METHOD OF MAKING BRACELET CHAINS

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4 Claims. (Cl. 69—35)

1. This invention relates to a method of making a flexible bracelet chain comprising a series of interconnected links.

One of the objects of this invention is to provide a simple, practical and durable, flexible bracelet chain. Another object is to provide a bracelet chain of the above character which may be constructed of inexpensive material with a minimum of labor. Another object is to provide a bracelet chain of the above character which may be assembled by a machine operation. Another object is to provide a bracelet chain of the above character which will be attractive and graceful in appearance. Another object is to provide a method of making a flexible bracelet chain in which the individual parts may be quickly assembled into the final construction in a minimum number of operations. Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the several steps and relations and order of each of the same to one or more of the others, all as will be illustratively described herein, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings in which is shown one of the various possible embodiments of this invention:

Figure 1 is a fragmentary perspective view of a portion of the bracelet chain as assembled;

Figure 2 is an enlarged perspective view of a small section of the chain, shown in Figure 1;

Figure 3 is a fragmentary perspective view, partially exploded to show the first step in connecting a side link to a pair of connector links;

Figure 4 is a view similar to Figure 3, showing the next step in this assembly operation;

Figure 5 is a cross section of the parts as shown in Figure 4; and

Figure 6 is a cross section similar to Figure 5 but showing the parts after the assembly has been completed.

Similar reference characters refer to similar parts throughout the several views of the drawings.

As best seen in Figures 1 and 2, the bracelet chain comprises a series of oblong connector links, generally indicated at 16, arranged in staggered relationship and held assembled by a series of pairs of cross pins, generally indicated at 11. More particularly, the cross pins 11 are held in fixed pairs because they are secured to the oblong side links, generally indicated at 12.

Thus, a pair of cross pins 11 with the side links 12 secured thereto at opposite ends comprises a unitary cross link, generally indicated at 19, connected to adjacent links of similar construction by the connector links 10. Additionally, there are bands, generally indicated at 14 which extend about the pins 11 of each cross link 13. These bands 14 not only serve to add to the continuity of the appearance of the bracelet chain but also act to maintain the connector links 10 in properly spaced relationship. As will be described more fully hereinafter, there are metal inserts, generally indicated at 15, in each of said side links disposed between the end portions of the adjacent pins 11. The inserts 15 and the end portions of the pins 11 are preferably soldered in this relationship within the side links 12.

The connector links 10, the side links 12 and the bands 14 are identical in shape and dimensions and, consequently, both sides of the bracelet chain comprise a series of staggered oblong links that are equally spaced from each other to assure a regularity of appearance throughout the length of the bracelet chain. Furthermore, cross links 13 are pivotally connected to each other by the connector links 10 so that the bracelet chain has a desired flexibility throughout its length and may thereby assume the shape of the wrist of the wearer.

Inasmuch as the connector links 10, the side links 12 and the bands 14 are identical in shape and dimensions, they may be easily formed on a machine in an automatic operation. Conveniently, they are formed by bending sheet metal or wire of any shape into the desired shape and securing the ends of the metal by way of solder as indicated at 12a (Figure 2). The pins 11 are also of standard length and may thus be cut automatically, ready for the assembling operation.

To assemble the bracelet, the connector links 10, the side links 12 and the bands 14 are laid out in any suitable holding device so that they will be maintained in staggered relationship in the position they will assume in the completed bracelet. With these parts thus held in this position, the pins 11 may be inserted crosswise to assume the positions they occupy in the completed bracelet. Next, it is necessary to secure the ends of the pins 11 to the side links 12.

As best seen in Figure 3, the metal inserts 15 comprise a metal plate 16 with a solder coating 17 on one surface thereof. The inserts 15 also have formed along their opposite edges teeth a, b and c. These inserts 15 are forced between the
end portions of the pins 11 into the position shown in Figure 4.

When the inserts come to rest in the desired position as shown in Figure 4, the teeth a and c thereof abut against the sides of the pins 11, but the center teeth b are bent upwardly to fit against the center portion of the pins 11, as will be clear from a consideration of Figure 5. After all of the inserts 15 are in place, the assembled bracelet chain may be heated in any well known manner so that the solder on the coating 17 runs freely about the end portions of the pin. Thus, the solder not only seals the inserts 15 in position but also runs about between the surfaces of the pins and the inner surfaces of the side links 12. Upon cooling, as seen in Figures 2 and 6, the solder is interposed between the engaging surfaces of the side links 12, the pins 11 and the inserts 15 to hold these parts rigidly. The completely assembled bracelet chain may finally be coated or plated with any desired metal, for example, a gold plating operation. This plating operation will form a finished surface to cover up all solder connections and the ends of the pins 11.

The finished bracelet chain is unusually sturdy in construction and yet may be easily assembled. In fact, this method of assembly is conducive to the use of machine processes throughout so that the bracelet chain may be manufactured inexpensively. Nevertheless, in spite of the simplicity of its parts and ease of its manufacture, it provides a graceful and pleasing appearance.

It will thus be seen that the various objects hereinabove referred to have been successfully accomplished in a practical manner.

As many possible embodiments may be made of the mechanical features of the above invention and as the art herein described might be varied in various parts, all without departing from the scope of the invention, it is to be understood that all matter hereinbefore set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

I claim:

1. The herein described art of forming a link in a bracelet chain comprising fitting a pair of oblong links over the opposite ends of a pair of pins so that the ends of the links with space between the pins, forcing metal inserts having a coating of solder thereon between said pins at the opposite ends thereof and heating said links to form a solder connection between the parts.

2. The herein described art of forming a bracelet chain, comprising, connecting a series of pairs of pins by a plurality of oblong links, fitting a pair of oblong links on the opposite ends of each pair of pins so that the ends of the pins lie adjacent the ends of the links with space between the pins, forcing metal inserts having a coating of solder thereon between said pins at the opposite ends thereof and heating said links to form a solder connection between the parts.

3. The herein described art of forming a bracelet chain, comprising, connecting a series of pairs of pins by a plurality of oblong links arranged in a longitudinally staggered relationship, fitting a pair of oblong links over the opposite ends of each pair of pins so that the ends of the pins lie adjacent the ends of the links with space between the pins, forcing metal inserts having a coating of solder thereon between said pins at the opposite ends thereof and heating said links to form a solder connection between the parts.

4. The herein described art of forming a link for use in a bracelet chain, which includes, connecting the ends of two pins to the sides of an oblong link by forcing between said pins a metal insert having a solder coating and a plurality of teeth at its opposite ends adjacent said pins so that the side teeth rest against each pin and the middle teeth are bent at an angle thereto, and heating said insert so that the solder coating flows into the space between said pins and said middle teeth.

EUGEN PRESTINARI.

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