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2,893,201

LINK MADE UP OF TWO PARTS JOINED BY AN UPSETTING OPERATION

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Fig. 1.

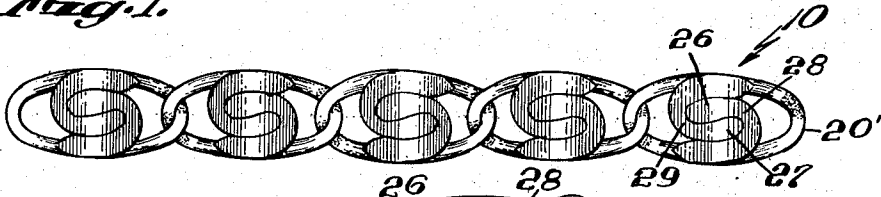


Fig. 2.

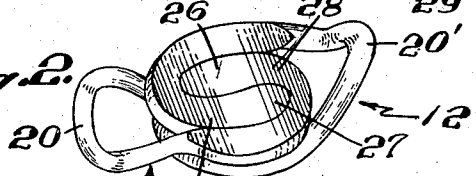


Fig. 3.

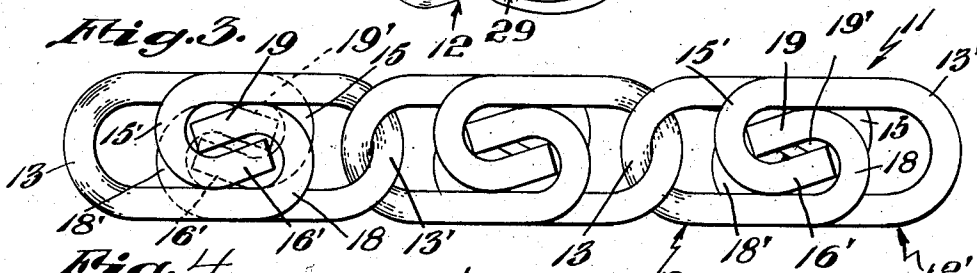


Fig. 4.

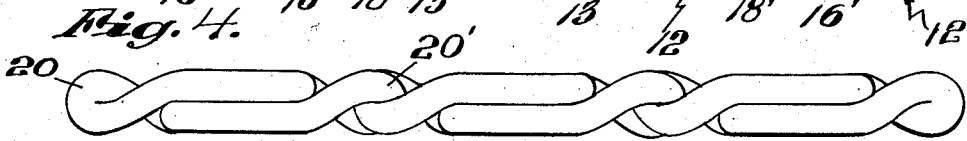


Fig. 5.

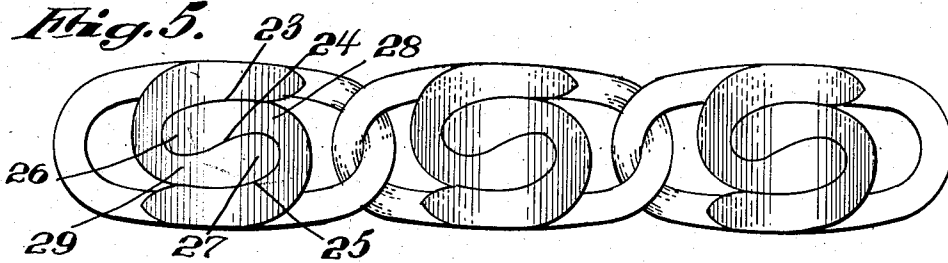


Fig. 7.

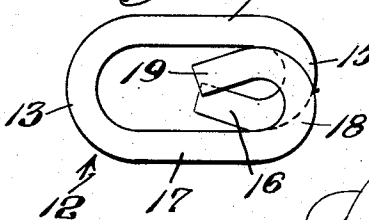


Fig. 6.

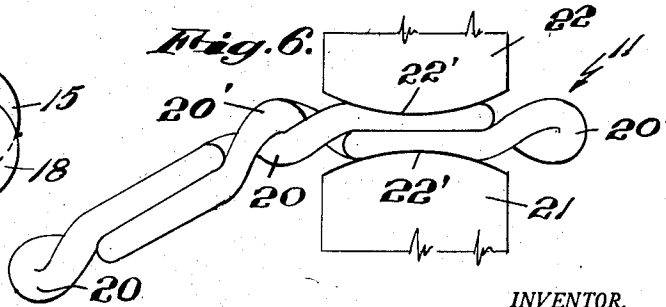


Fig. 8.



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**LINK MADE UP OF TWO PARTS JOINED BY AN UPSETTING OPERATION**

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Application October 17, 1956, Serial No. 616,437

4 Claims. (Cl. 59—80)

This invention relates to an ornamental chain of a type which is worn on the person.

Heretofore, an ornamental chain of the type here referred to had each of its links made of wire with the ends of the wire forming a center portion practically filling the links between the connected end. The links are wider than their thickness; and in order that the chain might lay flat, the links were curbed or had the end portions of the loops twisted for this purpose. In some cases, it was thought desirable to flatten the links; and to do this the links were either rolled or struck in a swedging machine in such a way that not only was the center portion of the links flattened, but also the end connecting curbed portions were flattened, and this flattening of the end portions would so distort the curbing that the links would not hang straight when suspended.

One of the objects of this invention is to provide a chain which will hang straight when suspended.

Another object of this invention is to flatten the center portions of the links without distorting the curbed end and connecting portions.

Another object of the invention is to arch the filled-in center portions so as to provide some convexity on the surface and thus enhance the reflected light therefrom and provide highlights.

Another object of the invention is to form a firmer and stronger link than heretofore.

With these and other objects in view, the invention consists of certain novel features of construction as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a top plan view of a series of links constructed in accordance with this invention;

Figure 2 is a perspective view of one of these links on a larger scale;

Figure 3 is a top plan view of a series of links, each of which is formed of round wire in the initial formation by a machine;

Figure 4 is a side elevation of the links shown in Figure 3;

Figure 5 is a top plan view of the links of Figures 3 and 4 having been struck in the center portion;

Figure 6 is a side elevation of one of the links shown in Figure 5 with the anvil and hammer shown in striking relation on the link for the flattening or deforming of the center portion thereof;

Figure 7 is a plan view of one of the two parts of a link of Figure 3; and

Figure 8 is a sectional view through one of the links of the chain shown in Figure 5.

With reference to the drawings, 10 designates a length of chain comprised of five links as shown in this figure each of identical construction, the same being formed by a series of steps performed by machine operations.

In Figure 3 I show a link designated generally 11 formed of two identical parts 12 as shown in Figure 7. These parts 12 each comprise a U-shaped end portion 13

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with one leg 14 bent as at 15 to dispose its end portion 16 in a hook shape, while its other leg 17 is bent as at 18 to provide a portion 19 also in hook shape. The hook portion 18, 19 is superimposed upon the hook portion 15, 16. The part 12 as just described is combined with a part now designated 12' as shown in Figure 3 which is of identical construction to that just described and designated 12, except it is disposed in opposite relation so that its U portion 13' has its arched end in the opposite direction from that of the arched U portion 13 of the part 12 and is turned over so that the hooks 15', 16' will be uppermost and will interlock with the hook 18, 19 as seen in Figure 3, and the hooks 18', 19' will interlock with the hooks 15, 16 which is somewhat hidden in Figure 3.

The wire which forms these link parts is shown as round in cross section and will be spaced somewhat along the interlocking hook portions which fills in the center portion of the loop having the U-shaped ends 13 and 13' with the legs extending therefrom. In order that this chain which is of a width greater than its thickness, as may be seen from a comparison of Figures 3 and 4, may lie flat or hang evenly when suspended, I curb or twist the portions 13 and 13' as shown at 20 and 20' in Figure 4 which causes this chain to hang evenly when suspended.

It is desirable that the filled-in center portion be further embellished, and I have caused this center portion to be struck in such a way that the center portion only is deformed. This may be accomplished as shown in Figure 6 by supporting each chain link individually in its connected relation in the chain on an anvil 21 striking the same with a hammer 22.

The anvil and hammer are of such a dimension lengthwise of the chain that they will not touch the curbed end portions 20 and 20' as shown in Figure 6. The shaping is also such that there will be a convex surface 22' formed on each side of the chain; and as the stock is flattened, the spaces between the hook ends 16' and 19 or 15' and 18 will be filled in as shown by the abutting edges 23, 24 and 25 in Figure 5. At the same time, the end portions 26 and 27 will be broadened to be larger than the neck portions 28 and 29 to provide a good lock of these end portions one with the other. The convexity of the surface 22' also serves to present highly ornamental highlights and a reflecting surface which is exceedingly attractive.

With the chain curbed as shown in Figure 4, even in the round wire the links will not pull apart because the curbing prevents the hooked ends from sliding one on the other. However, by reason of the flattening of these hooks as shown in Figure 5 so as to provide the enlarged ends an interlock of the ends is provided and a much stronger chain and the curbing need not be relied upon for preventing the attached parts 12 and 12' of a link from separating.

In order to draw a chain as shown in Figure 3 through a machine, I provide a feed which will draw the chain between the anvil 21 and the hammer 22 step by step, placing a link upon the anvil at each feeding step after which the hammer descends to shape the link as above described. Feeding operations may be by means of a hook which engages one of the links and moves it the length of one of the links of the chain forwardly or in any other desired manner of feeding.

I claim:

1. A chain having links formed of two U-shaped wire portions with the legs of each of said portions extending in a lengthwise direction toward each other and in overlapping superimposed relation, each leg of each U portion being doubled back upon itself in hook form with the hooks of the legs of one portion interlocking in tight

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engagement with the hooks of the other of said U portion, the wire at the bight of each of said U portions being uniform in cross section and curved and the hooks at the mid portion of the link being flattened in a tight mutual interlock.

2. A chain as in claim 1 wherein said flattened portions are in contact throughout their length.

3. A chain as in claim 1 wherein said flattened area is concave.

4. A chain as in claim 1 wherein said wire of uniform cross section is round.

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