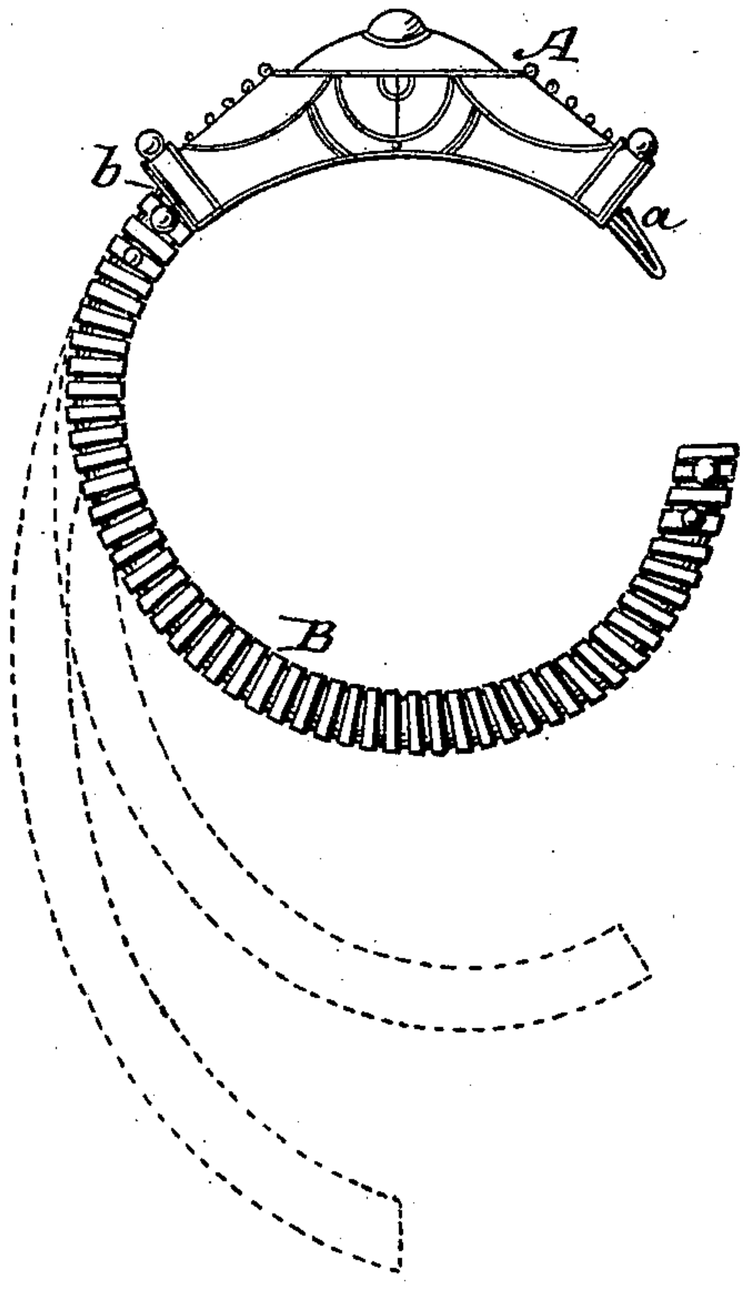
(No Model.)

W. H. HOWES.

BRACELET.

No. 248,591. Patented Oct. 25, 1881.



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UNITED STATES PATENT OFFICE.

WILLIS H. HOWES, OF NEW YORK, N. Y., ASSIGNOR TO HALE & MULFORD, OF SAME PLACE.

BRACELET.

SPECIFICATION forming part of Letters Patent No. 248,591, dated October 25, 1881.

Application filed July 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIS H. HOWES, of the city, county, and State of New York, have invented a new and useful Improvement in Bracelets, which is fully set forth in the following specification.

The ordinary bracelet, composed of rigid pieces, when made so large as to admit of any considerable ornamentation, is unpleasant to the arm of the wearer. Its rigidity prevents it from fitting closely to the arm, and to cause it to remain in any one place the arm must be compressed at some point, which, in bracelets of any considerable weight sufficient to afford an opportunity for display, will be disagreeable to the wearer. On the other hand, if allowed to remain loosely on the arm, it is not only disagreeable to the wearer, but there is a risk that the bracelet may become unfastened.

I have made a bracelet consisting of two principal parts, one of which is made of helical twist and the other part is made of rigid, hollow, or solid metal, such as is commonly employed in bracelets. Helical twist consists of two strips of metal grooved on one side and wound spirally around a mandrel, one over the other, so that they break joints, the grooved sides being adjacent and the edges of the grooves being interlocked. The twist is made of any desired length, and the ends are fastened to prevent their coming unwound. Helical twist made in this manner is somewhat elastic in the direction of its length, which I call its "longitudinal elasticity." It is flexible, and when annealed in any position has a greater or less tendency to return to that position, which I call its "lateral elasticity." The heavier and deeper the stock and the closer the spirals are wound the more elastic is the twist within certain limits.

For this style of bracelet I preferably use helical twist which possesses a high degree of elasticity, both laterally and longitudinally. The helical twist should comprise the greater portion of the bracelet—preferably about three-quarters. The rigid portion of the bracelet, which I shall call the "head" of the bracelet, is much larger than the helical twist, and this rigid portion may be ornamented according to the taste. The rigid portion may be fastened to the helical twist in any well-known manner; but preferably one end of it should be permanently attached to the twist, and the other end should contain a clasp to which one end of the helical twist is caught when the bracelet is worn.

A bracelet thus made will, on account of the flexibility of the twist and of its elasticity in the direction of its length, conform closely to the shape of the arm, and can be readily moved up the arm to such a point that the twist must be slightly extended. The twist being elastic in its longitudinal direction firmly grasps the arm and makes a bracelet which is comfortable to the wearer, which closely fits the arm, thereby adding greatly to its effectiveness as an ornament, and which allows the muscles of the arm to contract and expand without being displaced and without pain to the wearer, and which is much less liable than the ordinary bracelet to move up and down the arm, whereby the danger of the bracelet becoming unfastened is greatly lessened. At the same time the enlarged rigid part of the bracelet gives ample opportunity for that portion of the bracelet which is in view to be ornamented to any required degree, thus enabling a great effect to be produced by the jeweler without rendering the bracelet uncomfortable on account of its rigidity or weight and at a greatly decreased expense.

The rigid portion of the bracelet should preferably be made so that when the ends of the bracelet are clasped in the position in which it is to be worn the under surface of the rigid portion, together with that surface of the twist which is next to the arm, should form substantially an ellipse so arranged that the center of the under side of the rigid portion of the bracelet should be one of the two nearest points to the center of the ellipse.

In a bracelet thus made the rigid portion of the bracelet, which is generally the more ornamented, would naturally lie upon the arm in such a position as to be more exposed to view than any other portion of the bracelet.

It is preferred, as before stated, to have the clasp for the bracelet between the rigid and the flexible part; but this is not essential to the invention, since the rigid or the flexible or elastic part of the bracelet may be made in two or more pieces and the clasp placed between

them, or any other suitable arrangement may be adopted without altering the main feature of the invention. Moreover, the coil or flexible part may be made sufficiently elastic to hold the bracelet on the arm without a clasp or fastening of any kind, by its own elasticity, the coil being divided and having the adjacent ends overlapping; and great elasticity is very useful, even in the bracelet with clasp, in preventing the bracelet from becoming unclasped, and in causing it to fall off slowly when it is unclasped, so that it may be caught before it falls.

The accompanying drawing, which forms a part of this specification, illustrates a bracelet constructed in accordance with the invention. As shown, the ornamental head A is made of rigid material having an elliptical under surface and occupying about one-fourth of the periphery of the bracelet. The center of this enlarged ornamental head-piece is opposite the minor axis of the ellipse. The flexible part B of the bracelet is of helical twist, which will readily adapt itself, by reason of its elasticity and flexibility, to the arm of the wearer, as explained above. One end of the part B is fastened to the head-piece A at *b*, and the other is adapted to be secured by a catch, *a*. The outer dotted lines indicate the position which the part B would assume when the parts are drawn apart, and the inner lines indicate the distance to which it would fall of its own weight, as when falling off the arm of the wearer. The bracelet is preferably annealed in such position that it has always a tendency to assume the shape of an ellipse.

The elasticity of the helical twist is greater and of a special value when the twist is made of gold, although I do not confine myself to the use of this metal; nor is the invention limited to helical twist. Any kind of braid, twist, or coil which is elastic or flexible may be employed instead of helical twist, although the latter is best adapted for the purposes of this invention.

I claim—

1. A bracelet composed of a flexible part of helical twist or its equivalent, constituting the main portion of the bracelet, and a rigid part having its under side curved and combined with the flexible portion and forming an integral part of the body of the bracelet, substantially as described.

2. A bracelet of elliptical form composed of a rigid part opposite the minor axis of the ellipse, with its under side curved, and a flexible part of helical twist, or its equivalent, completing the ellipse, substantially as described.

3. The combination, in a bracelet or other annular article of jewelry, of an enlarged head extending over one-fourth the circumference, more or less, and an elastic or flexible part connected with opposite ends of said enlarged head, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIS H. HOWES.

Witnesses:
R. A. PIPER,
W. H. L. LEE.