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DRAWINGS ATTACHED.

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COMPLETE SPECIFICATION.

Improvements in Chains.

We, GAY FRÈRES S.A., a Corporation organized under the laws of the Confederation of Switzerland, of 12 rue des Glacis-de-Rive, Geneva, Switzerland, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention has for its object a chain, which may constitute a bracelet, or a collar for example and is formed of rows of hinged links of generally rectangular shape and which is characterized in that it comprises a series of elements each formed of a rectangular metallic frame two opposite sides of which have been folded over each other, each of said elements extending over the whole width of the chain, with their part thus folded disposed transversely relative to the length of the chain, and each forming, on the one hand, at least two links of a first kind, and, on the other hand, through parts of their transverse sides, at least one pair of connecting arms rigidly joining the said links one with the other, and in that it comprises a series of links of a second kind, each joining two of said connecting arms belonging to two successive elements, the said arms forming pivots for the links of the second kind.

The accompanying drawing shows, by way of example, one embodiment of the chain object of the invention, when the same constitutes a bracelet.

Fig. 1 is a plan view of one of the elements before shaping.

Fig. 2 is a sectional view along 2—2 of Fig. 1.

Figs. 3, 5, and 7 are views similar to Fig. 1 showing the element in three successive phases of shaping.

Figs. 4, 6, and 8 are, respectively, sectional views along 4—4 of Fig. 3, 6—6 of Fig. 5, and 8—8 of Fig. 7.

Fig. 9 is a side view of a second bracelet element before shaping.

Fig. 10 is a plan view of a piece of a bracelet.

Fig. 11 is a longitudinal sectional view of the bracelet along 11—11 of Fig. 10.

The bracelet shown in Figs. 10 and 11 is formed of five rows of links 1, 2, 3, 4, and 5, all having a general rectangular shape. The said links are connected by hinges, as will be described hereafter.

The rows 1, 3, and 5 are formed by means of a series of elements obtained as will be described with reference to Figs. 1 to 8.

As regards the rows 2 and 4, they are formed of more simple elements, shown by 6 in Fig. 11 and which are each obtained from a piece 7 such as shown in Fig. 9.

In order to produce the elements forming the rows 1, 3, and 5, one starts with a piece forming a rectangular metallic frame 8 having two longitudinal edges 9, 10 of the same width and two narrower transverse edges 11, 12. A middle arm 13 connects, in this example, the transverse edges 11 and 12.

The finished element is visible in Figs. 7 and 8 and, in order to obtain the same, one proceeds in the following manner:—

One starts by folding over each other, a first time through 180°, the opposed transverse sides 11 and 12, as shown in Figs. 3 and 4. Then one again folds the said edges through 90°, as shown in Figs. 5 and 6, after which one continues to fold to 180°

[*Price* 4*s.* 6*d.*]

in order to bring the longitudinal sides of the original frame 11 and 12 into the position twice folded over each other, shown in Figs. 7 and 8.

The elements shown in Figs. 7 and 8 extend over the whole width of the bracelet, as shown in Fig. 10. The folded parts 11 extend transversely relative to the length of the bracelet. As regards the parts 9, 10, and 13, they form three links of a first kind. The sides 11 and 12 of the original frame form connecting arms rigidly joining together the said links 9, 10, and 13.

These different elements according to Figs. 7 and 8, disposed parallel to each other, are connected two by two by links 6 of a second kind. It is these links 6 which form, as already explained, the rows 2 and 4. For the positioning of the said links 6, one takes U-shaped elements 7, one places them astride a part 11 of a link and a part 12 of the adjacent link, and one folds them to give them the shape visible in Fig. 11. Once thus placed, the said links 6 of the second kind each join two of the connecting arms 11, 12 belonging to two successive elements, the said arms forming hinged pivots for the links 6.

It will be seen that the chain described is of extremely simple manufacture, avoiding the mounting, necessary up to the present, of spindles for hinging the links.

According to a modification in the case of a chain having only three rows of links, the middle limb 13 (Fig. 1) would be eliminated. If, on the contrary, a chain of seven rows of hinges is desired, one will provide not one middle limb 13 but two intermediate limbs which will form not one, but two intermediate rows of links of the first kind. There will then be a total of four rows of links of the first kind and three rows of links of the second kind.

According to another modification, the folding could be stopped at the phase shown in Figs. 3 and 4.

WHAT WE CLAIM IS:—

1. A chain formed of rows of hinged links of generally rectangular shape, characterized in that it comprises a series of elements each formed by a rectangular metallic frame two opposite sides of which have been folded over each other, the said elements extending over the whole width of the chain, with their parts thus folded disposed transversely relative to the length of the chain, and each forming, on the one hand, at least two links of a first kind and, on the other hand, through parts of their transverse sides, at least one pair of connecting arms rigidly joining the said links one with the other, and in that it comprises a series of links of a second kind, each joining two of said connecting arms belonging to two successive elements, the said arms forming pivots for the links of the second kind.

2. A chain according to Claim 1, characterized in that the above-mentioned frame has, before folding, two opposed sides the width of which is greater than that of the two other sides, the latter being those folded, whereas the two first form, after folding, two links of the first kind.

3. A chain according to Claim 1, characterized in that each of the above-mentioned elements has moreover at least one limb joining the folded sides and also forming a link of the first kind.

4. A chain according to Claim 1, characterized in that each of the transverse edges of the above-mentioned elements is folded twice over itself, the parts thus folded being thus brought to a contiguous position.

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