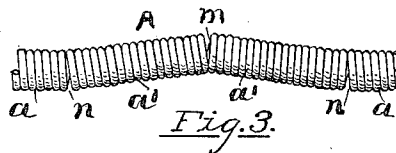
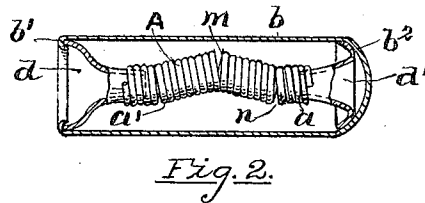
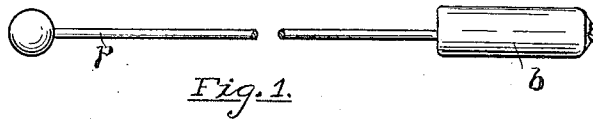


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 COMBINED HAT PIN HOLDER AND POINT PROTECTOR.
 APPLICATION FILED APR. 12, 1911.

1,045,887.

Patented Dec. 3, 1912.



WITNESSES.

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FRANK B. REYNOLDS, OF PROVIDENCE, RHODE ISLAND.

COMBINED HAT-PIN HOLDER AND POINT-PROTECTOR.

1,045,887.

Specification of Letters Patent.

Patented Dec. 3, 1912.

Application filed April 12, 1911. Serial No. 620,601.

To all whom it may concern:

Be it known that I, FRANK B. REYNOLDS, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Combined Hat-Pin Holders and Point-Protectors, of which the following is a specification.

My invention relates to devices adapted for holding in position hat-pins, scarf-pins and other analogous pins for personal wear, the device at the same time protecting and practically concealing the sharpened or puncturing portion of the pin, and it consists in the improved construction hereinafter set forth and claimed.

The object I have in view is to provide a simple, inexpensive and solderless combined pin-holding and point-protecting device, adapted to be readily attached to the pin and as readily withdrawn from it, at will, its construction being such that the article, when in normal use, is not liable to become accidentally detached, thereby insuring the pin against loss, while guarding the pin's point against inflicting injury.

The improved device is inherently resilient and flexible, and is both self-centering and self-adjusting with respect to the stiff steel pin-stem when the latter is being inserted therein.

In the accompanying sheet of drawings, Figure 1 represents, in side elevation, my improved pin-holding and point-protecting device, as mounted in a casing and attached to a hat-pin. Fig. 2 is a longitudinal central sectional view of the same, in enlarged scale, the pin itself being omitted. Fig. 3 is a side elevation of the resilient portion of the device. Fig. 4 is an end view of it.

Again referring to the drawings, A designates the elastic, resilient inner portion of my improved combined pin-holding and point-protecting device. It is preferably produced from a length of suitably tempered steel or German silver wire of proper thickness. The wire is wound so as to produce a flexible resilient tube whose walls consist of a series of helically disposed, snugly wound coils normally engaging one another. The bore or inner diameter of the tube is materially greater than the thickness of the pin-stem p to be inserted therein. After the tube is formed in the first instance it is bent laterally about midway of its length, so as

to produce therein permanent, oppositely inclined connected sections u^1 , a^1 . The said lateral bend or deflection may be equal to or exceed the semi-diameter of the tube's bore, thus producing in the wall a normal small V-shaped gap m —see Figs. 2 and 3. The outer or free end portions of the tube are each bent slightly with respect to the longitudinal axes of the sections a^1 in order to place the bore of said end portions in permanent axial alinement with each other, as indicated at a , a , thereby also producing a slight V-shaped gap n at the junction of the corresponding section a^1 , as clearly shown.

Now, assuming the tube to be mounted in a suitable holder, upon forcibly inserting the pointed end portion of a stiff pin-stem p (whose diameter exceeds the clear space or opening s , Fig. 4) endwise into the tube, its surface will frictionally engage opposite sides of the bore and flex or depress the angular sections a^1 of the tube, so that, when fully inserted, the point proper may extend nearly to the tube's end, and be protected by it. The act of inserting the pin temporarily depresses sections a^1 , as stated, and correspondingly closes the gap m . I prefer to closely wind the coils, thereby presenting a comparatively smooth inner surface to the pin-point.

The combined pin-holding and point-protecting device A is permanently mounted in a holder or thin sheet-metal casing b , in which are located a pair of oppositely disposed, elongated, tubular, eyelet-like members d , d^1 , substantially as represented in Fig. 2. In this arrangement, the flanged part of said inner member d^1 may bear directly against the closed end b^2 of the casing and having an end section a of the tube A snugly fitting the exterior portion of the tubular neck of the said flanged member. The other inner member d has a flaring mouth terminating in a tubular neck snugly inserted in the corresponding end section a of the tube. In order to secure the several parts together, the edge of the casing is bent inward around the adjacent outer edge of member d , thus producing the rounded or beaded rim b^1 . The function and manner of operation are substantially the same as before stated. It is obvious that the outer surface of the device may be increased in size and provided with suitable ornamental members or designs.

I claim as my invention:—

1. The combined hat-pin holder and pin-point protector herein described, the same consisting of an outer shell or casing having its rear or bottom end closed, an annular member, fixed to the other or front end of the casing, having inwardly tapering side walls, a central hollow inner projection secured to the lower portion of the casing having its longitudinal axis alining with that of the said front annular member, and a laterally bent flexible tube, formed from wire, interposed between said alining annular end members and secured to their inner ends.

2. In a pin-point guard, the combination of a flexible tube formed of a single length of continuously connected helical coils of

wire, the tube's wall having permanent lateral deflections therein extending longitudinally right and left in opposite directions at an angle from its center portion and terminating in ends having longitudinal axes alining with each other, a shell or casing secured to one end of said tube by a hollow projection, and a reversely arranged hollow guide member fixed to the other end of the shell, its inner end extending into and supporting the corresponding end of the said tube.

In testimony whereof I have affixed my signature in presence of two witnesses.

FRANK B. REYNOLDS.

Witnesses:

GEO. H. REMINGTON,
CALVIN H. BROWN.

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