No. 853,258. PATENTED MAY 14, 1907.

F. H. NOBLE.

PIN.

APPLICATION FILED FEB. 23, 1904.

Fig. 1.

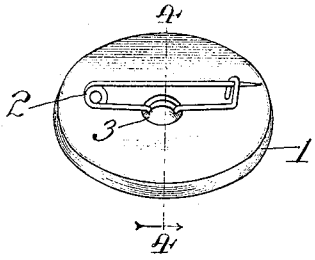


Fig. 2.

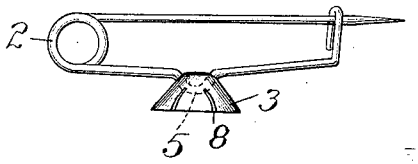


Fig. 3.

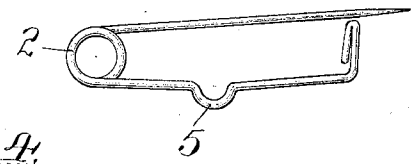


Fig. 4.

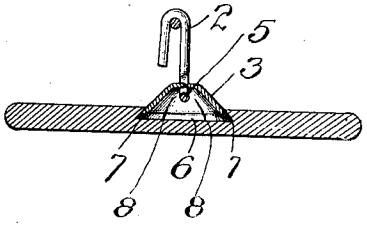


Fig. 6.

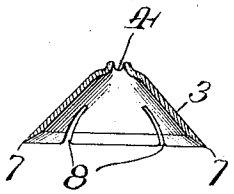
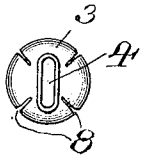


Fig. 5.



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PIN.

No. 853,258. Specification of Letters Patent. Patented May 14, 1907.

Application filed February 23, 1904. Serial No. 194,926.

To all whom it may concern:

Be it known that I, FRANK H. NOBLE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Pins, of which the following is a specification.

The object of my invention is to make pins which shall be neat, simple and economical to manufacture, and more reliable and efficient in use than those with which I am acquainted.

In the accompanying drawing, Figure 1 is a perspective of a button embodying my invention; Fig. 2 an elevation of the pin proper and the attaching cup, this figure and the remaining figures being on a larger scale than that of Fig. 1; Fig. 3 an elevation of the pin proper detached from the cup; Fig. 4 a section on the line 4—4 of Fig. 1; Fig. 5 a top-plan view of cup, and Fig. 6 a section of the cup showing the tapering or beveling of the edges thereof.

For convenience in description I have illustrated my invention as used in connection with a button 1, having a safety pin 2 for attachment to the place of use. The means for securing the pin to the button comprises a cup 3, made of thin sheet metal and having a top slot 4 to receive the kink or bend 5 of one of the members of the safety pin. After the safety pin is inserted in the slot of the cup, the sides or edges of the slot are turned over such kink 5, with the result that the safety pin is securely held to the cup and effectually prevented from rotating or moving from its normal position at right angles to the flat sides of the body of the button.

The button has a central opening 6 which is undercut as at 7 to receive the marginal edges of the cup which is inserted in the opening and then, by a suitable instrument, flattened down somewhat with the result that such edges are forced into the said undercut. However, it frequently happens that in this operation of securing the cup to the button, the edges of the cup break off and sometimes the break extends to the center of and even across the cup, thereby either weakening the cup or rendering the same unfit for use. Inasmuch as these pin attachments must be made and assembled very inexpensively with as little labor devoted thereto as possible, the above noted objections are serious and material. To overcome these objections, I provide the cup with a series of slits 8, preferably substantially radial as seen in Fig. 5 and formed by a suitable die when the cup is being stamped out and shaped up. By thus providing the cup with slits, as shown, provision is made for the necessary expanding of the circumference of the cup into the under cut of the button opening, whereby tearing or fracture of the material of the cup is avoided. Moreover, the edges of the cup are uniformly and effectually forced into such undercut and without damaging the cup. The additional advantage results that after the cup has been secured in place, the place of attachment thereof with the pin will be properly maintained with respect to the button.

As shown in Fig. 6, I prefer to taper or bevel the extreme marginal edges of the cup so as to thin them so that they will readily become outwardly flanged and quickly enter the undercut without applying too great pressure to the main portion or body of the cup.

I claim:

1. In combination with a button having an undercut recess, a one-piece cup the margin of which is beveled and also provided with a series of substantially radial slits and thereby adapted to be spread by pressure to engage said undercut recess, and an attaching member connected to the bowl of said cup; substantially as described.

2. In combination with a button having an undercut recess, a one-piece cup the margin of which is beveled and also provided with a series of radial slits and thereby adapted to be spread by pressure to engage said recess, the bowl of said cup being also provided with a transverse slot, and an attaching member received within and clamped by the infolded edges of such transverse slot; substantially as described.

FRANK H. NOBLE.

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