G. H. PERRINE.

BUTTON RING.

APPLICATION FILED OCT. 17, 1911.

1,120,079. Patented Dec. 8, 1914.

Fig. 1.

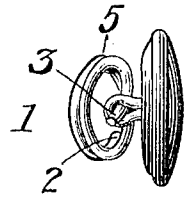


Fig. 2.

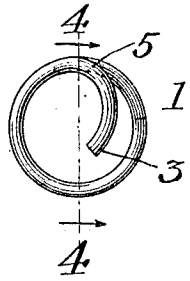


Fig. 3.

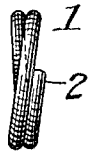


Fig. 4.

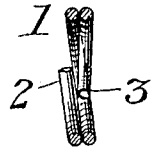
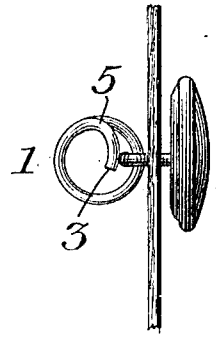


Fig. 5.



Witnesses.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C

UNITED STATES PATENT OFFICE.

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BUTTON-RING.

1,120,079. Specification of Letters Patent. Patented Dec. 8, 1914.

Application filed October 17, 1911. Serial No. 655,217.

To all whom it may concern:

Be it known that I, GEORGE H. PERRINE, a citizen of the United States, residing at Greenburg, in the county of Westchester and State of New York, have invented a certain new and useful Improvement in Button-Rings, of which the following is a full, clear, and exact description.

This invention relates to rings for securing eyed buttons in a detachable manner to garments and other articles, and the object of the invention is to provide a button ring with which the button eye may be readily engaged and as readily disengaged, but without liability of accidental disconnection.

The invention consists of a button ring preferably composed of two coils of wire, the end of one coil being bent inwardly toward the center of the ring on a curved line, and constituting a leader by which the button eye may be engaged very readily and put upon its passage between the coils to a full engagement with the ring; the leader end extending not only toward the center of the ring, but also being deflected so that its point will be between the planes extending along the sides of the ring, and thus concealed or guarded from injurious contact with the person or with the garment in use, and also serving to impart readiness of handling to the ring.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view showing the ring in process of application to an eyed button. Fig. 2 is a side view, Fig. 3 is an edge view, and Fig. 4 is a cross-section taken on line 4—4 of Fig. 2, of the ring alone. Fig. 5 is a side view of the ring applied to an eyed button, showing the button head and ring on opposite sides of the article to which it is applied, as in use.

The ring 1 as shown, is made up of two coils, and this is the preferred construction, the terminal 2 of one of the coils lying parallel against and directly below and in line with the other coil and the terminal 3 of the other coil extending beyond the terminal 2 and turned inwardly on a curved line, toward the center of the ring and also deflected laterally from the plane of its coil, as shown more particularly in Figs. 3 and 4, so that the point of this leader end or terminal 3 will be housed, shielded, or guarded by the double thickness of the ring itself at this point; this inturned laterally deflected leader end lying between the outside planes of the adjacent coils, and thus shielded from contact with the article to which the ring and button are applied.

The ring is applied to an eyed button by threading the eye of the button on the leader end 3 and then rotating the parts so that the eye will follow the coil containing the leader end and progress between the coils until it slips past the end 2 when it will be in engagement with both coils. Although in use the ring and eye may occupy the relation shown in Fig. 5, there is enough resilience in the ring to prevent the accidental detachment of the ring, and force is required to move the ring so that its leader end will pass the button eye sufficiently far to admit the button eye between the coils.

As already stated, the leader end is not only bent toward the center of the approximate circle formed by the coiling of the wire, but it also has the side twist or deflection which conceals the point of the leader end behind the main loop of the ring. This is advantageous not only because it puts the leader end of the wire in a place where it can do less damage to fingers and clothing, but also because it gives more of a pinch at the point 5 where the leader end turns in from the circle, than would be the case if the wire did not have this bend, or if the wire were bent outwardly instead of inwardly. Still another advantage due to the inward extension of the leader end on a curve rather than on a straight line, is that the angle between the leader end and the coil nearest it is more acute, and this makes it easier to slip a button on the ring than would be possible with an arrangement at an obtuse angle.

What I claim is:—

1. The herein described improved button ring, formed of a wire coiled upon itself, the terminal 2 of one of the coils lying parallel against and directly below and in line with the other coil and the terminal or leader end 3 of the other coil extending beyond the first mentioned terminal and turned inwardly on a curved line toward the center of the ring and also deflected laterally from the plane of its coil so that the point of this leader end will be housed or guarded by and between the coils of the ring at this point

and will lie between the outside planes of the adjacent coils to prevent it from coming into contact with the article to which the ring is applied.

2. As an improved article of manufacture, the herein described button ring, formed of a wire coiled upon itself, the terminal 2 of one of the coils lying parallel against and directly below and in line with the other coil and the terminal 3 of the other coil extending beyond the first mentioned terminal and turned inwardly on a curved line toward the center of the ring, the space between the terminal 3 and the adjacent coil of the ring defining an acute angle so as to augment the facility of engagement of the ring with a button eye, said terminal 3 deflected toward a median plane between the coils and housed, shielded or guarded by said coils and thereby removed from possible contact with the article upon which it is used.

In testimony whereof I have hereunto set my hand this 14th day of October A. D. 1911.

GEORGE H. PERRINE.

Witnesses:
EDYTHE E. CLUBB,
WM. J. CAMLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."