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ORNAMENTAL CHAIN

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The invention relates primarily to ornamental chains, especially suitable for use in the jewelry art in the construction of bracelets, rings, necklaces and the like.

5 The principal object of the invention is to provide a novel construction of chain in which the use of solder is obviated and which is capable of great longitudinal flexibility.

10 Another object of the invention is to produce a chain which is simple in construction and inexpensive to manufacture, and which is composed of a series of links which are so constructed as to enable them to be easily and quickly attached to or removed from the
15 chain.

To these ends the invention consists of the novel construction and arrangement of parts hereinafter described and more particularly set forth in the claims. In describing the invention in detail reference will be made to
20 the accompanying drawing, in which—

Figure 1 is a top plan view of a portion of my improved chain.

Figure 2 is a side elevation.

25 Figure 3 is a bottom elevation.

Figure 4 is an enlarged longitudinal central section showing the longitudinal flexibility of the links.

Figure 5 is a perspective view of a block link.

30 Figure 5a is a top plan view of a block link.

Figures 6 and 7 are detail views of the connecting link.

Figure 8 is a top plan view of a portion of a chain of modified construction.

35 Figure 9 is a perspective view of a modified form of block link in the chain shown in Fig. 8.

Figure 10 is a perspective view of the connecting link in the chain shown in Fig. 8.

40 Figure 11 is a central transverse section of the link shown in Fig. 10.

Referring to the drawing, my improved chain comprises a plurality of block links 10, each of which consists of a substantially
45 rectangular solid body portion, and a series of connecting links 11, each of which consists of a channel shaped member open at the top and having side portions 13 and 14 and bottom connecting portions 15 and 16, the latter
50 being spaced inwardly from the ends of the

link as shown more clearly in Fig. 7. Said sides 13 and 14 are thus connected at the bottom and spaced at the top. The sides 13 and 14 of the link 11 have pairs of aligned apertures 17, 17 and 18, 18. Each of the block links 10 is provided with pivot pins 19, 19 and 20, 20 as shown more clearly in Fig. 5. As shown more clearly in Figs. 1 and 4, each adjacent end of adjacent block links 10 overlaps the connecting link 11 to such an extent that the distance between the adjacent ends of adjacent block links is less than one-half of the length of the connecting link.

Said block link 10 is preferably stamped out of sheet metal with pairs of pivot pins 19, 19 and 20, 20 extending from opposite sides of said block, and each block may be provided with a central conical cavity 21 to receive a gem or other ornamentation for imparting to the completed chain the desired
70 ornamental appearance.

The connecting link 11 is preferably stamped out of sheet metal in the flat form illustrated in Fig. 6, after which the sides 13 and 14 are bent up along the dotted lines 13' and 14' to form the channel shaped link illustrated in Fig. 7.

In assembling the links, two adjacent block links 10 are connected by a connecting link 11, the pivot pins 19, 19 of one block link being mounted in the aligned apertures 18, 18 and the pivot pins 20, 20 of another block link being mounted in the aligned apertures 17, 17 of said connecting link 11. Thus, there is provided a pivotal connection between adjacent links above the bottom of the channel-shaped links. After the links are assembled the exposed side portions 13 and 14 and the exposed ends of the pivot pins 19, 19 and 20, 20 may be treated in any suitable way to present a smooth, finished appearance.

With the above construction it will be seen that while the block links will be held close together when the chain lies flat, as shown in Figs. 1 and 2, yet said links are capable of considerable movement with relation to each other, as shown in Fig. 4, thereby giving to the chain an extreme amount of flexibility, which is very desirable in this class of chains. By reason of the fact that the bottom portions
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15, 16 of the connecting links are spaced from the ends of said links, adjacent links comprising a block link and a channel-shaped link are permitted a relative angular movement in one direction, and since the pivotal connection is located above the bottom of the channel-shaped link, said adjacent links are permitted a relative angular movement in the other direction. Thus, the chain has the necessary flexibility in one direction and great flexibility in the other direction whereby the chain is flexible in both directions. Both the block links 10 and the connecting links 11 may be made by striking out the same in solid pieces or forming the same in shell construction, the latter being preferable when the chain is made of precious metal. While as shown in Fig. 5 the block links 10 are provided with a cavity for a gem or other ornamentation, it will be understood that this gem cavity may be omitted and the block links left plain or otherwise ornamented as may be desired. Similarly, connecting links 11 may be plain or ornamented in any suitable way. While I have shown two bottom connecting portions 15 and 16 in the link 11, it will be obvious that there may be only one bottom portion or there may be more than two. It will also be understood that the links may be of any suitable shape or design, the specific shapes of the links 10 and 11, as shown in Figs. 5 and 7, being illustrative of one embodiment of the invention.

A modified form of construction constituting another embodiment of the invention is illustrated in Figs. 8 to 11. As here shown, the construction is substantially the same as illustrated in Figs. 1 to 7, except that the block links 10¹ are diamond shaped and the connecting links 11¹ are provided with upper lateral extensions 22, 22, the links as thus shaped cooperating to form the ornamental outline illustrated in Fig. 8. The lateral extensions 22, 22 may be provided with conical cavities 23 to receive gems or other ornamentations. Otherwise the construction of the links 10¹ and 11¹ are substantially the same as the links 10 and 11 as above described and the corresponding parts of said links 10¹ and 11¹ are designated by the same numerals distinguished by the prime character.

While I have shown two embodiments of the invention it will be understood that the invention may have other embodiments as will readily occur to those skilled in the art in view of the present disclosure, it being understood that certain changes in the construction and arrangement of the parts may be made without departing from the present invention. I therefore do not wish to be limited to the exact construction shown, except as required by the appended claims and the prior art.

Having thus described my invention what

I claim and desire to secure by Letters Patent of the United States is:

1. A flexible ornamental chain comprising a plurality of block links and a connecting link between two block links, said connecting link comprising two side portions and a connecting bottom portion spaced from the ends of said side portions, said side portions having two spaced pairs of aligned apertures, each of said block links having two spaced pairs of laterally extending pivot pins on opposite sides thereof, one pair of said pins of one block link mounted in one pair of apertures in said connecting link, and one pair of said pins on another block link mounted in the other pair of apertures in said connecting link, each adjacent end of adjacent block links overlapping the connecting link to such an extent that the distance between the adjacent ends of adjacent block links is less than one-half of the length of the connecting link.

2. A flexible ornamental chain comprising a series of links, adjacent links comprising a block link and an open top channel-shaped link, and pivotal connections between adjacent links above the bottom of the channel-shaped link, said pivotal connections comprising two spaced pairs of aligned apertures in said channel-shaped link and aligned pivot pins on opposite sides of the block links at both ends thereof mounted in said apertures, the bottom of the channel-shaped link being spaced from the ends thereof to permit relative angular movement of adjacent links in one direction, the location of said pivotal connection above the bottom of the channel-shaped link permitting relative angular movement of adjacent links in the opposite direction whereby said chain is flexible in two directions, each adjacent end of adjacent block links overlapping the channel-shaped link to such an extent that the distance between the adjacent ends of adjacent block links is less than one-half of the length of the connecting link.

3. A flexible ornamental chain comprising a plurality of block links and a connecting link between two block links, said connecting link comprising two side portions and a connecting bottom portion spaced from the ends of said side portions, said side portions having two spaced pairs of aligned apertures at both ends thereof, said block links having pairs of laterally extending pivot pins at both ends thereof, one pair of said pins at one end of one block link mounted in one pair of apertures in said connecting link, and one pair of said pins on another block link mounted in the other pair of apertures in said connecting link, each adjacent end of adjacent block links overlapping the connecting link to such an extent that the distance between the adjacent ends of adjacent block links is less than one-half of the length of the

connecting link, said block links having reduced end portions positioned between the sides of said connecting link.

4. A flexible ornamental chain comprising a series of links, adjacent links comprising a block link and an open top channel-shaped link, and pivotal connections between adjacent links above the bottom of the channel-shaped link, said pivotal connections comprising aligned apertures at both ends of said channel-shaped links and aligned pivot pins on opposite sides of the block links at both ends thereof, mounted in said apertures, the bottom of the channel-shaped link being spaced from the ends thereof to permit relative angular movement of adjacent links in one direction, the location of said pivotal connection above the bottom of the channel-shaped link permitting relative angular movement of adjacent links in the opposite direction whereby said chain is flexible in two directions, each adjacent end of adjacent block links overlapping the channel-shaped link to such an extent that the distance between the adjacent ends of adjacent block links is less than one-half of the length of the connecting link, said block links having reduced end portions positioned within said channel-shaped link.

In testimony whereof I hereunto affix my signature.

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