Nov. 17, 1931. K. FASSNACHT ET AL 1,831,951

FLEXIBLE CHAIN

Filed Sept. 19, 1929

Fig. 1.

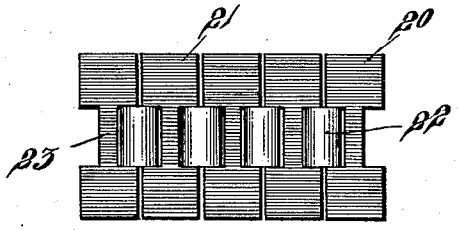
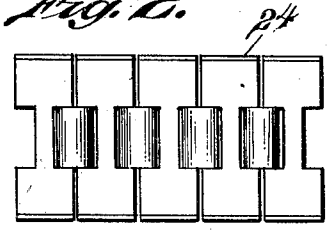


Fig. 2.



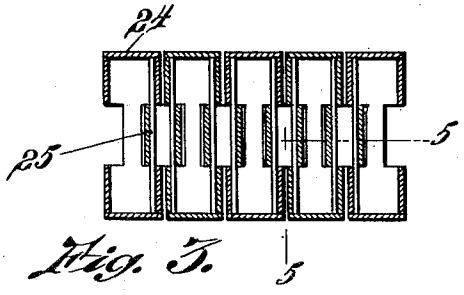


Fig. 3.

Fig. 4.



Fig. 5.



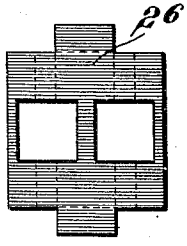


Fig. 7.

Fig. 8.

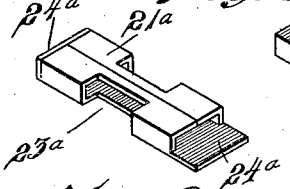


Fig. 6.

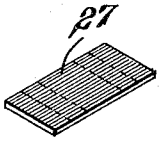


Fig. 9.

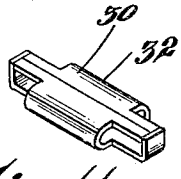


Fig. 11.

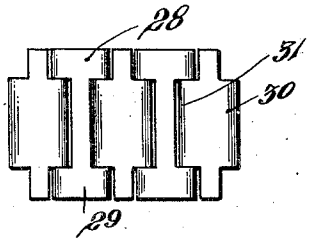


Fig. 10.

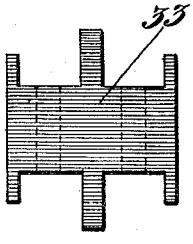


Fig. 12.

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UNITED STATES PATENT OFFICE

KARL FASSNACHT AND RICHARD GLOSS, OF PROVIDENCE, RHODE ISLAND, ASSIGNORS TO SPEIDEL CHAIN CO., OF PROVIDENCE, RHODE ISLAND, A FIRM COMPOSED OF FREDERIC SPEIDEL AND EUGEN SPEIDEL, BOTH OF PFORZHEIM, GERMANY

FLEXIBLE CHAIN

Application filed September 19, 1929. Serial No. 393,702.

Our present invention relates to the jewelry art and particularly pertains to chain constructions suitable for forming bracelet chains and the like.

One object of the invention is to form a flexible chain comprising relatively large thin link members.

Another object of the invention is to form a chain which utilizes a small number of parts designed for rapid machine production.

An additional object is to provide a chain construction requiring a minimum number of operations for assembly and repair.

With these and other objects and advantageous features in view, the invention consists of the novel construction and arrangement disclosed in the detailed description following, in conjunction with the accompanying drawings, and more particularly pointed out in the appended claim.

Referring to the drawings:

Fig. 1 is a top plan view of one form of chain construction;

Fig. 2 is a bottom plan view thereof;

Fig. 3 is a central vertical section thereof, the connecting pins being shown full;

Fig. 4 is a section through one of the links in the plane of one of the connecting pins;

Fig. 5 is a central section through two connected body links;

Fig. 6 is a perspective view of a body link formed from sheet metal;

Fig. 7 is a plan view of the blank therefor;

Fig. 8 is a perspective view of a connecting link formed from sheet metal;

Fig. 9 is a perspective view of the blank therefor;

Fig. 10 is a top plan view of a modified form of chain;

Fig. 11 is a perspective view of the modified connecting link; and

Fig. 12 is a plan view of the blank therefor.

It has been found desirable in the jewelry art to form flexible chains suitable for bracelets and the like of large links hingedly connected together, the links being thin to produce the effect of a thin, flat chain, and having sufficient surface to permit extensive ornamentation if desired. We have devised a simple construction for a chain of this type, utilizing flat, thin links which may be formed of tubular stock or from sheet metal, the completed chain comprising a small number of easily assembled and repaired parts; and the following is a detailed description of several forms of chain construction embodying the principles of our invention.

Referring to the drawings, 20 designates a flat chain formed of body links 21 and connecting links 22. These links may be of seamless tubular stock, each body link being sawed or cut to provide an opening 23 at each side thereof for receiving the connecting link 22, the ends being cut to leave integral end sections 24 which are folded to seal the ends of the body links. The body links are therefore of substantially H shape.

As shown in Figure 3, pins 25 are inserted through the body and the associated connecting links to lock the links together, one end section 24 of each link being first folded to close its end of the body link and facilitate the positioning of the associated pins, the other end section being folded after insertion of the pins to complete the sealing of the body link and to lock the pins in place.

If desirable, the chain may comprise links which are formed of sheet metal. A blank 26 such as shown in Figure 7 is stamped, preferably on a punch press, and is folded as shown in Figure 6 to form tubular body links 21*a* having side openings 23*a* and end sections 24*a*, as shown in Figure 6; the connecting links may also be formed from sheet metal blanks 27 such as shown in Figure 9, which are folded as shown in Figure 8 to form connecting links 22*a*. The procedure in constructing a chain using the links 21*a* and 22*a* is identical with the procedure when using the links 21 and 22.

A modified form of chain 28 is shown in Figure 10, formed of body links 29 and connecting links 30, the body links 29 being similar in general appearance to body links 21, but having elongated openings 31 for receiving the larger central portions 32 of the connecting links 30. Both the body links 29 and the connecting links 30 may, if desired, be formed of tubular stock, but are preferably formed of sheet metal, the body

links 29 being formed by bending blanks similar to blanks 26 into the general form shown in Figure 6, and the connecting links 30 being formed from blanks 33, as shown in Figure 12, and folded into the completed connecting links shown in Figure 11. The construction of the chain 28 is similar to the construction of chain 20, one end section of each body link remaining in unfolded position until pins 25 are inserted to lock the body and connecting links together, the unfolded end section then being folded to close and seal the body links and to lock the connecting pins in place.

Our improved chain construction therefore utilizes a small number of parts, each designed for rapid machine production, the assembly of these parts requiring a minimum number of operations; and the resulting chain is a strong, sturdy, attractive chain formed of large flat links which readily lend themselves to suitable ornamentation.

While we have described specific constructional forms of novel chains, desired changes in the arrangement and the proportions of the various parts may be made without departing from the spirit of the invention as defined in the appended claim.

We claim:

In a flexible chain, a plurality of hollow body links having top and bottom walls, each body link having an opening on each side thereof to form an H-shaped top wall and an H-shaped bottom wall, tubular connecting links having portions positioned in the contiguous openings of adjacent body links, pins in each body link extending through the associated connecting links, and means for preventing longitudinal movement of the pins.

In testimony whereof we affix our signatures.

KARL FASSNACHT.
RICHARD GLOSS.