Jan. 20, 1942. F. P. CRONAN 2,270,677

CUFF LINK CONSTRUCTION

Filed April 4, 1940

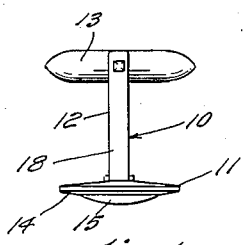

Fig. 1

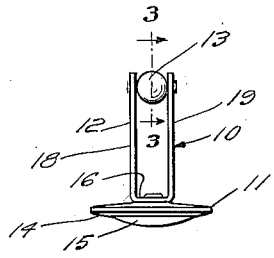

Fig. 2

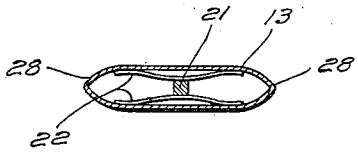

Fig. 3

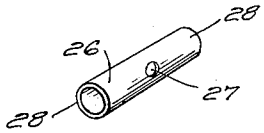

Fig. 4

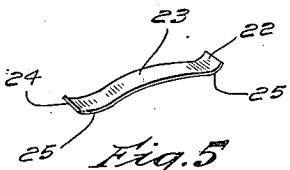

Fig. 5

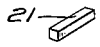

Fig. 6

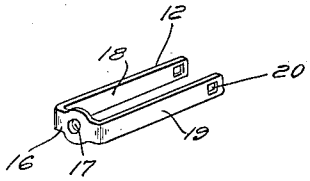

Fig. 7

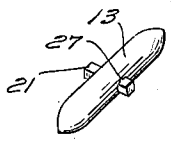

Fig. 8

INVENTOR
Francis P. Cronan
BY Nathaniel Frucht
ATTORNEY

Patented Jan. 20, 1942

2,270,677

UNITED STATES PATENT OFFICE

2,270,677

CUFF LINK CONSTRUCTION

Francis P. Cronan, Attleboro, Mass., assignor to Dolan & Bullock Company, Providence, R. I., a corporation of Rhode Island

Application April 4, 1940, Serial No. 327,838

4 Claims. (Cl. 24—102)

My present invention relates to the jewelry art, and has particular reference to a novel construction for cuff links.

It is the principal object of my invention to provide a novel construction for a cuff link which has a movable head releasably retained in alignment with and at right angles to the shank.

It is another object of my invention to provide a cuff link having a hollow movable head in which the snap action of the movable head is materially strengthened.

It is an additional object of my invention to provide a cuff link having a movable head and spring means therein for snapping the parts to selected position, action being strengthened and being maintained at maximum resiliency.

It is an additional object of my invention to provide a simple construction which is easy and economical to manufacture and to assemble.

With the above and other objects and advantageous features in view, my invention consists of a novel arrangement of parts, more fully disclosed in the detailed description following, in conjunction with the accompanying drawing, and more specifically defined in the claims appended thereto.

In the drawing:

Fig. 1 is a side elevation of a cuff link embodying my invention;

Fig. 2 is an end view thereof;

Fig. 3 is a section taken along line 3—3 on Fig. 2;

Fig. 4 is a perspective view of the movable head prior to assembly;

Fig. 5 is a perspective view of one of the snap springs;

Fig. 6 is a perspective view of a preferred pivot pin; and

Fig. 7 is a perspective view of the cuff link shank.

Fig. 8 is a perspective view of the movable head.

The conventional cuff link with movable heads which are retained in position in alignment with and at right angles to the shank has various spring means devised for releasably retaining the movable head in desired position and for providing for a snap action movement. It has been found that this type of construction tends to lose its snap action after extended use for structural reasons, such as the spring shifting so that its point of greatest resiliency is no longer in contact with the operative parts, and also because the spring flattens out and loses its inherent resiliency. To overcome these disadvantages, I have devised a simple construction which can be manufactured with a minimum number of readily assembled parts, the resiliency of the snap action spring construction having a much longer life and being always at maximum strength.

Referring to the drawing illustrating my invention, the novel cuff link 10 comprises a fixed ornamental head 11, a shank 12, and a movable head 13. The fixed head 11 may be of any desired construction or ornamentation and may be in one piece or as illustrated may comprise a cup-shaped member 14 having an ornamental stone 15 mounted therein.

The shank 12 is of integral construction and is preferably stamped from sheet stock. It comprises a bottom plate 16 having an opening 17 to which the member 14 of the fixed head may be riveted, and integral arms 18 and 19 forming a U-shaped shank. The arms 18 and 19 are provided adjacent their free ends with rectangular pivot pin openings 20.

The movable head 13 is pivoted between the arms 18 and 19 of the shank on a rectangular pivot pin 21 which is mounted in the openings 20. The head 13 may be of any desired shape, either round or rectangular, and is preferably of an integral one-piece hollow construction as illustrated. As shown in Fig. 3, the head 13 is provided with two leaf springs 22 disposed longitudinally of the head on either side of the pivot pin 21, each leaf spring 22 being arcuately curved at its central portion 23 and having its ends 24 oppositely curved so that the springs rest on their rounded ends 25 within the head.

In assembling the head 13, a hollow tube 26, see Fig. 4, is first provided with pivot openings 27 transversely of the center portion thereof; the leaf springs 22 are then inserted in the positions illustrated in Fig. 3, and the ends 28 of the hollow tube 26 are drawn together to form integral conical end portions as illustrated, the head ends 28 being preferably of greater curvature than the spring ends 25 to lock the spring ends.

With the parts assembled in the position shown in Fig. 3, it is clear that pressure of the springs 22 on the flat surfaces of the rectangular pin 21 will releasably retain the head 13 in position at right angles to the shank 12. When the head is swung, the corners of the pin 21 press against the springs until they snap past, whereupon the head is releasably locked in alignment with the shank 12. If the springs 22 were permitted to shift to either side, the high points of the spring at the arcuate portion 23 would no longer bear against the surfaces of the rectangular pivot pin

21 and the snap action would be materially lessened; with the novel construction illustrated, the drawing of the ends 28 of the movable head locks the springs 22 and prevents longitudinal shifting of the springs in the head. Moreover, a further advantage of the present invention is the construction of the movable head in one integral piece, without end closure members of separate ornamental sections or stones, the conical ends facilitating insertion of the cuff links in the cuffs.

While I have described a specific constructional embodiment of my invention, it is obvious that changes in the size and shape of the parts and in their relative arrangement may be made to suit the requirements for different cuff link designs, without departing from the spirit and the scope of the invention as defined in the appended claims.

I claim:

1. In a cuff link construction, a shank having spaced arms, a pivot pin of non-circular cross section mounted in said arms, a movable tubular head pivotally mounted on said pin, a leaf spring of arcuate form in said head contacting said pivot pin and adapted to yieldingly resist turning movement with respect to said pivot pin, the ends of said head being drawn axially and forming integral conical end closures, said spring being of a length to extend into said end closures when resisting turning movement of said pivot pin, whereby resistance of the spring to lengthening movement is increased.

2. In a cuff link construction, a shank having spaced arms, a pivot pin of non-circular cross section mounted in said arms, a movable tubular head pivotally mounted on said pin, a pair of leaf springs of arcuate form in said head contacting said pivot pin and adapted to yieldingly resist turning movement with respect to said pivot pin, the ends of said head being drawn axially and forming integral conical end closures, said springs being of a length to extend into said end closures when resisting turning movement of said pivot pin, whereby resistance of the springs to lengthening movement is increased.

3. In a cuff link construction, a shank having spaced arms, a pivot pin of rectangular cross section mounted in said arms, a movable tubular head pivotally mounted on said pin, a leaf spring of arcuate form in said head contacting said pivot pin and adapted to yieldingly resist turning movement with respect to said pivot pin, the ends of said head being drawn axially and forming integral conical end closures, said spring being of a length to extend into said end closures when resisting turning movement of said pivot pin, whereby resistance of the spring to lengthening movement is increased.

4. In a cuff link construction, a shank having spaced arms, a pivot pin of rectangular cross section mounted in said arms, a movable tubular head pivotally mounted on said pin, a pair of leaf springs of arcuate form in said head contacting said pivot pin and adapted to yieldingly resist turning movement with respect to said pivot pin, the ends of said head being drawn axially and forming integral conical end closures, said springs being of a length to extend into said end closures when resisting turning movement of said pivot pin, whereby resistance of the springs to lengthening movement is increased.

FRANCIS P. CRONAN.