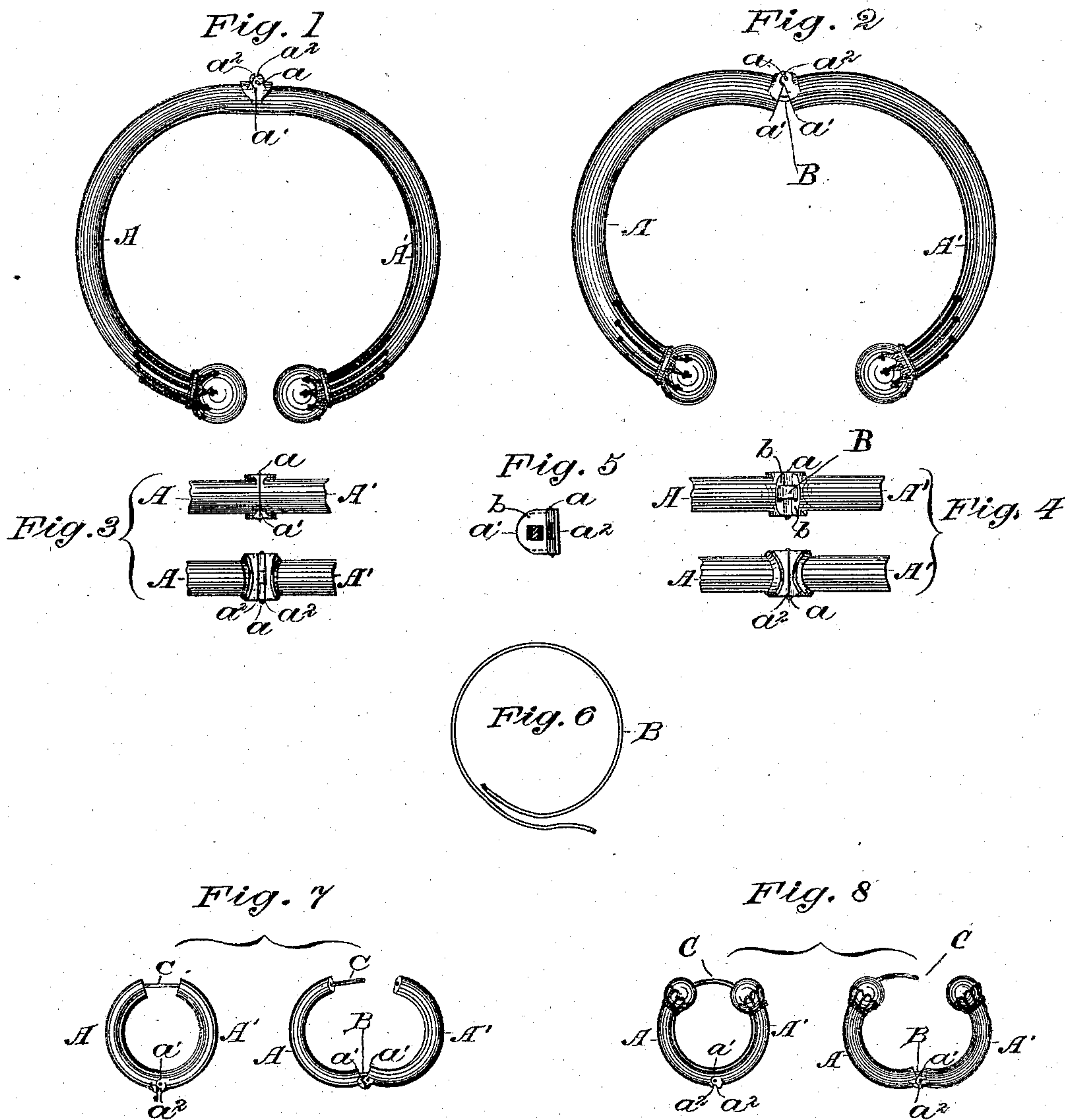


(No Model.)

J. A. RILEY & C. S. FREER.
Bracelet.

No. 229,276.

Patented June 29, 1880.



Witnesses
Philip Mauro.
C. G. Hedrick

Inventors
John A. Riley and
Charles S. Freer
by A. Pollon
their attorney

UNITED STATES PATENT OFFICE.

JOHN A. RILEY AND CHARLES S. FREER, OF NEW YORK, N. Y.

BRACELET.

SPECIFICATION forming part of Letters Patent No. 229,276, dated June 29, 1880.

Application filed March 24, 1880. (No model.)

To all whom it may concern:

Be it known that we, JOHN A. RILEY and CHARLES S. FREER, of the city and county of New York, N. Y., have invented a new and useful Improvement in Bracelets and other Articles of Jewelry of general annular form, which invention is fully set forth in the following specification.

This invention has more particular reference to bracelets formed in two parts connected with each other by a hinge-joint and provided with a spring tending to close or draw together the parts.

Heretofore bracelets of this kind have been made by providing an ordinary bracelet having a catch or click with a spring-hinge opposite the latter, or with a short loose flat spring combined with the common joint. This flat spring is inserted into the interior of the two parts of the bracelet, so as to pass over or inside of the pivot of the joint, and has its ends confined by stops, which prevent the spring from moving in either direction.

Bracelets such as indicated are open to many objections. The short closely-confined spring is readily broken, and also its ends are apt to dent out the lining or part of the bracelet next to the arm. The catch or click which secures when closed the two halves, and which is placed opposite the hinge, is, with the latter, arranged in the line of the longest diameter of the bracelet, and necessarily so, since its presence on the top or flatter portion would interfere with ornamentation which is (or it is desirable should be) placed there. The position of the hinge therefore is such as to give a comparatively sharp curve to the spring, increasing its liability to break. The click enters the bracelet, and the opening required to get the bracelet on the arm is increased by the amount of the penetration of the click, which causes so much additional strain upon the spring. Moreover, the ordinary hinge-joint does not furnish a sufficient limit to the movement of the halves in opening to prevent accidentally a greater strain than is necessary being put upon the spring.

This invention has as an object the production of a neat, practical, and highly ornamental bracelet, in which the objections set forth above shall be avoided. In it the click or catch is dispensed with and the ends of the

two halves of the bracelet are not brought together when closed, but a small space is left. This opening and the joint are placed opposite each other at the shortest diameter of the bracelet. Ornamentation, which is not desirable except on one of the flat sides, can thus be placed opposite the hinge. This ornamentation is placed on the end of each half opposite the open space, and injury to it is prevented, because the ends are not allowed to touch each other. A spring is connected with the joint and so arranged that it tends to hold the parts closed. The spring is sufficiently strong to keep the bracelet closed notwithstanding any cause which in use would be liable to open it.

There is in a bracelet thus constructed little strain upon the spring, since the bracelet is already partly open, and there is no contact or penetration of the click to be allowed for in the play of the spring, and also because the position of the joint is at that point where the strain in opening the bracelet a sufficient distance to admit the wrist is least.

The hinge is provided with stops, which limit the movement of the parts of the bracelet both in opening and in closing. The parts are not allowed to go so far back as to strain the spring. The strain falls upon the hinge, which there is much less danger of breaking than there is of snapping the spring. The hinge which is considered best adapted to the invention is such that the bracelet opens in the ordinary way, and the stops are formed in the contiguous ends of the parts of the bracelet inside and outside of the pivot. The spring which is employed is formed of a flat strip of suitable metal. Instead of being confined by stops near the joint, it is made comparatively long, and is purposely left to have free play at its ends, whereby its tendency to break is greatly diminished.

The invention, while it has, as first stated, more particular reference to bracelets, is also applicable to and is intended to include other articles of annular jewelry. By the term "annular jewelry" is meant that which is of a general curved or annular form, such as scarf-rings, necklaces, ladies' head-ornaments, napkin-rings, and ear-rings. In the ear-rings there is an ear-wire, which when closed extends across the opening between the ends of the

two halves of the articles, being attached to one of them, and the stops of the hinge must be so arranged as not to prevent the free end of the ear-wires bearing against the other.

5 The end of the ear-wire may, if desired, enter more or less the opposite end of the ear-ring, as the same extent of opening is not required in an ear-ring as in a bracelet, and there is not the same degree of liability for the spring
10 to break.

In order to explain more fully the invention, and to enable those skilled in the art to which it appertains to make and use the same, the following description is made, reference being
15 had to the accompanying drawings, which form a part of this specification.

Figure 1 is a top view of a bracelet made in accordance with the invention closed, and Fig. 2 a similar view of the same open. Fig. 3
20 represents a front and back view of the joint or hinge of the bracelet in the position shown in Fig. 1, and Fig. 4 similar views of the joint of the bracelet in an open position. Fig. 5 is an end view of one of the two parts or halves,
25 and Fig. 6 a view of the spring detached. Figs. 7 and 8 illustrate two styles of ear-rings constructed in accordance with the invention, the ear-ring being shown closed and open in each figure.

30 The same letters indicate corresponding parts on all the figures.

A A' represent the two halves of the articles, shown connected by a joint or hinge at *a*. The two halves are hollow practically through-
35 out their length, being closed at the outer ends, which are ornamented in any desired way. As shown, they terminate, except in Fig. 7, in balls of larger diameter than the thickness or width of the bracelet or ear-ring.

40 The hinge *a* is provided with stops *a'* *a*², which limit the movement in both directions. The hinge, with its stops, is preferably made integral with the parts of the article, the front or inside stops, *a'*, being formed by the meeting
45 edges of the two halves, and the stops *a*² by lips or projections on the back or outside, one on each side of the hinge *a*. The hinge is or may be formed by intermeshing projections, through which a suitable pin is inserted and
50 secured.

The contiguous ends, or those next the joint, are shown closed by plates *b*, in which there is a slot for the passage of the spring *B*. This spring is formed of a flat strip of suitable
55 metal having a set or permanent curvature, so that when inserted in the bracelet it tends to close the same. The length of the spring is less than that of the bracelet, but is great enough to extend for a considerable distance
60 on either side of the hinge, so that when bent the extreme ends will not be pressed against the lining of the bracelet or other article so as to dent the same. A suitable length is indicated in the drawings, Fig. 6. The slot in the
65 plate *b* is deep enough to give the spring free play, which construction relieves the spring

from strain at the hinge when the bracelet is opened.

Referring to the figures showing the bracelet, it will be seen that the hinge is on one of 70 the flat sides, the open space about which the ornaments are placed being opposite. The bracelet may be readily opened to the extent required to admit the wrist without endangering the spring. Any further movement is 75 prevented by the meeting of the lips or projections constituting the stops *a*².

The wire of the ear-ring (shown in Figs. 7 and 8) is indicated by C. It is attached to the part A and projects toward the other, against 80 which it bears, as in Fig. 8, or into which it enters, as in Fig. 7, when the article is closed. The shape of the ear-ring may be varied indefinitely, and the position of the hinge and opening at points opposite the shortest diam- 85 eter, if there be one, is not so important, because the amount of opening required is in any case comparatively small. The stops *a'* *a*² limit the movements of the two halves, as before described. The delicate ear-wire is re- 90 lieved of endwise pressure by the stops *a'*.

The adaptation of the invention to scarf-rings, necklaces, and similar articles can be readily made by one skilled in the art, and needs no description. 95

Having thus fully described our said invention and the manner in which the same is or may be carried into effect, we would observe, in conclusion, that we do not limit ourselves to the details hereinbefore set forth, which may 100 be varied; but

What we claim, and desire to secure by Letters Patent, is—

1. A bracelet, ear-ring, or similar article of jewelry composed of two parts jointed or piv- 105 oted to each other and provided with a spring having a tendency to close the article and with stops to limit the movements of the parts, so as to leave a space between the ends of said parts opposite the joint when the arti- 110 cle is closed, substantially as described.

2. A bracelet consisting of two parts or halves joined to each other, with an open space between their ends opposite the joint and a spring tending to hold the bracelet closed, the 115 said joint and open space being located in line of the shortest diameter of the bracelet, substantially as described.

3. The combination, in an article of annular jewelry, with the curved arms, hinge, and 120 spring, arranged to draw the arms together, of stops at the hinge, adapted to limit of themselves the inward as well as the outward movement of said arms, substantially as described.

4. The combination, in a bracelet, or ear- 125 ring, or similar article, with the two parts or halves of the article having the outer ends ornamented, of the hinge connecting the said parts or halves, a comparatively long flat spring having the ends extending respectively 130 into each half, and stops located on opposite sides of the pivot of the hinge, the stops on

the inside preventing the meeting or contact with each other of the ornamental ends of the two halves of the article, substantially as described.

5 5. The combination, with two curved parts or pieces connected with each other so as to leave at all times a space between the outer ends, of a spring arranged to draw or press their outer ends toward each other and an ear-
10 wire spanning the space between said ends and attached to one of said parts or pieces, substantially as described.

15 6. The combination, with the hollow curved pieces or halves, of the hinge connecting the same, the spring for drawing or pressing them together, the slotted plates closing the ends of the curved pieces next the joint, and a loose flat spring inserted into said curved pieces through the slots in the plates which close
20 their ends, substantially as described.

7. The combination, in a bracelet, ear-ring, or similar article of jewelry, of two curved parts, a hinge connecting the same, stops located inside and outside of the pivot or pin of the hinge, slotted plates closing the ends of 25 the curved pieces, and a flat spring inserted into said pieces through the slots in said plates and passing inside the pin or pivot of the hinge, substantially as described.

In testimony whereof we have signed this 30 specification in the presence of two subscribing witnesses.

JOHN A. RILEY.
CHAS. S. FREER.

Witnesses:

F. E. NEWELL,
HENRY K. THOMAS.