Jan. 13, 1931. E. F. M. SPEIDEL 1,788,552

CHAIN

Filed March 6, 1930

Fig. 1.

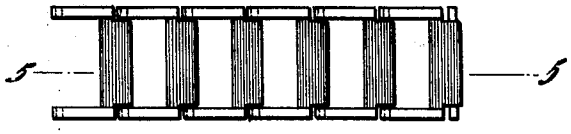


Fig. 2.

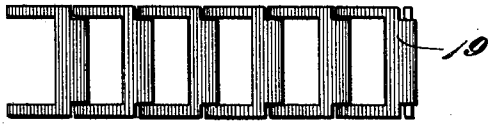


Fig. 3.

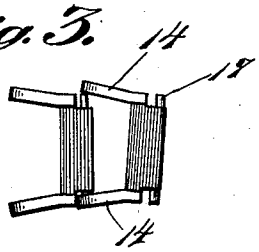


Fig. 4.



Fig. 5.



Fig. 9

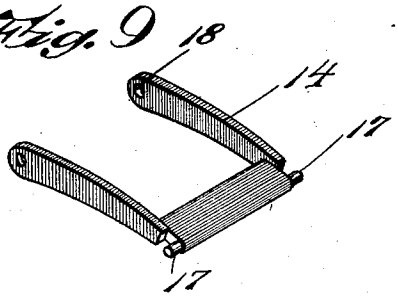


Fig. 6.

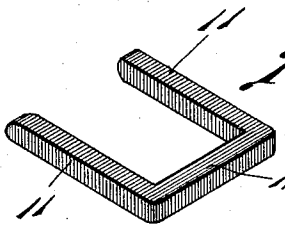


Fig. 8.

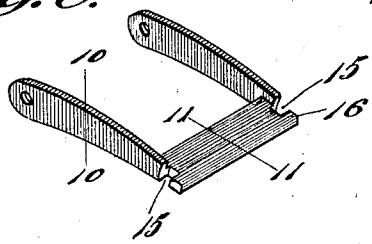


Fig. 7.

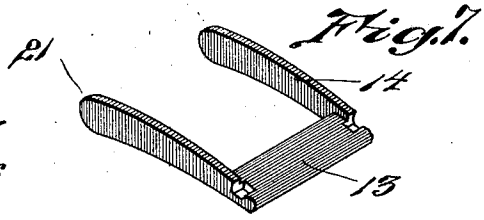




Fig. 10.



Fig. 11.

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UNITED STATES PATENT OFFICE

EDWIN F. M. SPEIDEL, OF EDGEWOOD, RHODE ISLAND

CHAIN

REISSUED

Application filed March 6, 1930. Serial No. 433,733.

This invention relates to a chain of the type used for bracelets, watch straps and the like; and has for its object to provide a construction, each of the links of which is identical, with parts of one link directly connecting with parts of the next link.

A further object of the invention is to provide a construction which may be of plated stock with its inner and outer exposed portions covered with the plate of the stock to enhance and cause it to maintain its appearance.

A further object of the invention is to provide the bracelet of open work construction, which may be formed by bending and swaging as distinguished from cutting pieces from sheet stock.

With these and other objects and advantageous features in view, the invention consists of a novel arrangement of parts more fully disclosed in the detailed description following, in conjunction with the accompanying drawings, and more particularly set forth in the appended claims.

In the drawings:

Fig. 1 is a top plan view of a portion of the chain;

Fig. 2 is a bottom view thereof;

Fig. 3 is a plan view of two links before being bent into finished position;

Fig. 4 is a side elevation of the chain;

Fig. 5 is a central section on the line 5—5 of Figure 1;

Fig. 6 is a perspective view of one of the links bent into U-form;

Fig. 7 is a perspective view illustrating a further operation of flattening the cross piece between the arms;

Fig. 8 is a perspective view showing the body or cross piece between the arms as notched;

Fig. 9 is a perspective view showing the studs or trunnions as formed thereon as being rounded and the holes pierced in the arms;

Figs. 10 and 11 are sections on the lines 10—10 and 11—11 respectively of Figure 8, showing the stock as of a plated construction.

It is found desirable to form a bracelet chain of such construction as to leave openings therethrough to permit the flesh to be exposed through the bracelet when worn upon the arm; and in order to provide such a construction which will be thin and comfortable upon the wrist and one which may have a plated surface on its exposed parts, I have bent a piece of plated wire into U-shape, displaced the stock by flattening the cross piece between the U arms and have then suitably notched this flattened portion to provide studs to extend into holes in the arms to hingedly connect the adjacent links together; and the following is a detailed description of the present embodiment of this invention illustrating the preferred means by which these advantageous results may be accomplished.

With reference to the drawings, Figure 6 illustrates a piece of wire folded into U-shape with arms 11 and a cross piece or bar 12. The bar 12 is flattened by swaging, as illustrated at 13, and at the same time the arms 14 are tapered, as shown in Figure 7. Notches 15 are cut in the body to leave studs 16 which are suitably rounded as at 17, to be received in openings 18 adjacent the ends of the tapered arms 14, as illustrated in Figure 9, whereby a chain is formed as illustrated in Figures 1 and 2.

In joining the links together, the arms 14 are at first diverging, as illustrated in Figure 3, which allows them to be snapped by the spring of the stock over the round pins 17, after which they are bent inwardly by suitable operations so as to be in line as illustrated in Figures 1 and 2. The flattening of the cross piece 12 to form the body 13 displaces the stock from the top of the link and leaves the bottom 19 smooth, as illustrated in Figure 2, in order not to form any sharp edges or uneven surface which might be uncomfortable to the arm when worn.

From the above construction and from Figures 10 and 11, it will be observed that I have preserved the outer plated surface 20 of the wire from which the link was formed with the only parts exposed being about the notches 15, which are substantially covered by the ends 18 of the wire extending there-

into. Each of the ends is, however, suitably curved as at 21 to allow for greater flexibility of the structure.

Various appearances of the chain so constructed may be obtained by variously shaping the cross bar 12 or the arms 11 to provide a variety of appearances.

While I have described certain construction forms which embody the principles of my invention, it is obvious that other desired changes in arrangement may be made within the spirit and the scope of the invention as defined in the appended claims.

I claim:

1. A chain comprising a series of links, each link generally U-shape and of a single piece of wire, the cross piece between the arms of the U being flattened to be generally in the plane of the chain and having notches cut laterally inwardly from its edge to leave studs, the opposite arms of the U having recesses to receive said studs and hingedly connect the links together.

2. A chain comprising a series of links, each link generally U-shape and of a single piece of wire, the cross piece between the arms of the U being flattened to be generally in the plane of the chain and having notches cut laterally inwardly from its edge and adjacent the end of the U to leave studs between the notch and the end thereof, the opposite arms of the U having recesses adjacent their ends to receive said studs and hingedly connect the links together.

3. A chain comprising a series of links, each link generally U-shape and of a single piece of wire, the cross piece between the arms of the U being flattened to be generally in the plane of the chain and having notches cut laterally inwardly from its edge to leave studs, the opposite arms of the U having recesses to receive said studs and hingedly connect the links together, said arms having their width lying in a plane at right angles to the plane of the flattened portion.

4. A chain comprising a series of links, each link generally U-shape and of a single piece of wire, the cross piece between the arms of the U being flattened to be generally in the plane of the chain and having notches cut laterally inwardly from its edge to leave studs, the opposite arms of the U having holes to receive said studs and hingedly connect the links together, said arms being tapered from their ends toward the cross piece.

5. A chain comprising a series of links, each link generally U-shape and of a single piece of wire, the cross piece between the arms of the U being flattened to be generally in the plane of the chain and having notches cut laterally inwardly from its edge to leave studs, the opposite arms of the U having holes to receive said studs and hingedly connect the links together, said arms being tapered from their ends toward the cross piece and curved longitudinally to conform to the shape of the arm.

In testimony whereof I affix my signature.

EDWIN F. M. SPEIDEL.