C. G. KING.

CHAIN OR BRACELET.

APPLICATION FILED OCT. 25, 1910

1,271,041.

Patented July 2, 1918.

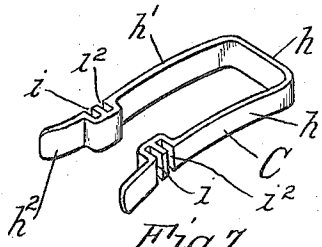


Fig. 7.

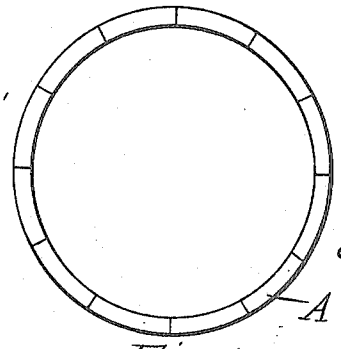


Fig. 1.

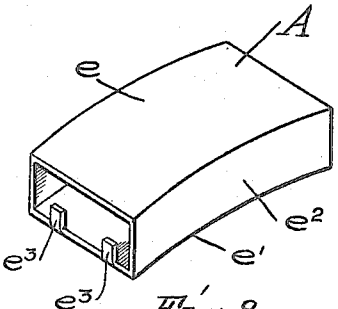


Fig. 8.

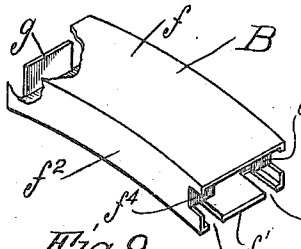


Fig. 9.

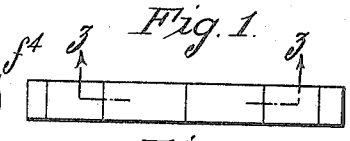


Fig. 2.

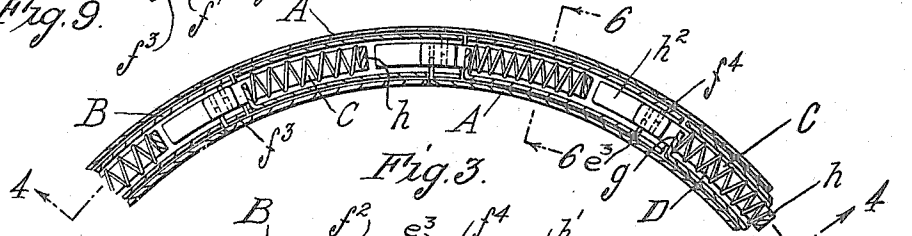


Fig. 3.

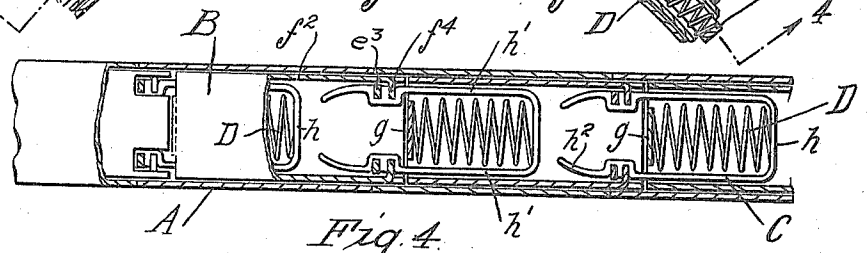


Fig. 4.

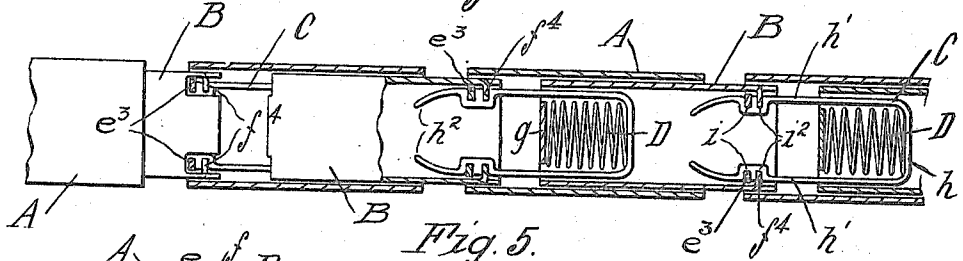


Fig. 5.

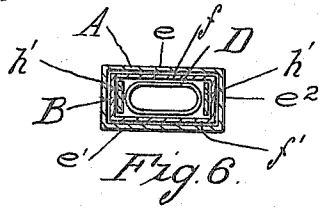


Fig. 6.

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CLIFFORD G. KING, OF PROVIDENCE, RHODE ISLAND.

CHAIN OR BRACELET.

1,271,041. Specification of Letters Patent. Patented July 2, 1918.

Application filed October 25, 1916. Serial No. 127,582.

To all whom it may concern:

Be it known that I, CLIFFORD G. KING, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Chains or Bracelets, of which the following is a specification.

My invention relates to improvements in expansible chains adapted for use as bracelets, bands, necklaces and analogous articles of jewelry.

The essential objects of my invention are to furnish a maximum unbroken area for ornamentation, and to afford a comparatively even exterior surface when the units are expanded so that the appearance thereof is not varied by a change in the positions of the units. Other objects are facility of assemblage and operation, cheapness of manufacture, and concealment of the operative parts.

To the above ends essentially my invention consists in such parts and combinations of parts as fall within the scope of the appended claims.

In the accompanying drawings which form a part of this specification

Figures 1 and 2 are plan and side elevations respectively of my chain embodied in one form of bracelet,

Fig. 3, an enlarged fragmentary section of the same on line 3—3 of Fig. 2,

Fig. 4, a section on line 4—4 of Fig. 3,

Fig. 5, a like section showing the units or sections expanded,

Fig. 6, a transverse section of chain on line 6—6 of Fig. 3, and

Figs. 7, 8, and 9, detail views of a yoke member, an inner section, and an outer section respectively.

Like reference characters indicate like parts throughout the views.

The chain, which is herein shown as a band or bracelet, comprises a series of slightly longitudinally curved shells or tubes A, rectangular in cross section, adapted, when the chain is contracted, to abut against each other. Within each of these shells is slidably mounted an internal tube B of similar shape. In closed position the ends of the tubes B abut against each other, and one end of each shell A overlaps a portion of the adjacent end of a tube B. In each tube B is a yoke C extending approximately half way into said tube, and projecting from one end thereof some distance into the adjacent tube B. In each yoke is a flattened helical spring D. The four members above mentioned constitute a single unit which are multiplied to form the chain or bracelet.

These parts have the following detailed construction or arrangement. Each member A has front and back walls e, e', and side walls e^2, and upon one end of the wall e' are inturned tongues e^3. Each inner tube B has front and back walls f, f', and side walls f^2. In one end of the wall f' are two spaced longitudinal guide slots f^3 into which extend the tongues e^3. Upon the same end of the walls f^2, which are shorter than the walls f and f' are inturned lugs f^4, which extend across intermediate portions of the slots. Upon the other end of the wall f' is an inturned flange g adapted to form an abutment for one end of the spring D, whose other end abuts against the body h of the yoke C. The yoke body h has resilient arms h' terminating in fingers h^2. In Figs. 1 to 6 these fingers are shown as inwardly curved, although they may in some instances be outwardly curved, as shown in Fig. 7. Each arm has adjacent its finger two spaced lateral cavities i and i^2, adapted to receive respectively a tongue e^3 and a lug f^4. The interengagement of the tongues and lugs with the arms retains one end of a shell A upon the adjacent end of a tube B, while the opposite end of tube is not confined but is slidable in the adjacent shell A, and is limited in the extent of its travel only by the flange g and the spring D.

In assembling the parts the arms h' of the yoke, which extend through the resultant openings at each side of the flange g, are compressible, and thus they pass into the adjacent tube B being guided therein by their curved ends h^2; and when released register the tongues and lugs in the cavities i and i^2.

It will be observed that an extensive superficial area is afforded for ornamentation; and that the contour of the chain is comparatively unbroken when the units are expanded. Furthermore, the operative parts are entirely concealed, and that the use of solder is avoided and all the parts may be composed of cut out and bent thin metal.

It is obvious that many changes in details

of construction within the spirit of my invention may be made. The description of the chain or bracelet has been given in detail merely for clearness of understanding, and no undue limitation should be understood therefrom.

I claim:—

1. In a chain or bracelet, a series of bodily-movable separable tubes, a series of shells each embracing a tube and overlapping the end of an adjacent tube, and means movable independently of one of said tubes for yieldingly connecting said tube and its overlapping shell with the adjacent tube.

2. In a chain or bracelet, a series of bodily-movable separable tubes, a series of shells each embracing a tube and overlapping the end of the adjacent tube, means movable independently of one of said tubes for yieldingly connecting said tube and its overlapping shell with the adjacent tube, said means being laterally expansible to engage means on the tube.

3. In a chain or bracelet, a series of bodily-movable separable tubes, a series of shells each embracing a tube and overlapping the end of the adjacent tube, and means movable independently of one of said tubes for yieldingly connecting said tube and its overlapping shell with the adjacent tube, said means being yieldable and laterally expansible to engage means on the tube.

4. In a chain or bracelet, a shell, a tube embraced by the shell and projecting beyond the shell, a compressible member in the tube engaging the shell, and a spring in said member.

5. In a chain or bracelet a series of shells, a tube in each shell surrounded by the shell and projecting loosely into the adjacent shell, a laterally compressible connecting member in each tube engaging the surrounding shell and one adjacent tube, and a spring in each tube abutting against said member and the other adjacent tube.

6. In a chain or bracelet, the combination of a series of tubes, a series of shells upon the tubes loosely overlapping adjacent tubes, connecting members comprising bodies in the tubes, and resilient arms upon the bodies extending into adjacent tubes engaging the latter tubes and the shells, and compression springs in the connecting members abutting against said bodies and the tubes.

7. In a chain or bracelet, the combination of a series of tubes provided with slots in one end, flanges on the opposite ends of the tubes, a series of shells upon the tubes slidably overlapping adjacent tubes, tongues on one end of the shells registering in the slots, U shaped connecting members in the tubes extending into adjacent tubes comprising bodies, arms upon the bodies, and means upon the arms for engaging the tongues, and springs between the arms pressing against the bodies and the flanges.

8. In a chain or bracelet, the combination of a series of tubes provided with slots in one end, lugs upon the same ends, flanges on the opposite ends of the tubes, a series of shells upon the tubes slidably overlapping adjacent tubes, tongues upon one end of the shells registering in the slots, connecting members in the tubes extending into adjacent tubes comprising bodies, and arms upon the bodies, said arms being provided with cavities adapted to receive the tongues and lugs, and springs between the arms pressing against the bodies and the flanges.

In testimony whereof I have affixed my signature in presence of two witnesses.

CLIFFORD G. KING.

Witnesses:
CHARLES S. JENCKES,
HORATIO E. BELLOWS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."