No. 843,195. PATENTED FEB. 5, 1907.

F. E. CRAIN.

BRACELET.

APPLICATION FILED SEPT. 26, 1906.

Fig. 1.

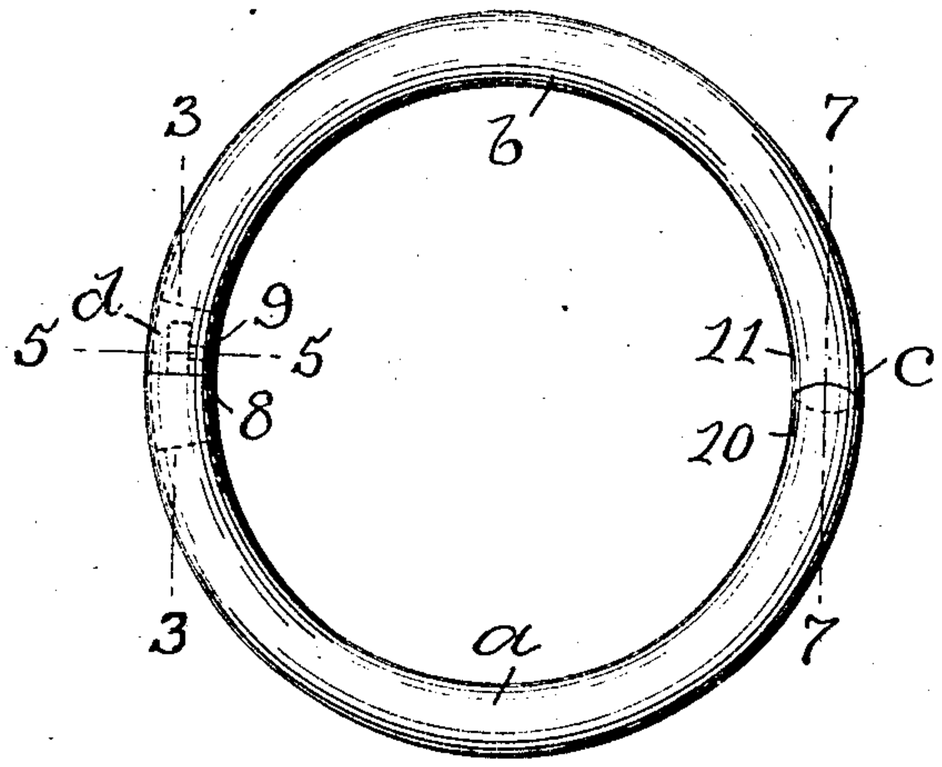


Fig. 2.

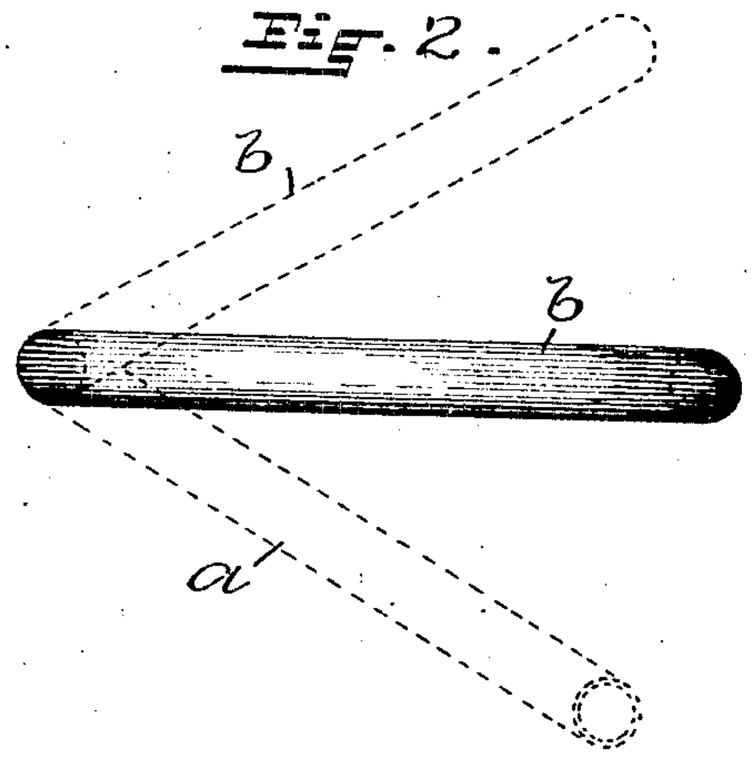


Fig. 3.

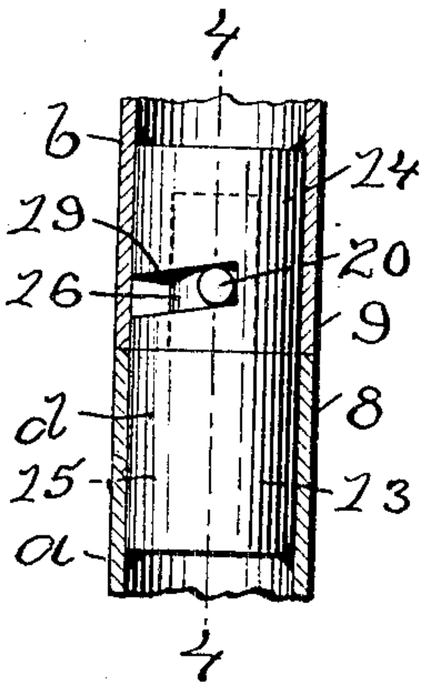


Fig. 4.

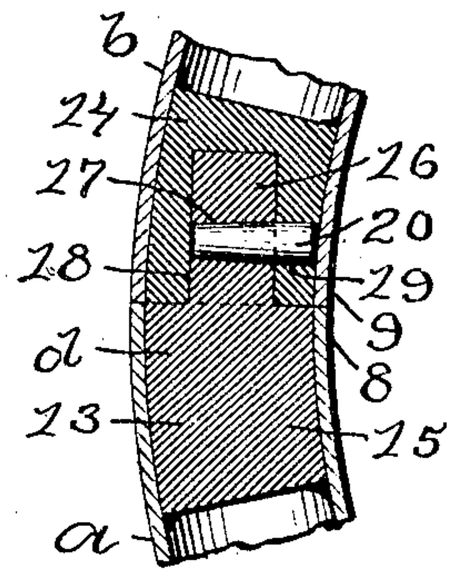


Fig. 5.

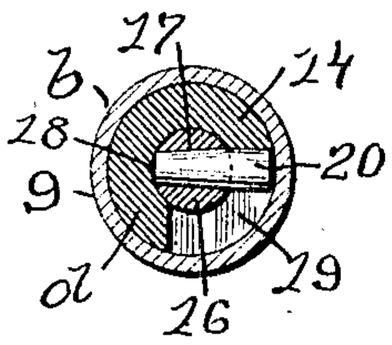


Fig. 6.

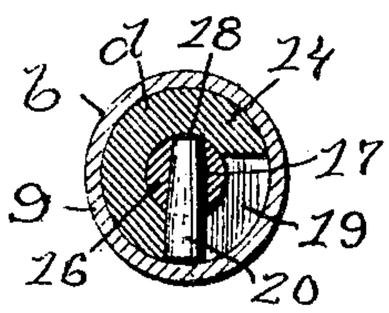
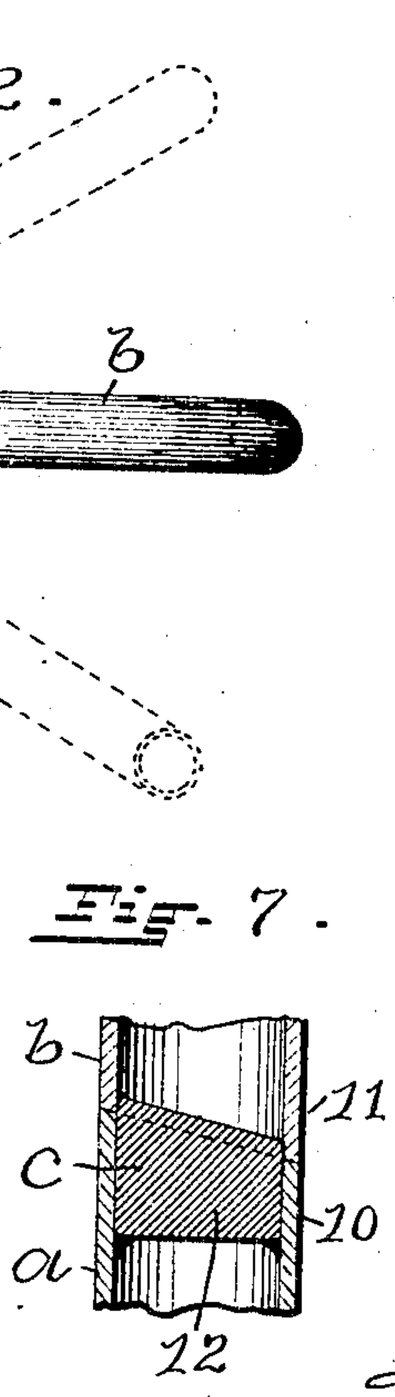


Fig. 7.



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UNITED STATES PATENT OFFICE.

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BRACELET.

No. 843,195. Specification of Letters Patent. Patented Feb. 5, 1907.

Application filed September 26, 1906. Serial No. 336,326.

To all whom it may concern:

Be it known that I, FRANK E. CRAIN, 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 means for pivotally securing the members of a two-part bracelet together.

The object of my invention is to improve the construction of a two-part bracelet, whereby the bracelet is provided with a pivot-hinge adapted to separate the halves of the bracelet at the joint when the bracelet is opened to draw the halves together when the bracelet is closed and to limit the opening and closing movements of the bracelet.

A further object of my invention is to simplify the construction of a concealed pivot-hinge for bracelets, thereby strengthening the hinge and reducing the cost of manufacturing the same.

My invention consists in the peculiar and novel construction of a two-part bracelet having a concealed pivot-hinge and a snap, with details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1 is a face view of my improved bracelet, showing the bracelet in the closed position. Fig. 2 is an edge view of the bracelet, showing the bracelet in the closed position in full lines and in the open position in broken lines. Fig. 3 is an enlarged detail sectional view taken on line 3 3 of Fig. 1 through the shell of the bracelet looking at the inner face of the hinge. Fig. 4 is an enlarged detail sectional view taken on line 4 4 of Fig. 3 through the shell and hinge of the bracelet. Fig. 5 is an enlarged transverse sectional view taken on line 5 5 of Fig. 1 through the shell and hinge of the bracelet with the bracelet in the closed position. Fig. 6 is an enlarged transverse sectional view similar to Fig. 5 with the bracelet in the open position, and Fig. 7 is an enlarged detail sectional view taken on line 7 7 of Fig. 1 through the snap of the bracelet.

In the drawings, *a* indicates one semicircular half, *b* the other coinciding semicircular half, *c* the snap, and *d* the concealed pivot-hinge, of the bracelet.

The semicircular halves *a* and *b* are formed from a tube which is circular in cross-section. The half *a* has the open ends 8 and 10, and the half *b* has the open ends 9 and 11. The ends 8 and 9 are cut square across and coincide when the bracelet is closed. The ends 10 and 11 are cut at an angle, as shown in Figs. 1 and 7, and coincide when the bracelet is closed. The snap *c* is formed by the end 11 and a plug 12, secured in the end 10 by solder or other means. The plug 12 extends slightly beyond the end 10 and secures the ends 10 and 11 together by snapping into the open end 11 of the half *b* when the bracelet is closed.

The hinge *d* consists of the members 13 and 14, curved to conform to the contour of the bracelet and shaped to fit in the ends 8 and 9. The member 13 is constructed to have the body portion 15, from one end of which extends the central stud 16, having a transverse hole 17 and forming the pintle of the hinge, as shown in Figs. 4 and 5. The member 14 is constructed to have a central hole 18 in the end, adapted to receive the stud 16, and a transverse cam-groove 19, formed at an angle in the side of the member and extending approximately one-quarter the circumference of the member through to the hole 18 in the member, as shown in Figs. 3 and 5. A pin 20 is secured in the transverse hole 17 in the stud 16 and extends outward into the cam-groove 19 in the member 14, as shown in Figs. 3 and 4.

The hinge is assembled by inserting the stud 16 of the member 13 into the hole 18 in the member 14 and driving the pin 20 through the cam-groove 19 into the hole 17 in the stud 16, thus locking the members of the hinge together. The sides of the groove 19 act as a cam on the pin 20 to separate or draw the members of the hinge together when the hinge is opened or closed, and the ends of the cam-groove act as stops on the pin to limit the opening or closing movements of the hinge. The members of the hinge are now secured in the ends 8 and 9 of the bracelet by solder or other means in a position for the joint of the hinge to coincide with the juncture of the ends 8 and 9 of the bracelet.

In opening the bracelet the ends 10 and 11 are forced apart and the halves *a* and *b* moved into the position as shown in broken lines in Fig. 2. The groove 19, acting as a

cam on the pin 20, separates the halves *a* and *b* at the hinge, thereby preventing wear on the ends 8 and 9 of the bracelet. When the bracelet is closed, the ends 8 and 9 are drawn tightly together and the open end 11 of the half *b*, riding up the inclined end of the plug 12, snaps over the protruding end of the plug and holds the bracelet in the closed position, as shown in Fig. 7.

It is evident that the halves *a* and *b* of the bracelet could be oval or square in cross-section and that the bracelet could have any design or configuration desired without materially affecting the spirit of my invention.

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

1. A bracelet the body of which consists of two tubular members, a pivot-hinge comprising a member having a central stud, a member having a central hole into which the stud extends and a cam-groove, and a pin extending from the stud into the cam-groove, and means for holding the tubular members of the bracelet together in the closed position.

2. In a bracelet, the combination with the tubular halves *a* and *b* having the open ends 8 and 9 cut square across and the open ends 10 and 11 of a pivot-hinge *d* consisting of a member 13 shaped to fit in the end 8 of the half *a* and constructed to have the body portion 15 from one end of which extends a central stud 16 and a member 14 shaped to fit in the end 9 of the half *b* and constructed to have a central hole 18 in the end adapted to receive the stud 16 and a transverse cam-groove 19 formed at an angle in the side of the member, a pin 20 secured to the stud 16 and extending into the cam-groove 19, and means for holding the ends 10 and 11 of the bracelet in the closed position, as described.

3. In a bracelet, the combination with the tubular halves *a* and *b* having the open ends 8 and 9 cut square across and the open ends 10 and 11 cut at an angle, of a pivot-hinge *d* consisting of a member 13 shaped to fit in the open end 8 of the half *a* and constructed to have a body portion 15 from one end of which extends a central stud 16 having a transverse hole 17 and a member 14 shaped to fit in the end 9 of the half *b* and constructed to have a central hole 18 in the end adapted to receive the stud 16 and a transverse cam-groove 19 formed at an angle in the side of the member, a pin 20 secured to the stud 16 in the hole 17 and extending into the cam-groove 19 and a snap *c* formed by the end 11 and a plug 12 secured in the end 10 and extending into the end 11, whereby the halves *a* and *b* are pivotally secured together, are separated or drawn together in the opening or closing of the bracelet, the halves held in the closed position, and the opening and closing movement of the halves limited, as described.

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

FRANK E. CRAIN.

Witnesses:
ADA E. HAGERTY,
J. A. MILLER.