

July 29, 1947.

M. CHERNOW

2,424,924

JEWELRY CHAIN

Filed May 12, 1947

FIG. 1.

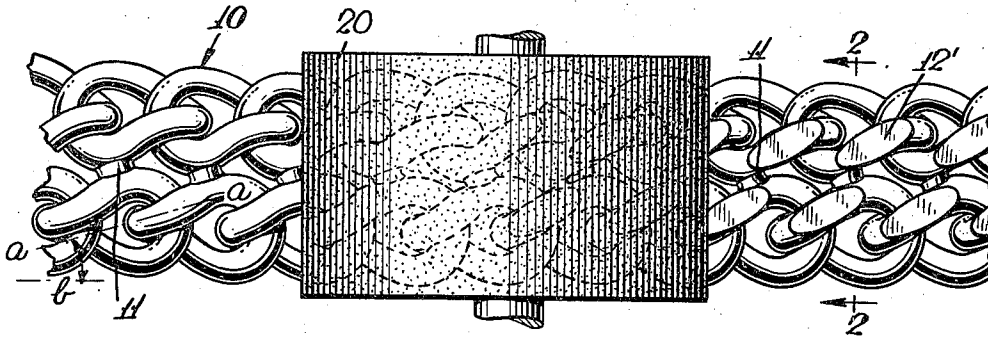


FIG. 2.

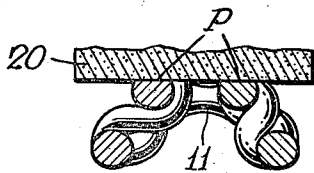


FIG. 4.

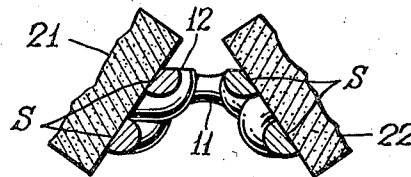


FIG. 3.

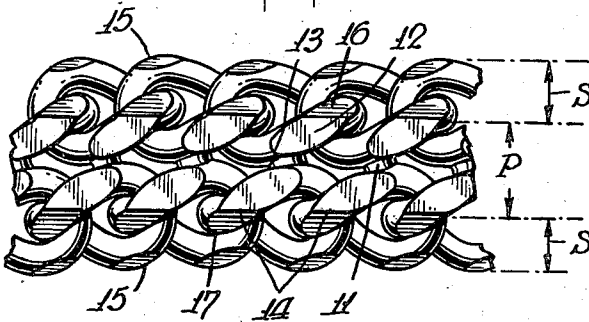


FIG. 5.

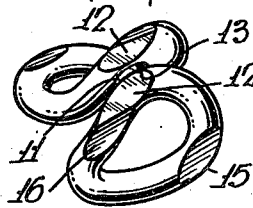


FIG. 7.

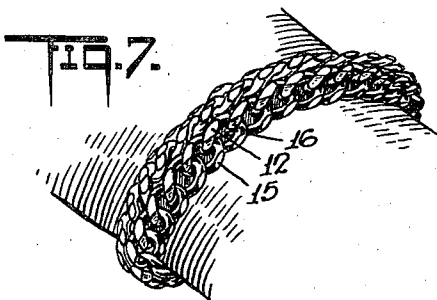
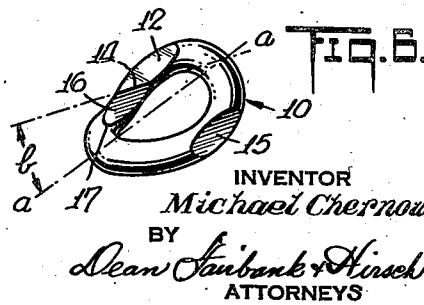


FIG. 6.



UNITED STATES PATENT OFFICE

2,424,924

JEWELRY CHAIN

Michael Chernow, New York, N. Y.

Application May 12, 1947, Serial No. 747,402

6 Claims. (Cl. 59—80)

1

The present invention is concerned with the art of jewelry, more especially that of jewelry chains.

It is among the objects of the invention to produce a jewelry chain of unusually rich, faceted effect, having the appearance of an expensive hand-wrought article with not less than three intriguingly interlinked chain lengths with attractive inter-related faceted surfaces, and from one important aspect of the invention, it is an object to produce this effect at low cost and by simple operation from a chain that is composed of only two chain lengths, the corresponding round-wire links of which are integrally connected in twin pairs.

In the accompanying drawings in which are shown one or more of various possible embodiments of the several features of the invention,

Fig. 1 is a plan view on an enlarged scale, illustrating one stage of the method of producing the chain according to one embodiment,

Fig. 2 is a transverse sectional view taken on line 2—2 of Fig. 1,

Fig. 3 is a plan view similar to Fig. 1 of a segment of the completed chain,

Fig. 4 is a view similar to Fig. 2 showing the method of forming the lateral facets,

Fig. 5 is a perspective view of one link pair of the chain, and

Fig. 6 is a view similar to Fig. 5 of one of the links of said pair, and

Fig. 7 is a perspective view showing the jewelry chain in use as a bracelet.

Referring now to the accompanying drawings, the chain length from which the article is made is composed of individual links 10 of generally round wire. Each link is generally elliptical in form, but the halves thereof at opposite sides of its major axis *a—*a** thereof are deflected out of a common plane, as indicated in Figs. 1 and 6 of the drawings, so that said major axes *a—*a** of the individual links extend at an acute angle as at *b*, Figs. 1 and 6, to the chain length made of a sequence of such links.

The chain is made up of two substantially identical chain lengths of the character described, disposed in side by side relation, as shown, the adjacent or inner halves of corresponding links of the two chain lengths being rigidly connected together into an integral structure, preferably by bridging connections, each bridging connection being a short neck 11 as shown, of thickness approximately equal to the diameter of the wire. Each link pair with its connecting bridge neck thus forms a truss-like structure, as suggested in

2

Figs. 2, 4 and 5. While each composite double link is thus rigid, the chain has the desired flexibility, since each rigid link pair is hingedly interlined with the neighboring link pairs. By reason of the fact that each link is twisted out of a common plane, as above described, and each link pair has a truss-like form, the line of the bridge necks 11 extends horizontally well above a horizontal surface on which the extended chain is laid.

The chain thus far described and best shown at the left of Fig. 1, has an appearance that is not particularly decorative as it is obvious to the naked eye that it consists merely of two lengths of chain with the corresponding links bonded together.

According to the invention the finished product has an entirely different appearance of far greater richness. As best shown in Fig. 3, the median portion of the chain length has sharply defined flat facets 12, one on each link, each with a rounded contour 13 flanking the contiguous bridge neck 11 and having straight edges 14 aligned lengthwise of the chain and defining the lateral edges of a median plateau *P* extending the length of the chain and in the common plane of which the various facets 12 are located, when the chain is laid out flat as above set forth.

Furthermore, the lateral portions of the entire length of the chain and which flank the plateau, also have facets, preferably two approximately diametrically opposed flat facets lying in a common plane on the exposed face of the outer half of each link. The latter pairs of facets aligned on the successive links at each side of the extended chain define slopes *S*. The facet 15 on each link which is nearest the lateral edge of the chain is generally elliptical as shown. The facet 16 of each link and which is nearest the plateau *P* is rounded in contour at its lower or outer part at 17 and has a straight edge 14 at its innermost part common with that of facet 12 at the lateral edge of the plateau. Thus facets 12 and 16 of each link have a common connecting straight edge 14 constituting the vertex of a dihedral angle defined between said facets, said facets 12 and 16 thus merging as a single dihedral facet.

Due to the merging contour of each bridge neck 11 with the facets 12 that flank it and the correlation therewith of the round portions of the link wire, the illusion of a chain length in addition to the two lengths that actually constitute the chain is produced, with the rich appearance of three decorative interlinked chain lengths. The facets are so related that those on each

3

bonded link pair (Figs. 3 and 5), making up the chain are staggered lengthwise of the chain, that is, those on one chain length are advanced somewhat with respect to those of its neighbor on the other, and therefore facets 12 of two consecutive link pairs are roughly near the vertices of a rhombus. The elliptical facets 15 near the lateral periphery of the chain are further staggered somewhat with respect to those on the plateau. Thus the suggestion of a woven cord is produced in which the facets with their greater light reflection appear to extend in helical or spiral relation relative to the length of the chain, thereby further enhancing the richness of appearance.

Obviously, gems or rhinestones might be set in some or all of the facets, if desired.

The chain might be made of individual generally elliptical links of generally round wire, such as shown in Fig. 6, prefabricated with its two halves deflected out of a common plane from its major axis *a-a* and with the facets 15 and 16 thereof in a common plane and substantially diametrically opposed and a third facet 12 at a dihedral angle to facet 16 with its vertex line 14 at an acute angle *b* relative to the major axis *a-a* of the link. Alternatively the chain might be made of prefabricated link pairs or twin links of elements similar to that just described but integrally connected, as shown in Fig. 5, as by bridging neck 11 and with the facets 12 of the companion links extending in a common plane, as shown.

It is greatly to be preferred, however, to produce the finished chain from the crude chain structure previously described and shown at the left in Fig. 1, by the simple operation of removing those portions of the wire of the individual links that protrude above a limiting horizontal plane along the entire length of the chain extended flat along the bed of a grinding or planing mill. A grinding or planing tool 20 passed over the chain thus produces the plateau P along the mid-section of the length of prefabricated chain. In this operation the roundness is taken off the exposed surface of the wire making up the links 10, thereby forming elliptical facets 12' which constitute the plane section of the rounded wire contour and which flank the bridge-necks 11, as shown.

Similarly the facets are formed on the lateral portions of the chain that flank the plateau P formed as above set forth on the prefabricated chain by grinding or planing tools 21 and 22, thereby to shear off the metal from the round wire at the outer half of each link as well as along the approximately diametrically opposed portion thereof. The outer facet thus formed is facet 15 of elliptical form, and the inner facet 16 thus concurrently formed intersects facet 12' previously formed as shown in Fig. 1 and thus defines the bounding straight edge 14 between facets 12 and 16 that constitutes the vertex of the dihedral angle therebetween.

By reason of the positioning of the links in the original duplex chain, as shown at the left of Fig. 1, the simple grinding or planing operation set forth upon the extending chain reliably results in the facets of the forms and geometrical arrangement and effect above described.

Obviously the three grinding operations may be performed in any desired order with the same final effect, and if desired, only the plateau facets may be formed.

As many changes could be made in the above construction and method and many apparently widely different embodiments of this invention

4

could be made without departing from the scope of the claims, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. As an article of jewelry, a link chain comprising a pair of substantially identical chain lengths, composed of links of generally round wire stock, each link of each length having a rigid bridging connection to the corresponding link of the companion length, each bridging connection being a short neck of diameter substantially the same as the diameter of the wire stock, each link being generally elliptical and displaced out of a common plane at opposite sides of its major axis, said axis extending obliquely of the length of the chain, each link pair with its connecting bridge neck thereby forming a truss-like structure and the line of bridges extending in a plane parallel to but spaced from that common to the lateral edges of the flatly supported and extended chain, the metal stock of the chain links having flat facets adjacent the line of bridges, said facets lying in a common plateau surface along the median portion of the length of the chain.

2. A jewelry chain composed of links of round wire, each link being generally elliptical in shape with its major axis inclined relative to the length of the chain, both halves of each link being deflected outwardly from said major axis out of a common plane, said chain comprising a pair of substantially identical lengths, each consisting of a plurality of links of the character described, each link of each length being rigidly connected to be integral with the corresponding link of the companion length, whereby the line of bridging connections of the horizontally supported extended chain extends in a plane parallel to but spaced from such plane of support, the various links of said chain presenting flat facets adjacent the bridging connections defining a horizontal plateau on the chain as thus supported.

3. A jewelry chain composed of links of round wire, each link being generally elliptical in form with its major axis inclined relative to the length of the chain and both halves of each link deflected outwardly from said major axis out of a common plane, said chain comprising a pair of identical lengths, each consisting of a plurality of links of the character described, the links of the two chain lengths being adjacent each other, and the corresponding links of the two lengths having bridging necks therebetween integrally connecting such pair of links in a rigid unitary structure, whereby the line of bridging connections joining the two lengths of chain extends in a plane parallel to but spaced above the plane of support of the extended chain when rested upon a horizontal surface, the individual links of the chain having facets flanking said bridging necks and lying in a common plane defining a plateau along the median section of the entire length of the chain, the individual links having each a pair of further flat facets along the portion thereof laterally of said plateau, said pair of further facets being substantially diametrically opposed on each link.

4. A jewelry chain having individual links of generally round wire, each link being generally elliptical with its major axis inclined relative to the length of the chain and the halves of said link deflected outwardly from a common plane at op-

5

posite sides of the major axis thereof, the major axis of said links extending at an angle relative to the length of the chain made up of said links, said chain comprising a pair of chain lengths with the adjacent portions of corresponding links of the two chain lengths rigidly connected together, each connection consisting of a short bridging neck of diameter of the order of that of the wire, the common line of said bridging necks being substantially above a horizontal support surface for the extended chain, the adjacent halves of the integrally connected link pairs of the chain having flat facets in a common plane defining a median plateau along the length of the chain and the outer or flanking part of said link pairs having further flat facets defining slopes inclined from the plateau and extending the entire length of the chain, the facets on the plateau and certain of the facets on said slopes defining a dihedral angle therebetween, and said two facets thus merging as a dihedral facet, the laterally outermost half of each link also having a facet substantially in the plane of the slope portion of the corresponding dihedral facet.

5. A jewelry chain length comprising a sequence of interconnected generally elliptical links of round wire, the halves of each link being deflected out of a common plane from the major axis thereof, the major axis of each link extending at an angle to the chain length, each link having a flat facet at corresponding portions of

6

the outer half thereof and having a further flat facet in a common plane therewith at the inner half of each of said links, each of said links having a third facet adjacent said latter facet and forming a dihedral angle with respect thereto, the length of the vertex of which extends longitudinally of the chain.

6. A round wire link for a link jewelry chain, said link being generally elliptical in form with its halves deflected out of a common plane from the major axis thereof, said link having flat facets in a common plane at opposite sides of the major axis thereof and having an additional facet defining a dihedral angle with respect to one of said facets.

MICHAEL CHERNOW.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
973,601	Widenmeyer	Oct. 25, 1910
577,440	Lutton	Feb. 23, 1879

OTHER REFERENCES

1946 abridged catalogue of L. C. Meyers Co., Fifth Ave., New York. (A copy of this catalogue can be found in the Design Division.)