

T. W. FOSTER.
BRACELET.

APPLICATION FILED MAR. 24, 1906.

Fig. 1.

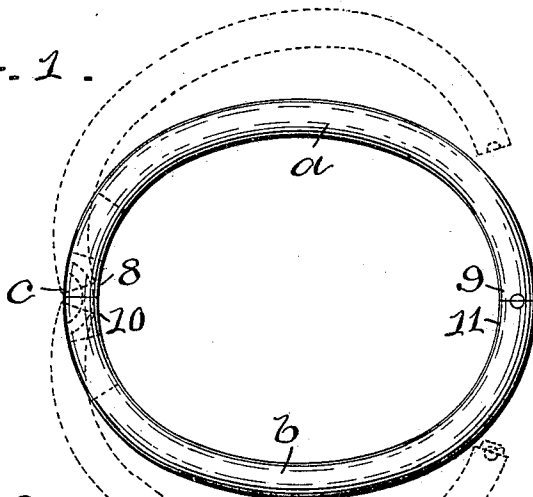


Fig. 2.

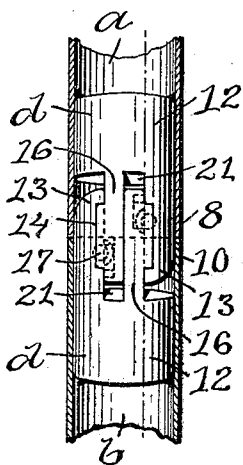


Fig. 3.

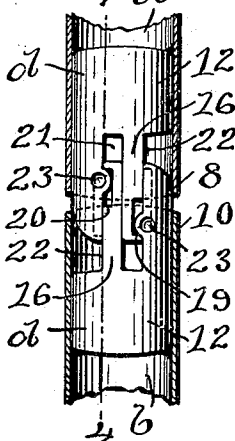


Fig. 4.

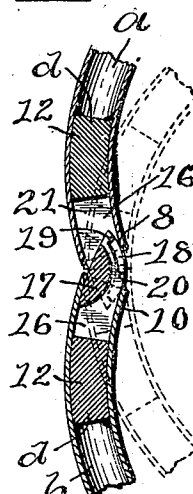


Fig. 5.

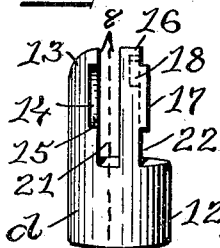


Fig. 6.

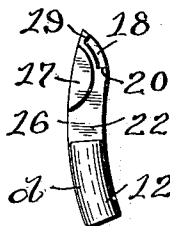
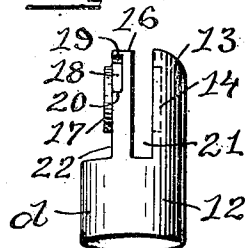


Fig. 7.



WITNESSES:

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Fig. 8.

Theodore W. Foster
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INVENTOR:

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UNITED STATES PATENT OFFICE.

THEODORE W. FOSTER, OF PROVIDENCE, RHODE ISLAND.

BRACELET.

No. 830,987.

Specification of Letters Patent.

Patented Sept. 11, 1906.

Application filed March 24, 1906. Serial No. 307,844.

To all whom it may concern:

Be it known that I, THEODORE W. FOSTER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Bracelets, of which the following is a specification.

This invention has reference to an improvement in bracelets, and more particularly to an improvement in concealed hinges for bracelets.

The object of my invention is to improve the construction of a concealed hinge for bracelets whereby the center on which the hinge turns is outside of the bracelet, the usual hing-pintle dispensed with, and a strong and durable concealed hinge constructed at less cost than has heretofore been done.

My invention consists in the peculiar and novel construction of a concealed hinge for bracelets, with details of construction, as will be more fully set forth hereinafter and pointed out in the claims.

Figure 1 is a side view of a two-part bracelet provided with my improved concealed hinge and showing the bracelet in the closed position in full lines and in the open position in broken lines. Fig. 2 is an enlarged detail sectional view of the hinge end of the bracelet, looking at the outside face of the hinge, with the hinge in the closed position. Fig. 3 is an enlarged detail sectional view similar to Fig. 2, looking at the inner face of the hinge, with the hinge in the open position. Fig. 4 is an enlarged detail sectional view taken on line 4 4 of Fig. 3 through the hinge and adjacent ends of the bracelet and showing the hinge in the open position in full lines and in the closed position in broken lines. Fig. 5 is an enlarged detail view looking at the outside face of one of the interlocking hinge members before the hinge is assembled. Fig. 6 is an enlarged detail view of the hinge member looking at the right-hand edge of Fig. 5, and Fig. 7 is an enlarged detail view looking at the inner face of the hinge member. Fig. 8 is a longitudinal section on line 8 8 of Fig. 5.

In the drawings, *a* indicates a semi-oval half, *b* a corresponding semi-oval half, and *c* the concealed hinge of the bracelet.

The semi-oval halves *a* and *b* are constructed from a tube, which is oval in cross-section. The half *a* has the open end 8 for the hinge *c* and the end 9. The half *b* has the open end 10 for the hinge *c* and the end 11. The ends

8 and 10 and the ends 9 and 11 coincide when the bracelet is closed. The ends 9 and 11 may be provided with any one of the well-known forms of catches adapted to hold the ends together when the bracelet is closed.

My improved concealed hinge *c* consists of two identically-constructed interlocking members *d d*. These members *d d* are shaped to fit in the open ends 8 and 10 of the bracelet and curved to conform to the contour of the ends 8 and 10 of the bracelet, as shown in Figs. 4 and 6. Each member *d* is constructed integral to have a solid oval body portion 12, from one end of which extends a side arm 13, in the inner face of which is a recess 14, which extends in from the outer face of the member and is shaped to form a ledge 15 in the form of an arc, the center of which is struck on the center on which the hinge turns. An off-center arm 16 extends from the body portion 12 centrally between the arm 13 and the edge of the member and is constructed to have the boss 17 on the outer face of the arm in an oppositely-disposed position to the recess 14 in the arm 13 and shaped to fit in the recess 14 in the adjoining hinge member, as shown in Fig. 2. A groove 18, the ends of which form the stop-shoulders 19 and 20, is formed in the edge of the arm 16 adjacent the end of the arm, as shown in Figs. 6 and 7. The arms 13 and 16 form an opening 21 therebetween, the width and length of which coincides to the width and length of the arm 16, and I further provide a cut-away space 22, which is adapted to receive the arm 13 on the adjoining hinge member.

The duplicate members of the hinge are assembled by placing the members at right angles in a position for the arms 13 13 to enter the spaces 22 22, the arms 16 16 to enter the openings 21 21, and for the bosses 17 17 on the arms 16 16 to enter the recesses 14 14 in the arms 13 13, forcing the members together, and then straightening the members out into the position as shown in Fig. 2. A stop 23 is now formed on the inner edge of the arms 13 13 (by the use of a prick-punch) in a position to enter the grooves 18 18 in the arms 16 16, as shown in Fig. 3. These stops engaging with the stop-shoulders 19 and 20 on the arms 16 16 limit the opening and closing movements of the hinge. The bosses 17 17, which now form the pintle of the hinge, have a circular reciprocating movement in the recesses 14 14. The members are held together by the bosses 17 17

engaging with the ledges 15 15 in the recesses 14 14 and are prevented from separating by the stops 23 23 on the arms 13 13 engaging with the stop-shoulders 19 and 20 on the arms 16 16. The members of the hinge are now forced into the open ends 8 and 10 of the bracelet into a position for the center on which the hinge turns to coincide with the juncture of the ends 8 and 10 when the bracelet is closed. The body portions 12 12 of the hinge members are now secured in the ends 8 and 10 of the bracelet by solder or other means.

By the use of my improved concealed hinges in bracelets the opening at the hinge-joint when the bracelet is opened is closed by the members of the hinge, as shown in Fig. 4, thereby preventing articles of wearing-apparel from catching in the hinge-joint when the bracelet is closed; also, the arms 13 and 16, having the largest possible wearing-surfaces, practically eliminates wear between the members of the hinge. Therefore the hinge is not liable to wear loose and throw the catch ends of the bracelet out of alignment.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a bracelet, a concealed hinge comprising duplicate interlocking members each having a solid body portion from one end of which extends a side arm in the inner face of which is a recess forming a ledge in the form of an arc, the center of which is struck on the center on which the hinge turns, and an off-center arm which extends from the body portion midway between the side arm and the edge of the member and having a boss on its outer face shaped to fit in the recess in the side arm of the adjoining member, and a groove adjacent the end of the arm, the ends of the groove forming stop-shoulders, and a stop on the side arm adapted to enter the groove and engage with the stop-shoulders to limit the opening and closing movement of the hinge.

2. A concealed bracelet-hinge comprising two identically-constructed interlocking members *d d* each member *d* having a solid body portion 12 from one end of which extends a side arm 13 in the inner face of which is a recess 14 forming a ledge 15 in the form of an arc, the center of which is struck on the center on which the hinge opens and an off-center arm 16 which extends from the body portion 12 midway between the side arm 13 and the edge of the member and having a boss 17 on its outer face shaped to fit in the recess 14 in the side arm 13 of the adjoining member and a groove 18 adjacent the end of the arm 16 the ends of which form stop-shoulders 19 and 20, and a stop 23 formed on the side arm 13 in a position to enter the groove 18 in the arm 16, all formed integral, as described.

3. The combination with a tubular half *a* having the open end 8 and a tubular half *b* having the open end 10, of a concealed hinge *c* composed of two identically-constructed interlocking members *d d* each member *d* having a solid body portion 12 from one end of which extends a side arm 13 in the inner face of which is a recess 14 forming a ledge 15 in the form of an arc, the center of which is struck on the center on which the hinge turns and an off-center arm 16 which extends from the body portion 12 midway between the side arm 13 and the edge of the member and having a boss 17 on its outer face adapted to fit in the recess 14 in the side arm 13 of the adjoining member and a groove 18 adjacent the end of the arm 16 the ends of which form stop-shoulders 19 and 20 and a stop 23 formed on the side arm 13 in a position to enter the groove 18 in the arm 16, all formed integral, as described.

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

THEODORE W. FOSTER.

Witnesses:

ADA E. HAGERTY,
J. A. MILLER.