Dec. 4, 1934. G. A. LAUGHTON 1,983,235

CUFF LINK

Filed March 7, 1934

Fig. 1

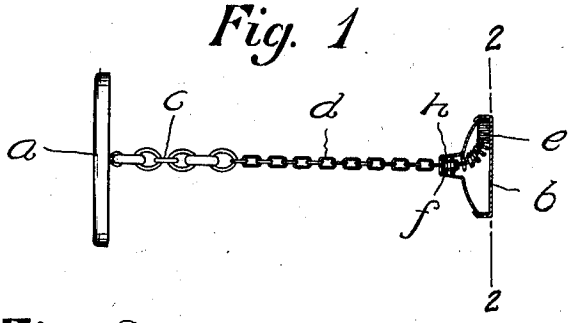


Fig. 2

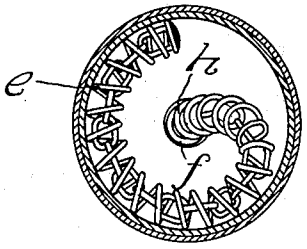


Fig. 3

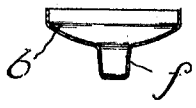


Fig. 4

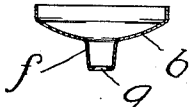


Fig. 5

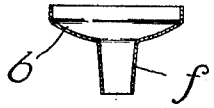


Fig. 6

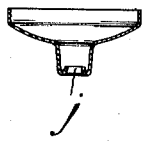


Fig. 7

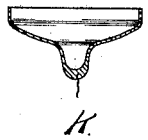
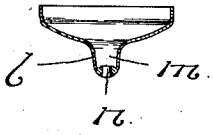


Fig. 8



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UNITED STATES PATENT OFFICE

1,983,235

CUFF-LINK

George Abe Laughton, Birmingham, England

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In Great Britain March 7, 1933

6 Claims. (Cl. 24—102)

The invention relates to cuff-links of the kind in which a pair of heads or buttons are connected together by an expansible member so that the fastened cuff may be drawn up the arm of the wearer when desired and will open or expand as it is drawn onto the thicker part of the forearm.

In one arrangement of this kind a helical compression spring is coiled within a hollow head or button and a light chain or other flexible member is connected to the other head or button and enters the hollow head; the chain or other flexible member passes along the interior of the spring and is attached to the free end thereof. Usually, the other end of the spring from that to which the flexible connection is attached, is secured around a tubular neck or lip on the internal face of the hollow button or head.

The object of the present invention is to provide an improved mounting for the end of the spring which is adjacent the neck of the hollow button or head.

The appended drawing illustrates the invention:—

Figure 1 is a part-sectional elevation of a cuff-link in expanded condition.

Figure 2 is a section of one hollow button or head on line 2—2 of Figure 1 but showing the extended condition of the spring which corresponds to the unexpanded condition of the link.

Figure 3 is a sectional view of one shell or pressing for making this hollow button.

Figure 4 is a similar view after piercing the blank.

Figure 5 is a sectional view of an alternative form of pressing or shell.

Figure 6 is a similar view of the finished shell ready for assembling in the button or head.

Figure 7 shows in section a still further constructional form of pressing or shell, and

Figure 8 shows the same pressing after drilling.

In the drawing *a* is one button or head of a cuff-link and *b* the other. *c* represents the usual chain link or other form of link between the two heads *a* and *b*. One end of *c* is attached to the head *a* in any convenient manner; the other end, instead of being directly attached to the head *b*, is connected in this type of expansible link to a length of fine chain *d* or any equivalent flexible member such as a wire or cable. The spring which is housed within the hollow head *b*, and serves to take up the chain or flexible member *d* when the link is not expanded, is referred to as *e*. The fine chain *d*, or equivalent flexible member, is secured at its end to the other of the spring *e* within the hollow button by soldering it to the last turn of the spring or forming a head on it after it is threaded into the spring.

In accordance with the present invention I press or draw the metal side cheek or shell of the hollow button or head *b* with an integral hollow, outwardly directed neck *f* terminating in a bore *g* of reduced diameter. The part of reduced bore is shaped to provide a smooth guide at its extremity, for the chain or flexible connector to work through; while the hollow neck gives an enclosed space to receive and provide an effective anchorage for the end *h* of the spring *e*.

Figure 3 shows the neck formed as a blind pressing which is subsequently pierced to form the bore *g* as shown at Figure 4. In a preferred construction, Figures 5 and 6 I press, or draw, the hollow neck *f* of the same thickness of metal as the side cheek or shell of the head and of greater length than is ultimately desired for the neck. Then I force back the extremity into the hollow of the neck in suitable press tools to form an inturned lip or flange *j* therein. This lip or flange is smoothly curved or bell-mouthed to form the guide for the chain; whilst the space around it and above it serves for the anchorage of the end *h* of the spring *e*.

A further construction shown in Figures 7 and 8 does not give accommodation for quite so long a spring *e*. This consists in pressing the end of the hollow neck part *f* so as to thicken up the metal at the end as at *k*.

This may then be drilled with a two piece drill to form a bore *m* of larger diameter near the cheek terminating in a shoulder, slightly grooved on its surface for the spring to rest on; and, beyond the shoulder, an outer smaller diameter bore *n* with a flared mouth, to form the guide.

In addition to the facility of manufacture, and the more effective spring anchorage, which this invention yields, there is the advantage that a greater length of spring can be employed so that the connector can be drawn out of the hollow button a little farther before the component turns of the spring abut.

It will be understood that each button or head of the cuff-link may house a spring of the above character, but usually sufficient expansion is allowed by a spring in one button or head of each complete link.

I claim:

1. A cuff-link comprising in combination a pair of heads and a flexible connection, a flexible member to which the flexible connection is at-

tached, a spring housed in one of the heads to which the flexible member is connected and a hollow neck on one of the heads into which one end of the spring is accommodated so as to permit a longer spring to be employed.

2. A cuff-link comprising in combination a pair of heads and a flexible connection, a flexible member to which the flexible connection is attached, a spring housed in one of the heads to which the flexible member is connected and through which it is threaded, and a hollow neck on one of the heads into which one end of the spring is accommodated so as to permit a longer spring to be employed.

3. A cuff-link comprising in combination a pair of heads and a flexible connection, a flexible member to which the flexible connection is attached, a spring housed in one of the heads to which the flexible member is connected and a hollow neck on one of the heads into which one end of the spring is accommodated so as to permit a longer spring to be employed, said neck having an opening which forms a smooth guide for the flexible member as it is drawn into or out of the head.

4. A cuff-link comprising in combination a pair of heads and a flexible connection, a flexible member to which the flexible connection is attached, a spring housed in one of the heads to which the flexible member is connected, and through which it is threaded, and a hollow neck on one of the heads into which one end of the spring is accommodated so as to permit a longer spring to be employed, said neck having an opening which forms a smooth guide for the flexible member as it is drawn into or out of the head.

5. An expansible cuff-link having a spring in one of its heads to which a flexible connection member is attached so that the member under strain can be drawn more or less out of the head against the expansive force of the spring which draws it in again when the load is removed, in which the head for housing the spring has a hollow neck through which the flexible member moves and in which the end of the spring is accommodated.

6. An expansible cuff-link having a spring in one of its heads to which a flexible connection member is attached so that the member under strain can be drawn more or less out of the head against the expansive force of the spring which draws it in again when the load is removed, in which the head for housing the spring has a hollow neck integral with it, through which the flexible member moves and in which the end of the spring is accommodated, said neck having an inturned end around which the end turns of the spring are engaged.

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