(No Model.)

S. COTTLE.

BRACELET.

No. 391,883. Patented Oct. 30, 1888.

Fig. 2.

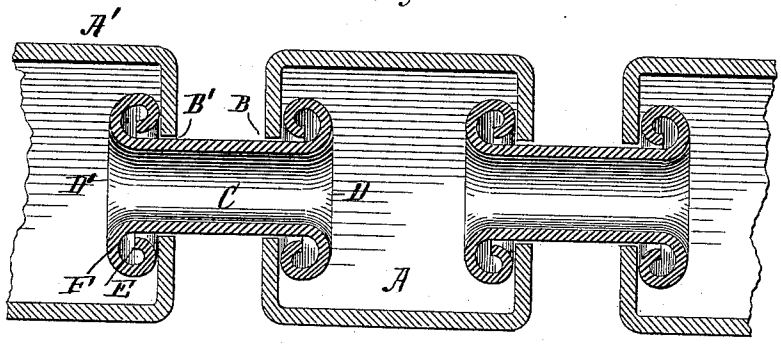


Fig. 1.

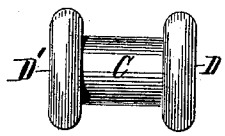


Fig. 3.

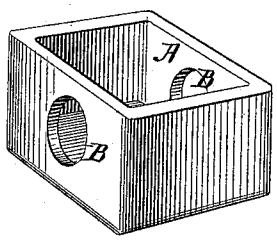


Fig. 4.

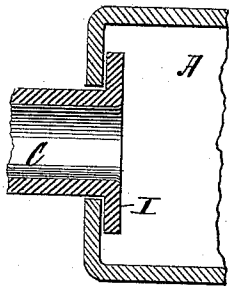


Fig. 5.

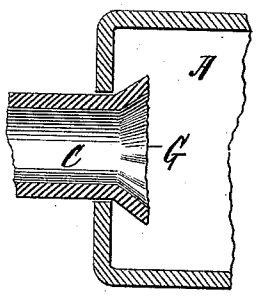
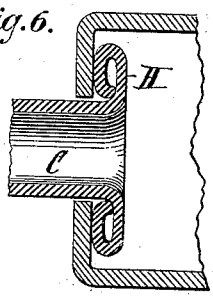


Fig. 6.



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UNITED STATES PATENT OFFICE.

SHUBAEL COTTLE, OF NEW YORK, N. Y.

BRACELET.

SPECIFICATION forming part of Letters Patent No. 391,883, dated October 30, 1888.

Application filed June 15, 1888. Serial No. 277,226. (No model.)

To all whom it may concern:

Be it known that I, SHUBAEL COTTLE, of the city, county, and State of New York, have invented a new and useful Improvement in Bracelets, of which the following is a specification.

My invention relates to a flexible bracelet formed of a series of connected beads or boxes; and it consists more particularly in the device hereinafter described, whereby said beads or boxes are fastened together.

In Letters Patent No. 311,722, granted to me February 3, 1885, I have described a bracelet likewise formed of a series of connected beads or boxes, which are permanently but loosely connected by means of short tubes having heads or flanged ends, which engage shoulders or upturned flanges of the said boxes or beads. Said tubes are hollow and through them passes a continuous spiral spring, which tends always to draw said beads or boxes together, and which also resists the strain applied to the bracelet when the same is extended. The heads or flanged ends of the connecting-tubes in my prior invention are shown simply as bent-over flanges, which, when a spring is employed, as aforesaid, I find to be practically useful.

In my present device I do away with the continuous spiral spring, and I construct the ends of the connecting-tubes in a certain specific manner. I thus materially simplify and reduce the cost of manufacture of the bracelet, and I also, by reason of the conformation of the ends of the tubes, secure the same in the beads or boxes much more strongly, and, in fact, so that they cannot be pulled out under any strain short of one which will break them.

In the accompanying drawings, Figure 1 is a side view of one of the connecting-tubes. Fig. 2 is a longitudinal section of a portion of my bracelet through both boxes and tubes. Fig. 3 is a perspective view of one of the boxes. Figs. 4 and 5 are sectional views showing the effect of pulling-strain upon the end of a connecting-tube when the flange is formed by a simple bend. Fig. 6 shows the effect of similar strain when the end of the tube is formed in accordance with my present invention.

Similar letters of reference indicate like parts.

A represents one of the boxes, several of which are joined together, as hereinafter described, in order to form the bracelet. This box may be of thin metal, and may be ornamented in any desired manner. So, also, its form may be modified, so that it may be round or oval or of any other desired box shape. In opposite sides of the box A are made openings B for the reception of the connecting-tubes C. These tubes are also made of thin metal and are preferably cylindrical in form, as shown. They may be, however, of rectangular or polygonal cross-section. The ends D of the tubes C are not simply bent once to form a flange, as indicated at I in Fig. 4, but are curled over, as shown in Fig. 2, and preferably so that the face of the bent-over extremity, as E, may come parallel and opposite to the under side of the bent-over part, as F. It is essential, however, that the ends D should be bent over double.

One extremity of a tube, C, being curled over, as described, the tube is inserted from the inside of a box, A, through an aperture, B, therein. The next box, A′, Fig. 2, is then placed upon the tube, which is inserted from the outside through an aperture, B′, is said box, and then the other end, D′, of the tube C is curled over. In this way the curled-over ends D D′ of the tube C are within the boxes A A′, and, as the apertures B B′ are made sufficiently large to allow the tube freely to slide in them, but not large enough to allow the curled-over ends of the said tube to pass through them, it results that said boxes thus become loosely but permanently fastened together by the tube; or, conversely, the boxes while connected by the tube may slide freely upon the tube to the extent of its length.

In the bracelet described in my prior patent, No. 311,722 the spring therein shown expanded when the boxes were drawn asunder to the length of the tubes and took up considerable of the strain.

In my present device, wherein the spring is entirely omitted, all the strain due to the drawing asunder of the boxes comes upon the flanged extremities of the tubes. Now, if the tube ends are simply flanged over, as indicated in Fig. 4 at I, and likewise in my prior patent,

I find that the effect of this strain after a short time is to flatten out the flange, as indicated at G in Fig. 5, and as a consequence the tube either becomes wedged in the opening in the box A or else is pulled entirely out of the box. In order to prevent this, I curl over the ends D of the tube in the manner described with the result indicated at H, Fig. 6. Here any pulling strain on the tube simply tends to flatten the curled-over extremity or to force its parts into closer contact. The result is to increase the diameter of the head or flange thus formed, so that it is practically impossible without actually rupturing the metal to pull the tube out of the box.

I claim—

A bracelet containing a pair of hollow boxes, A A′, and a tube, C, passing loosely through an aperture, B, in the side of each of said boxes, the ends of said tube having the curled-over enlargements D D′, substantially as described.

SHUBAEL COTTLE.

Witnesses:

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