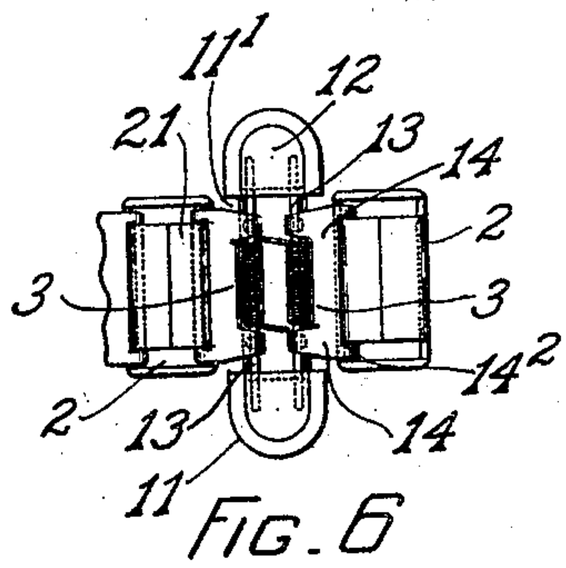

FIG. 6

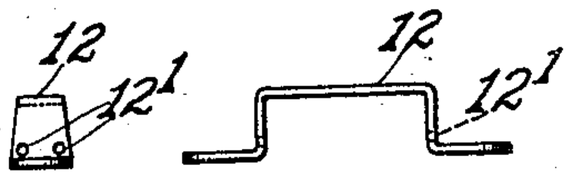

FIG. 7 FIG. 8

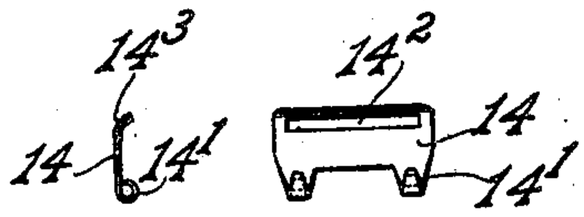

FIG. 9 FIG. 10

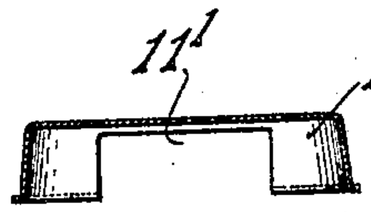

FIG. 11

WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM S. THORNTON, OF NORTH ATTLEBORO, MASSACHUSETTS, ASSIGNOR TO HANLON-THORNTON COMPANY, OF NORTH ATTLEBORO, MASSACHUSETTS, A CORPORATION OF DELAWARE.

EXPANSIBLE BRACELET.

No. 914,533. Specification of Letters Patent. Patented March 9, 1909.

Application filed October 9, 1907. Serial No. 396,594.

To all whom it may concern:

Be it known that I, WILLIAM S. THORNTON, a citizen of the United States, residing at North Attleboro, county of Bristol, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Expansible Bracelets, of which the following is a specification.

This invention relates to expansible bracelets, collars and the like in which link members of a band or strip are so arranged and connected as to be relatively separable for the purpose of distention or elongation of the article.

It is desirable in such articles to have a structure which will assume its various positions without becoming unsightly and which will operate mechanically without giving trouble to the wearer by catching or pinching and which will be strong and simple in operation and use. To this end I have devised a connection and relative movement of the link members of such a device by which a ready expansion to an unusual degree will be secured without rendering the article unsightly and without undue distortion of the structure and without liability to catching or pinching action upon the wearer.

As illustrating an embodiment of my invention I have shown in the drawings a band of members and will more fully describe the same in the specification which follows:

In these drawings—Figure 1 is a plan view of a series of links in closed position, Fig. 2 is an edge view of the same, Fig. 3 is a view of the series opened out, Fig. 4 is an edge view of Fig. 3, Fig. 5 is a sectional detail on the line 5—5, Fig. 1, Fig. 6 is a rear view in detail showing a leaf bearing link with cap removed, Fig. 7 is an end view of a leaf frame, Fig. 8 a side view of the same, Figs. 9 and 10 the side and plan views of a leaf, and Fig. 11 a casing shell.

1 are a plurality of unit bearing link members consisting each of a casing 11 open on its bottom side and having lateral openings 11^1 on its sides. Within the casing is located a bridge frame 12 having a pair of perforations 12^1 at each end which form recesses for the support of pintles 13 on which the leaves 14 are mounted by bent flaps 14^1 which encircle the pintles giving a hinge movement thereon.

14^2 is a slot in the upper part of the leaf 14 to receive the flap 21 of the link member 2. The leaf 14 is curved as at 14^3 to maintain engagement with the link 2 during the swing of the leaf 14 and to hold the link 2 secure when the band is in its retracted or closed position, as shown most plainly in Fig. 5.

3 are actuating springs wound on the pintles 13 between the flaps 14^1 and having one end bearing against the inside of the frame 12 and the other end engaging the leaf 14 so as to normally throw said leaf up toward the top of the member 1.

15 is a cap plate for closing the bottom of the shell as shown in Fig. 5.

In assembling the parts the flap pieces 14 are run onto the pintles 13 with the spring 3 between the flaps 14^1 and the parts thus assembled are applied to the frame 12 with the spring ends in proper engagement to exert the pressure required. The links 2 may then be applied to couple the adjacent leaves of a pair of links 1 by inserting the flaps 21 through the slots 14^2 of the leaves 14—the insertion being made from the concave side of the bend 14^3. The flaps 21 may then be closed down to hold the leaves 14 against escape. The shells 11 may then be applied to the frames 12 and the links 1 thus formed sealed by the cover plate 15. With the parts thus assembled the links 1 and 2 will occur alternately and will assume in normal position a staggered relation (see Figs. 1, 2, and 5,) which will bring the series into a closed or retracted position. When a pull is exerted upon the series, as when a bracelet or collar is expanded for application to the person, the tendency will be to draw the links 2 down into alinement with the links 1 (see Figs. 3, 4, and 6) against the action of the springs 3 which exert their influence through the leaves 14 which connect the links. As shown in Fig. 5 the curved ends 14^3 of the leaves 14 tend to maintain a secure engagement with the links 2 acting as a hook to give additional strength to the slot and flap engagement between the parts 14^2 and 21.

Obviously various modifications may be made in the connection of parts, in their form and arrangement, in their actuating means and in details of structure without departing from the spirit of my invention.

What I therefore claim and desire to secure by Letters Patent is:—

1. In a device of the class described a plurality of unit members forming a normally

circular band and connected for relative movement substantially radially thereof and means for moving one set of said units substantially radially in relation to the other units.

2. In a device of the class described a plurality of links relatively movable into position substantially side by side, and means for holding alternate links yieldingly positioned in a different plane from the rest of said links.

3. In a device of the class described a plurality of links, hinged leaves connecting said links, and means for moving said leaves to maintain alternate links in a different plane from the rest of said links.

4. In a device of the class described, a link, a connecting leaf hinged to said link at one end and having its opposite end provided with a hook, a second link mounted on the end of said leaf, and engaged by said hook, and means to move said leaf to normally maintain said links in different planes.

5. A device of the class described comprising a plurality of links, a connecting leaf hinged to one set of links and means for moving said hinge to maintain said sets of links staggered in relation to the rest of the links.

6. In a device of the class described a plurality of links, hinged leaves on alternate links and connecting said links with those adjacent, and means for moving said leaves to normally maintain said links in a yielding staggered relation.

In testimony whereof, I affix my signature in presence of two witnesses.

WILLIAM S. THORNTON.

Witnesses:
JOHN H. HANLON,
EDWARD N. GODING.