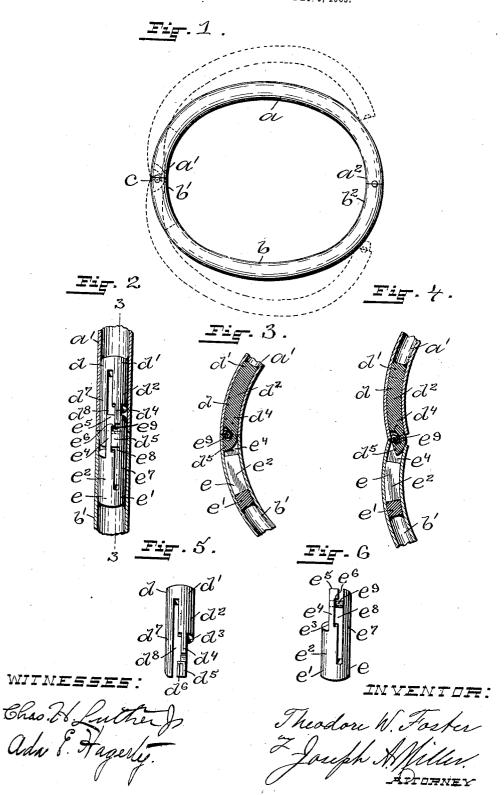
## T. W. FOSTER. BRACELET. APPLICATION FILED DEC. 6, 1905.



## UNITED STATES PATENT OFFICE.

THEODORE W. FOSTER, OF PROVIDENCE, RHODE ISLAND.

## BRACELET.

No. 813,697.

Specification of Letters Patent.

Patented Feb. 27, 1906.

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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 10 an improvement in concealed hinges for brace-

The object of my invention is to improve the construction of a concealed hinge for bracelets, whereby the interlocking members 15 of the hinge are held together under spring tension from the side arms and a stronger and more durable concealed hinge is constructed than has heretofore been done.

My invention consists in the peculiar and 20 novel construction of a concealed hinge for bracelets, with details of construction, as will

be more fully set forth hereinafter.

Figure 1 is a side view of a two-part bracelet provided with my improved concealed 25 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. 30 Fig. 3 is an enlarged detail sectional view on line 3 3 of Fig. 2 through the hinge and adjacent portions of the bracelet and showing the hinge in the closed position. Fig. 4 is a detail sectional view similar to Fig. 3 and show-35 ing the hinge in the open position. Fig. 5 is a detail view looking at the outside face of one interlocking member of the hinge, and Fig. 6 is a detail view looking at the outside face of the other interlocking member of the 40 hinge.

In the drawings, a indicates one semi-oval half, b the other semi-oval half, and c the concealed hinge of my improved bracelet.

The semi-oval halves a and b are construct-45 ed from a tube which is oval in cross-section. The upper half a has the end a' for the hinge and the end  $a^2$ . The lower half b has the end b' for the hinge and the end  $b^2$ . The ends a'and b' and the ends  $a^2$  and  $b^2$  coincide when 50 the bracelet is closed. The ends  $a^2$  and  $b^2$ may be provided with any 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 55 the members d and e. These members d and

bracelet and shaped to fit in the ends a' and b' of the bracelet, in which they are secured by solder or other means. The member d is formed to have a solid end d', from which ex- 60 tends a rigid portion  $d^2$ , reduced in thickness at  $d^3$  to form an arm  $d^4$ , having a hook-shaped end  $d^5$ , thickened on its inner face to form a stop-shoulder  $d^s$ , and a spring side arm  $d^7$ , extending from the end d' parallel with the arm  $d^4$  and forming a central opening  $d^8$ , as shown in Fig. 5. The member e is formed to have a solid end e', from which extends a rigid portion  $e^2$ , reduced in thickness at  $e^3$  to form an arm  $e^4$ , having an end  $e^5$ , thickened on its inner face to form a stop-shoulder  $e^6$ , and a spring side arm  $e^7$ , extending from the end e'parallel with the arm e4 and forming a central opening  $e^8$ . A transverse pin  $e^9$  is secured in the arm  $e^4$  adjacent the end  $e^5$  and 75 extends across the opening  $e^8$ , as shown in

The members d and e of the hinge are brought into their operative positions by forcing the arm  $d^4$  on the member d through 80 the opening  $e^8$  in the member e at right angles, hooking the hook-shaped end  $d^{s}$  on the  $\operatorname{arm} d^4$  over the pin  $e^9$  on the arm  $e^4$ , and then bringing the members on a curved line with The solid ends d' and e' of the 85 each other. members d and e are now secured in the ends a' and b' of the bracelet by solder or other means in a position to bring the pin  $e^{\mathfrak{d}}$  on a line with the joint of the bracelet, as shown in Fig. 3. The inner and outer edges of the 90 hook-shaped end  $d^5$  are semicircular in contour, the center of which coincides with the center on which the bracelets open. The inner semicircular edge of the hook-shaped end  $d^5$  extends beyond the pin  $e^9$ , (which now 95 forms the pintle of the hinge,) forming a space between the pin and the inner end of the hook, with the hinge in the closed position, as shown in Fig. 3, thus allowing the hinge to be opened, as shown in Fig. 4. The 100 hinge is limited in its opening movement by the stop-shoulder  $d^6$  on the member d engaging with the stop-shoulder  $e^6$  on the member e, also by the pin  $e^9$  on the member e engaging with the inner edge of the hook-shaped end 105  $d^5$  on the member d, as shown in Fig. 4. The spring-arms  $d^7$  and  $e^7$  on the members exert a spring tension on the arms  $d^4$  and  $e^4$ , thereby holding the arms  $d^4$  and  $e^4$  together under spring tension, compensating for wear be- 110 the members d and e. These members d and e tween the arms, and preventing looseness or chattering of the hinge. The opening at the

hinge-joint of the bracelet when the bracelet is opened is practically closed by the members of the hinge, as shown in Fig. 4, thereby preventing the bracelet from catching on the apparel in closing the bracelet.

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

Patent—

1. In a hinged bracelet, a concealed hinge comprising a member having a solid end from which extends a rigid arm having a hook-shaped end, and a spring side arm extending from the solid end parallel with the rigid arm, and a member having a solid end from which extends a rigid arm, a pin secured transversely in the rigid arm adjacent its end and a spring side arm extending from the solid end parallel with the rigid arm, said members being provided with means for limentage iting the opening movement of the hinge and means for securing the members of the hinge in the bracelet.

A concealed bracelet-hinge comprising a member d having a solid end d' from which extends a rigid portion d² reduced in thickness to form an arm d⁴ having the hookshaped end d⁵ thickened on its inner face to form a stop-shoulder d⁶, and a spring side arm d³ extending from the solid end d' parallel with the rigid arm d⁴ and forming a central opening d⁶, and a member e having a solid end e' from which extends a rigid portion e² reduced in thickness to form an arm e⁴ having the end e⁵ thickened on its inner face to form
 a stop-shoulder e⁶, a spring side arm eⁿ ex-

tending from the solid end e' parallel with the rigid arm  $e^4$  and forming a central opening  $e^8$  and a transverse pin  $e^9$  secured in the arm  $e^4$  adjacent the end  $e^5$  and across the opening  $e^8$ , and means for securing the members d and e 40

of the hinge in a bracelet.

3. The combination with a tubular half ahaving the end a' and a tubular half b having the end b' of a bracelet, of a concealed hinge c composed of a member d having a solid end 45 d' from which extends a rigid portion  $d^2$  reduced in thickness to form an arm  $d^4$  having a hook-shaped end d<sup>5</sup> thickened on its inner face to form a stop-shoulder  $d^{6}$  and a spring side arm  $d^7$  extending from the end  $d^7$  par- 50 allel with the arm  $d^4$  and forming a central opening  $d^s$  and a member e having a solid end e' from which extends a rigid portion e2 reduced in thickness to form an arm e4 having the end e5 thickened on its inner face to form 55 a stop-shoulder  $e^6$ , a spring side arm  $e^7$  extending from the solid end e' parallel with the arm e4 and forming a central opening e8, and a transverse pin e9 secured in the arm e4 adjacent the end e<sup>5</sup> and across the opening e<sup>8</sup>, and 6c means for securing the members d and e of the hinge in the ends a' and b' of the brace-

In testimony whereof I have signed my name to this specification in the presence of 65

two subscribing witnesses.
THEODORE W. FOSTER.

 ${
m Witnesses}$ :

Ada E. Hagerty, J. A. Miller.