

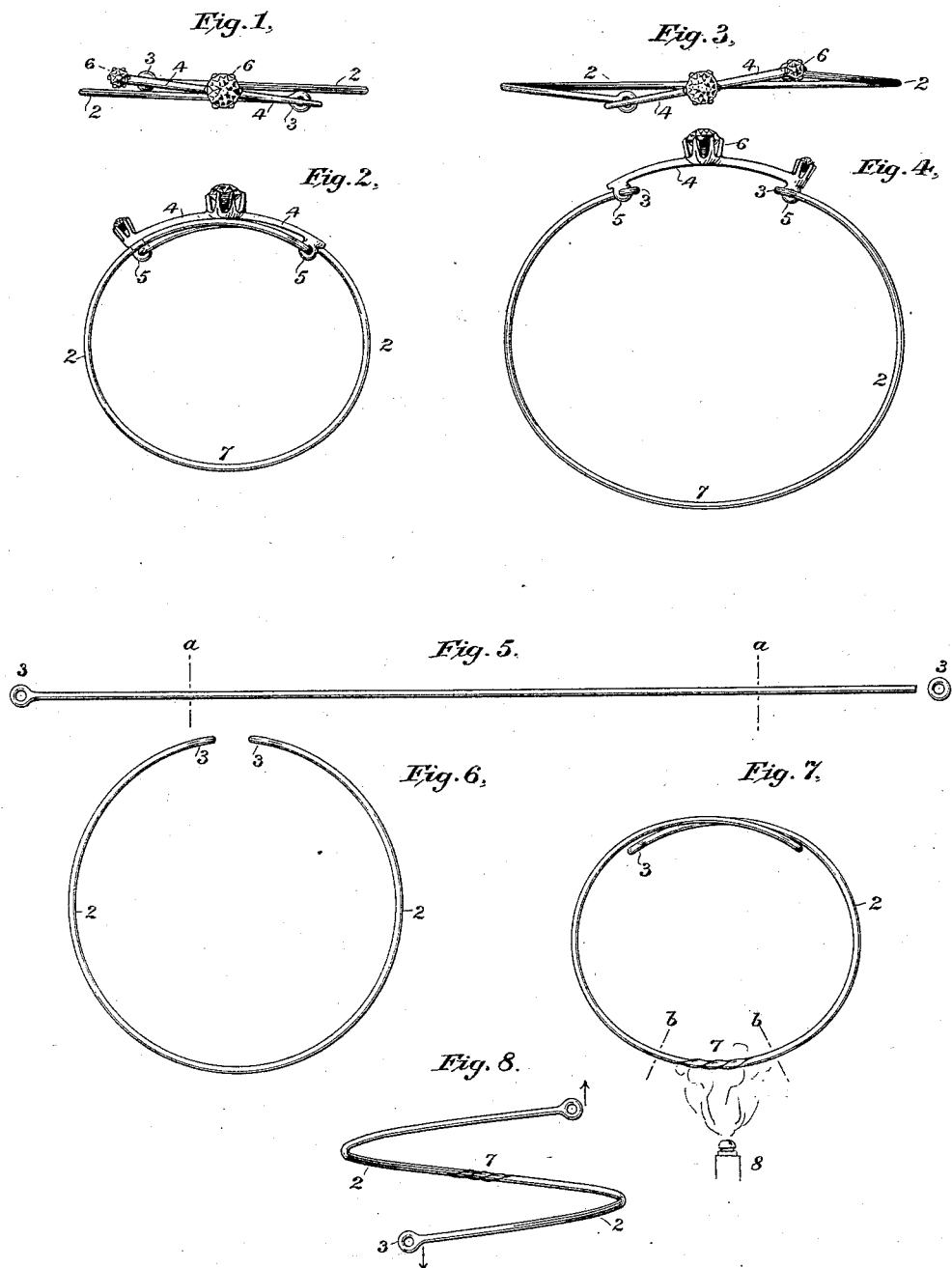
(No Model.)

F. HARTJE.

BRACELET AND METHOD OF MAKING THE SAME.

No. 423,246.

Patented Mar. 11, 1890.



Witnesses
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BRACELET AND METHOD OF MAKING THE SAME.

SPECIFICATION forming part of Letters Patent No. 423,246, dated March 11, 1890.

Application filed September 25, 1889. Serial No. 325,014. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK HARTJE, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Bracelets and Methods of Making the Same, of which the following is a specification.

My invention relates to a novel construction of bracelets and to a novel mode of making bracelets, both of which improvements will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a top view of a bracelet embodying my improvements, about full size. Fig. 2 is a side elevation of the same. Fig. 3 is a top view of the bracelet distended or opened out. Fig. 4 is a side view of the same. Fig. 5 is a plan view of the wire used in constructing the bracelet and showing the attachment of the pivot-rings. Fig. 6 is a side elevation of the wire bent into circular form. Fig. 7 is a similar view of the wire illustrating the ends overlapped and the mode of giving elasticity to the wire. Fig. 8 is a top view of the wire shown at Fig. 7 before overlapping the ends.

In the several views the same part will be found designated by the same numeral of reference.

2 represents the band or wrist-encircling portion of the bracelet, which band portion is made of wire. The ends of the band are provided with eyes 3 3.

4 designates a coupling or connecting bar having at each end an eye or ring 5, which is linked into one of the eyes 3 of the band. The bar 4 is preferably curved to correspond or nearly conform to the curvature of the band 2 and is adapted to be provided with any suitable or desired ornamentation. I have illustrated the same as bearing two diamond settings 6, but of course any other style or character of ornamentation may be employed instead.

One of the objects of the employment of the bar 4 is to adapt the bracelet to be variously and thickly ornamented, for with the base or support afforded by the bar 4 it will be observed that the bracelet may be as fully and differently ornamented as a lace-pin,

brooch, or other piece of jewelry. Without the bar 4 a thin wire bracelet, such as shown, like a wire finger-ring, is capable of a limited amount of embellishment only.

Another of the objects of employment of the bar 4 is to control the movements of the ends of the band in the opening of the band. The ends of the bar being coupled to the ends of the band when the overlapping ends of the band are pulled apart and then pulled laterally the bar operates to hold and guide the ends of the band and raise the same, and becomes practically a continuation of the band between its ends, thus producing a band of greater size or circumference, as seen at Figs. 3 and 4, whereby the bracelet may be readily slipped over the hand onto the wrist or arm of the wearer. The band is made or formed to possess a spring action, by which the parts are caused to normally assume the relationship seen at Figs. 1 and 2. In opening out the parts to the conditions shown at Figs. 3 and 4 the pull or force is exerted against the tension or resiliency residing in the wire band 2, and hence as soon as this pull or force is removed the inherent spring of the band operates to return the parts quickly and positively to their initial positions, thus automatically closing the bracelet and preventing any accidental detachment from the wrist of the wearer.

The mode of making the bracelet and giving to the band the elasticity or resiliency referred to will now be explained. I take a suitable length of straight, tempered, round wire, such as seen at Fig. 5, and to the ends of the same I solder the eyes 3 3. In said figure one eye 3 is shown as soldered and the other one as adapted to be. In soldering said eyes the temper of the wire at each end is usually destroyed down to about the point indicated by the dotted lines *a*, while that portion of the wire between the points *a a* remains hard and unaffected. After attaching the eyes 3 3 I then, with the aid of suitable tools, as pliers, work the wire round into curvilinear or band form, as illustrated at Fig. 6. I then proceed to give to the wire the peculiar spring quality required to close the bracelet and cause the parts to stand normally in the positions shown at Figs. 1 and 2. To do this I give the wire two twists, pref-

erably about the center of its length, as represented at 7, and cause the ends to overlap, as seen at Fig. 7. By giving to the wire the double twist 7 the ends thereof have a tendency to spring apart or recede laterally, as indicated by the arrows at Fig. 8; but by crossing or overlapping said ends, as illustrated at Fig. 7, this spring tendency or action is utilized to cause said end portions of the band to press forcibly against each other normally and to spring toward each other after having been separated and released.

I have found in making bracelets in this manner that in giving the twist 7 to the wire band there is great liability of breaking or rupturing the hardened wire. To avoid this difficulty I employ heat at the locality of the twist, and preferably during the twisting operation, for the purpose of removing a portion of the temper from the wire. This heat may be obtained from a blow-pipe or a burner, as 8, and may extend sensibly to the localities indicated by the dotted lines *b b* on each side of the portion to be twisted. When heat is thus applied, there is no liability whatever of breaking the wire. The twists in the wire are preferably afterward filed or otherwise treated, so as to be invisible. The eyes 5 are subsequently linked into the eyes 3 and closed.

I deem the employment of the eyes 3 and 5 of some importance, because it enables me to open the bracelet to a greater extent than by any other form of joint or coupling that I am aware of.

When the parts have been assembled or put together, as shown at Figs. 1 and 2, the bar 4 operates to prevent the ends of the bands from becoming uncrossed accidentally or by design, and serves also as a great aid to the user in putting on and taking off the bracelet.

Various changes in detail construction may be made without departing from the spirit of my invention, the gist of which has already been described, and will now be embodied in the following clauses of claim.

What I claim as new, and desire to secure by Letters Patent, is—

1. A wire bracelet having overlapping ends, and a twist formed in the wire to cause said ends to have a spring action toward each other, substantially as set forth.

2. A wire bracelet having overlapping ends, a twisted portion between said ends, and a connecting-bar, substantially as set forth.

3. A bracelet consisting of a wire band the ends of which overlap and are provided each with an eye, and a connecting-bar having eyes at its ends linked into the eyes at the ends of the wire band, substantially as set forth.

4. The method of making self-closing wire bracelets, which consists, first, in giving to a piece of tempered wire a circular or rounded form; secondly, in twisting said wire between its ends, and, thirdly, in crossing or overlapping said ends, substantially as set forth.

5. The method of making self-closing wire bracelets, which consists in giving to a piece of tempered wire a circular or rounded form and then in heating and twisting said wire between its ends, substantially as set forth.

Signed at New York city, in the county of New York and State of New York, this 24th day of September, A. D. 1889.

FREDERICK HARTJE.

Witnesses:

JACOB FELBEL,
MARTIN LAYDEN.