F. E. FORSELL.

SPRING RING SNAP.

APPLICATION FILED APR. 15, 1908.

917,038. Patented Apr. 6, 1909.

Fig. 1.

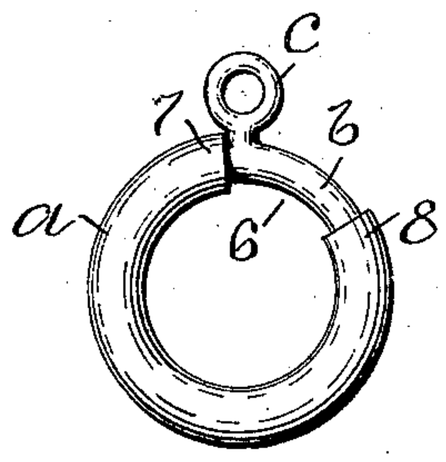


Fig. 2.

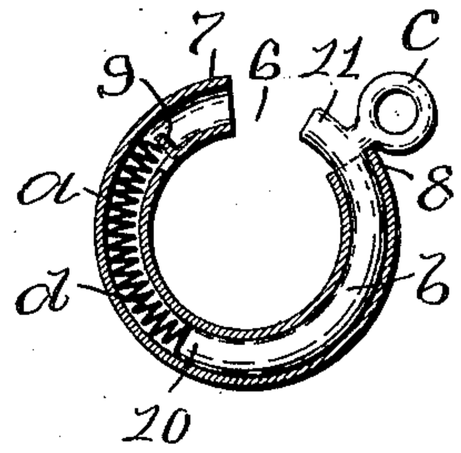


Fig. 3.

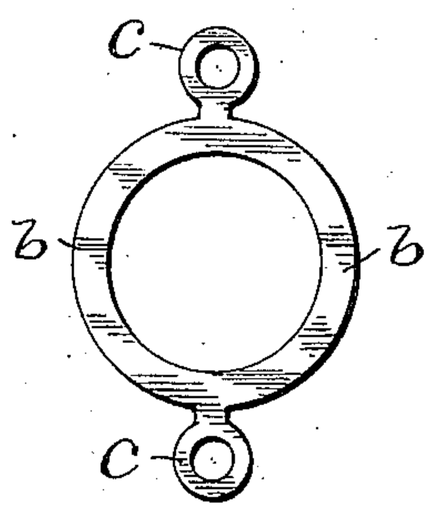


Fig. 4.

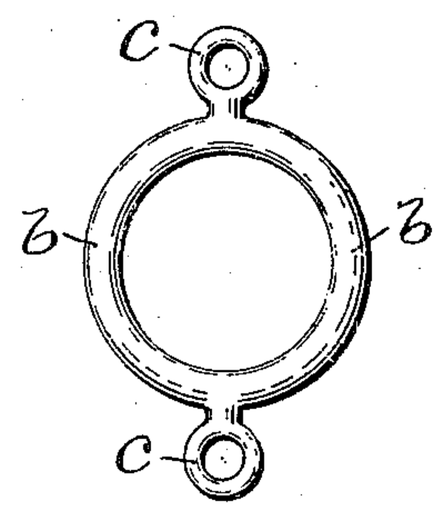
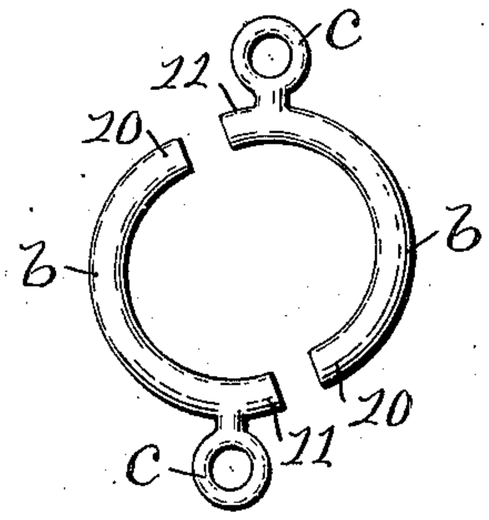


Fig. 5.



WITNESSES:

Chas. H. Luther

Ada E. Fagerty

INVENTOR:

Franz Edward Forsell

by Joseph A. Miller

ATTORNEY.

UNITED STATES PATENT OFFICE.

FRANS EDWARD FORSELL, OF ATTLEBORO, MASSACHUSETTS, ASSIGNOR TO ATTLEBORO CHAIN COMPANY, OF ATTLEBORO, MASSACHUSETTS.

SPRING RING-SNAP.

No. 917,038. Specification of Letters Patent. Patented April 6, 1909.

Application filed April 15, 1908. Serial No. 427,248.

To all whom it may concern:

Be it known that I, FRANS EDWARD FORSELL, a citizen of the United States, residing at Attleboro, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Spring Ring-Snaps, of which the following is a specification.

This invention has reference to an improvement in spring snaps and more particularly to an improvement in spring ring snaps.

The object of this invention is to improve the construction of a spring ring snap, whereby the bolt stop, the means for operating the bolt and the eye member for attaching the snap are formed in one, integral with the bolt and the whole constructed without solder.

My invention consists in the peculiar and novel construction of a spring ring snap having the attaching eye member on the bolt and other details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1 is a face view of my improved spring ring snap, showing the same in the closed position. Fig. 2 is a sectional view, showing the snap in the open position. Fig. 3 is a face view of the double bolt blank struck from sheet metal. Fig. 4 is a face view of the finished double bolt blank, and Fig. 5 is a face view of the finished double bolt blank cut in halves to form two bolts.

In the drawings, *a* indicates a tubular ring, *b* a semi-circular bolt adapted to have a sliding fit in the tubular ring, *c* an attaching eye member, and *d* a coiled spring in the tubular ring. The tubular ring *a* has an opening 6 forming the open ends 7 and 8 and a bent-in tongue 9 adjacent the end 7 and forming a stop for the adjacent end of the coiled spring *d*, as shown in Fig. 2. The semi-circular bolt *b* has the ends 10 and 11 and the outwardly-extending attaching eye member *c* in the form of a ring adjacent the end 11. The attaching eye member *c* is formed integral with the bolt *b* by first stamping out a double bolt blank from sheet metal, as shown in Fig. 3, rounding the same in finishing dies, as shown in Fig. 4, and then cutting the same in halves, as shown in Fig. 5.

The coiled spring *d* is placed in the tubular ring *a* intermediate the bent-in tongue 9 and the end 10 of the bolt *b*, as shown in Fig. 2. The snap is opened by the attaching eye member *c* which now acts as a bolt knob and as a stop to limit the opening movement of the bolt against the tension of the coiled spring *d* and when released closes by the expansion of the spring *d*. The end 11 of the bolt enters the end 7 of the tubular ring *a* when closed and the eye member *c* now acts as a stop on the end 7 to limit the closing movement of the bolt. The snap is secured to a chain or other article by the eye member *c*.

It is evident that the eye member *c* may be in the form of a ring secured to the bolt *b* which may be formed of wire 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 spring ring snap consisting of a tubular ring having an opening and a bent-in tongue forming a stop, a semi-circular bolt in the tubular ring, a coiled spring in the tubular ring intermediate the bent-in tongue and the end of the bolt, and means for opening the bolt, for limiting the opening and closing movement of the bolt, and for attaching the snap, consisting of an eye member formed integral with the bolt.

2. A spring ring snap consisting of a tubular ring having a part thereof cut away, a tongue struck out from said ring and bent so as to lie on the interior thereof, a semi-circular bolt in said ring, a coiled spring in the ring engaging said tongue and one end of said bolt, and an eye member on said bolt operating in said cut-away portion of the tubular ring, said eye member being adapted for engagement with the ends of the ring to restrict the opening and closing of the bolt, and being designed to receive fastening means.

3. A spring snap consisting of a tubular ring, having a cutaway part forming two spaced ends, a spring pressed bolt operating in said ring and across the space between said ends thereof, and a combined stop and fastening member carried by said bolt adja-

cent one of its ends, said member operating in said space between the ends of said ring and being adapted for engagement with said ring ends to restrict the opening and closing of said bolt, and being formed to engage fastening means.

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

FRANS EDWARD FORSELL.

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