No. 827,164. PATENTED JULY 31, 1906.

W. I. MACOMBER.

SELF CLOSING BRACELET.

APPLICATION FILED MAR. 13, 1906.

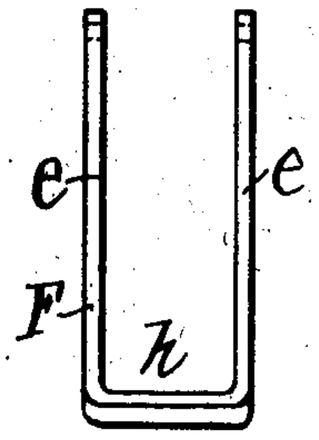

FIG. 6.

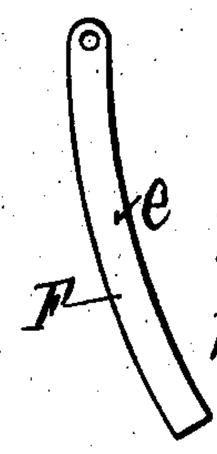

FIG. 7.

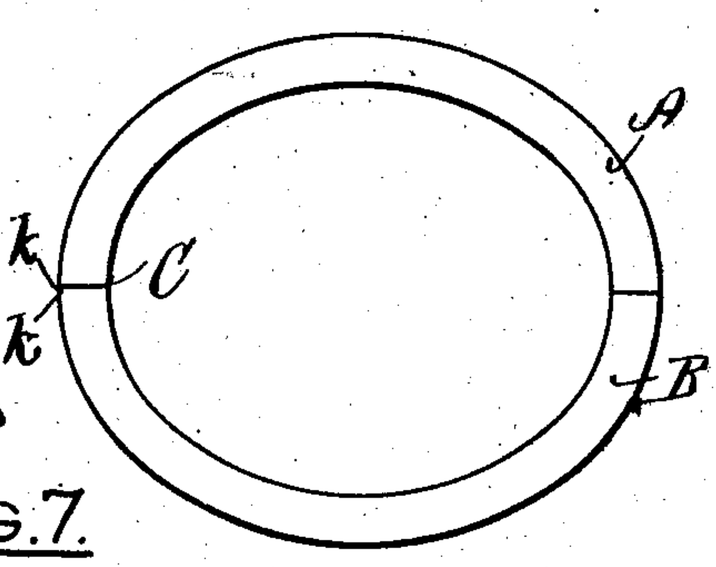

FIG. 1.

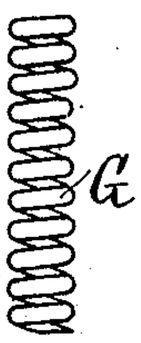

FIG. 8.

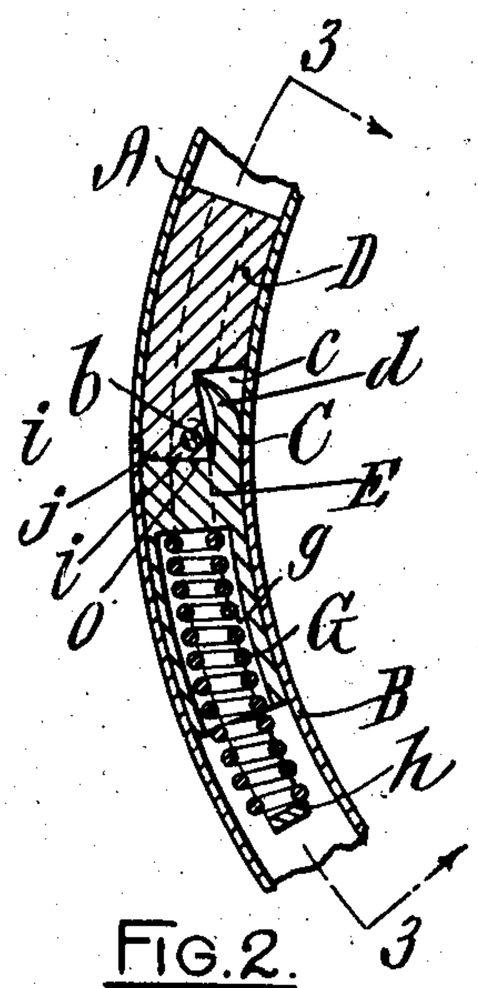

FIG. 2.

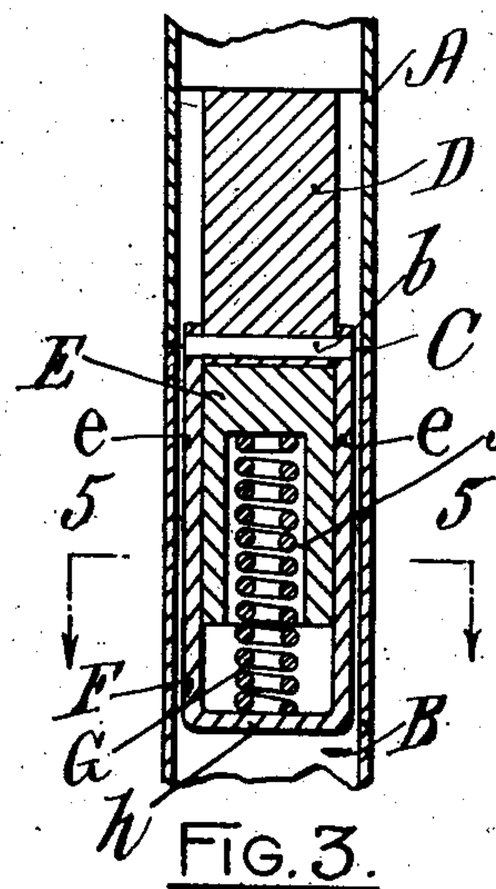

FIG. 3.

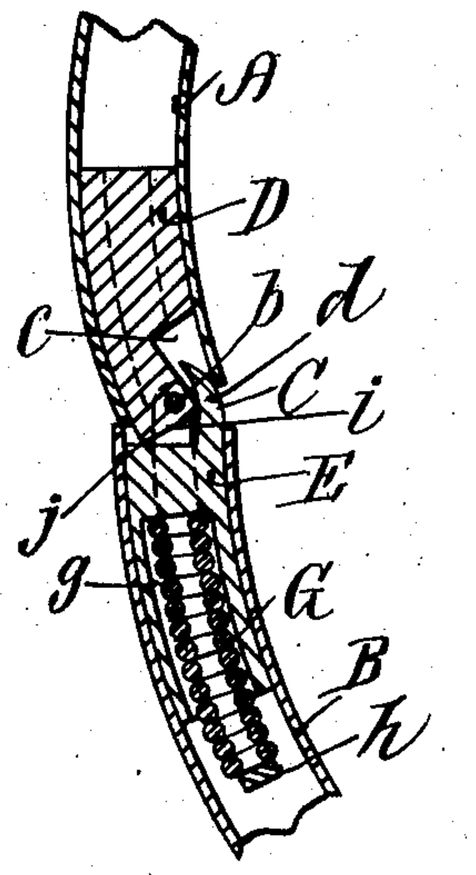

FIG. 4.

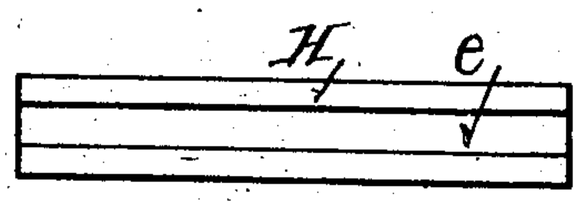

FIG. 9.

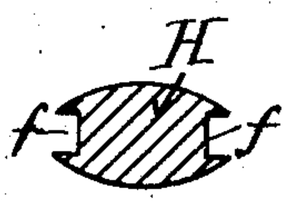

FIG. 10.

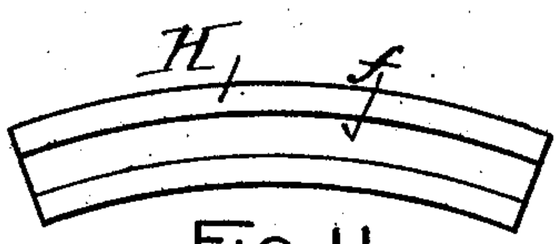

FIG. 11.

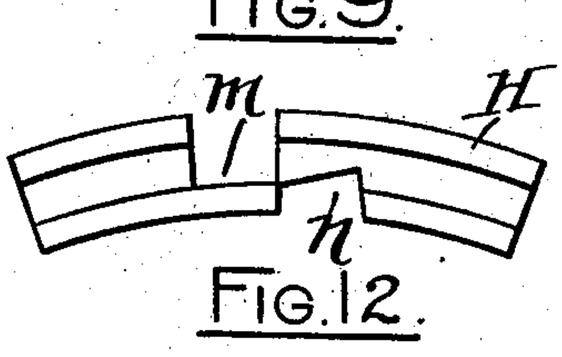

FIG. 12.

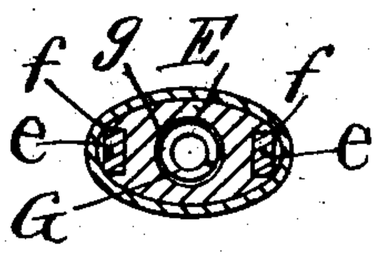

FIG. 5.

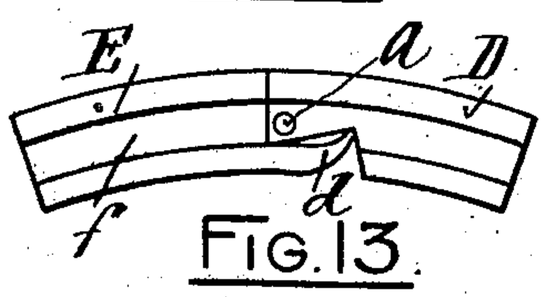

FIG. 13.

WITNESSES.

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SELF-CLOSING BRACELET.

No. 827,164. Specification of Letters Patent. Patented July 31, 1906.

Application filed March 13, 1906. Serial No. 305,881.

To all whom it may concern:

Be it known that I, WILLIAM I. MACOMBER, a citizen of the United States, residing at Providence, in the State of Rhode Island, have invented a new and useful Improvement in Self-Closing Bracelets, of which the following is a specification.

My invention consists in the improved construction of the spring-actuated joint of the bracelet, as hereinafter set forth.

In the accompanying drawings, Figure 1 represents a side view of a hollow wire bracelet to which my improvement is applied. Fig. 2 represents an enlarged longitudinal section of the closed spring-actuated joint, taken in the plane of the arms of the bracelet. Fig. 3 represents a longitudinal section of the same, taken in the line 3 3 of Fig. 2. Fig. 4 represents a section, as in Fig. 2, with the arms of the bracelet opened. Fig. 5 represents a transverse section taken in the line 5 5 of Fig. 3. Fig. 6 represents a side view of the sliding yoke, which serves to hold the actuating-spring of the bracelet-joint. Fig. 7 represents an edge view of the same. Fig. 8 represents a side view of the actuating-spring. Fig. 9 represents an edge view of the piece of grooved stock from which the joint-pieces are to be formed. Fig. 10 represents a transverse section of the same. Fig. 11 represents an edge view showing a properly-bent piece of stock of sufficient length to make both joint-pieces of a bracelet. Fig. 12 represents the same edge view, showing the portions to be removed from the blank shown in Fig. 11 preparatory to the separation of the joint-pieces. Fig. 13 represents the completely-formed joint-pieces with their inner ends abutting each other.

In the drawings, A represents one of the hollow arms of the bracelet, and B the other hollow arm, the said bracelet being provided with the improved self-closing joint C. The joint-piece D is soldered firmly in the cavity of the arm A of the bracelet and is constructed as shown in Fig. 13, being provided with the perforation *a* for the pivot *b* and the cut-away recess *c*, which is adapted to receive the projecting lip *d* of the opposite joint-piece E, the said lip *d* serving to close the inner side of the joint C when the arms A and B of the bracelet are thrown open, as shown in Fig. 4. To the joint-piece D is pivoted the yoke F, the curved arms *e e* of which are adapted to slide loosely in the curved grooves *f f*, formed in the opposite edges of the joint-piece E. The joint-piece E is provided with the cavity *g*, which is adapted to receive and hold the actuating-spring G, the outer end of the said spring being held in contact with the cross-bar *h* of the said yoke F, so that the expansion of the said spring G will serve to draw the inner ends of the joint-pieces D and E forcibly together, and thus cause the closing of the arms of the bracelet. When the arms of the bracelet are being opened, as shown in Fig. 4, the projecting end *i* of the joint-piece D will act as a lever to cause a drawing action upon the yoke F and the compression of the spring G, the corner *j* constituting the fulcrum for the turning movement.

Heretofore in self-closing bracelets of this class the turning-fulcrum has been located at the abutting ends *k k* of the hollow arms of the bracelet, with resulting wear and injury; but in my invention the wear does not come upon the said hollow arms, but upon the joint-pieces D and E, which are soldered in the cavities of the said arms in such a position that the abutting ends *k k* of the hollow arms A and B lie in about the plane of the center of the pivot-pin *b*, as shown in Figs. 2 and 3, whereby when the arms A and B are being opened the outer edge of the arm A will be drawn inward, as shown in Fig. 4. The projecting end *i* of the joint-piece D bears against the face *o* of the joint-piece E, which face is back of the plane of the end of the hollow arm B.

In the manufacture of the joint-pieces D and E, I first form a bar H of suitable cross-section, having the opposite longitudinal grooves *e e*, as shown in Figs. 9 and 10, and then bend the said bar in longitudinally-curved form, as shown in Fig. 11. The stock is then cut away at *m* and *n* to form the joint-pieces.

I claim as my invention—

1. In a self-closing bracelet, the combination of a joint-piece provided with opposite grooves, the yoke held in the said grooves, and the actuating-spring, with the opposite joint-piece, pivoted to the yoke and adapted to fulcrum upon the end of the grooved joint-piece when the arms of the bracelet are being opened.

2. In a self-closing bracelet, the combination of the hollow arm of the bracelet the joint-piece provided with the grooves, and secured in the said hollow arm which pro-

jects beyond the end of the said joint-piece, and the opposite joint-piece projecting beyond the end of the hollow arm to which it is secured, with the yoke-piece pivoted to the said projecting joint-piece, and held in the grooves of the opposite joint-piece, and the actuating-spring held in the said yoke.

3. In a self-closing bracelet, the combination of the hollow arm of the bracelet the joint-piece provided with the grooves and the projecting lip, and secured in the said hollow arm which projects beyond the end of the said joint-piece, and the opposite joint-piece provided with a recess at its inner side adapted to receive the said projecting lip, and projecting beyond the end of the hollow arm to which it is secured, with the yoke-piece pivoted to the said projecting joint-piece, and held in the grooves of the opposite joint-piece, and the actuating-spring held in the said yoke.

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Witnesses:
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JOHN S. LYNCH.