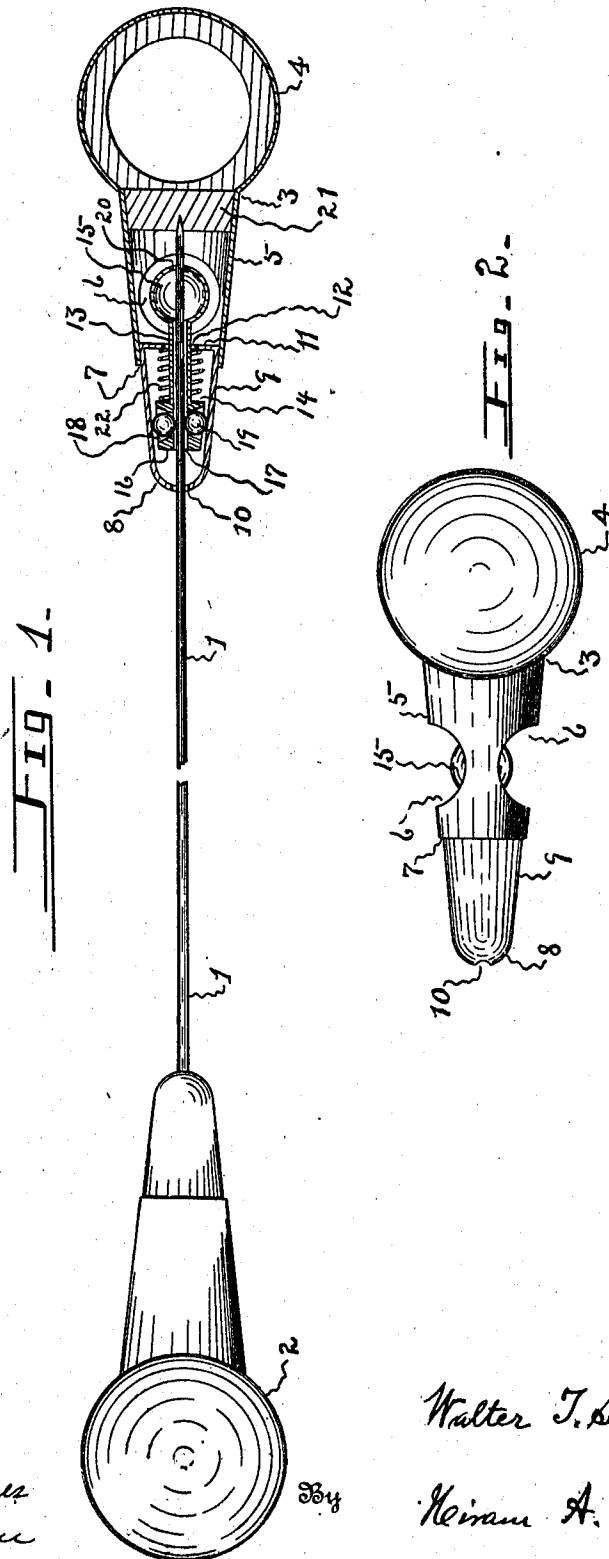


W. T. SCHROEDER.
HAT PIN PROTECTOR.
APPLICATION FILED OCT. 24, 1910.

988,738.

Patented Apr. 4, 1911.



Witnesses

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WALTER T. SCHROEDER, OF OMAHA, NEBRASKA.

HAT-PIN PROTECTOR.

988,738.

Specification of Letters Patent.

Patented Apr. 4, 1911.

Application filed October 24, 1910. Serial No. 588,639.

To all whom it may concern:

Be it known that I, WALTER T. SCHROEDER, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Hat-Pin Protectors, of which the following is a specification.

This invention relates to an attachment for hat pins, and has for its object to provide an ornamental head which may be secured upon the sharp end of the pin, after the pin has been inserted in or passed through the hat, to inclose, cover or protect the point.

The use of hat pins which, when inserted, pass through the crown of the hat are objectionable since the obtrusive, projecting point may cause injury. The herein described protector or attachment has reference to a construction which may be conveniently secured upon the free end of the pin, will be reliably held, and may be readily removed.

With these objects in view the invention presents a novel construction, combination and arrangement of parts as described herein and claimed, and as illustrated in the drawing, wherein,—

Figure 1 shows a side elevation of a hat pin with a protecting device, embodying my invention, the device being in longitudinal section. Fig. 2 is a plan view of the device.

Referring now to the drawing for a more particular description, the stem or pin 1 and head 2 of the hat pin may be of usual construction, and, for the purpose of protecting the point of the pin, I provide an attachment 3 to be removably mounted thereon, the same comprising a head 4 preferably having a tubular, convergent shank 5 and formed with oppositely-disposed apertures 6 near its open end 7.

At 8 is indicated a cone-shaped casing, its convergent wall 9 being provided at its terminal with an opening 10, its opposite end being rigidly secured in opening 7 of shank 6, and having a base or inturned part 11 operating as a stop, with a central opening 12.

Seated in opening 12 and adapted to move longitudinally therein, is the tubular stem 13 of the plunger or compression member 14, the stem being provided at one of its ends with a globular holder or handle 15 disposed within shank 5 adjacent to openings 6, its opposite end being provided with a bearing-head 16 disposed in casing 8. The head has

a central aperture 17 formed in alinement with the bore of tube 13, and provided with transversely formed, oppositely-disposed apertures or pockets 18 opening upon the outer sides of the head and also opening upon its aperture 17.

Seated within each of pockets 18, is a roller-member 19 having a diameter less than the pocket, but having a diameter greater than the thickness of the material forming the head.

The attachment may be seated upon the free end of the pin, the pin passing through the aperture of the casing, the bearing-head, and tube 13 and through aperture 20 of holder-member 15, the point of the pin having a seating in the filler 21, preferably of cork or similar material, said filler being located in the shank adjacent to head 4; it will be seen, if member 14, at this time be moved toward head 2 of the pin, rollers or balls 19 will be moved in the casing toward the end thereof of lesser diameter, members 19 having bearings upon the convergent wall of casing 8 and the body of the pin, and thereby the device will be secured upon the pin. In order, however, that compression-member 14 will be normally maintained, with its head 16 disposed near the narrow part of casing 8, with balls or rollers 19 in contact with the convergent wall 9, spiral spring 22 is provided and is seated upon tube 13 between head 16 and base or stop-lug 11, and when mounting the device upon the hat pin, the spring will cause the compression-member to operate as a wedge, head 16 passing within the narrow part of the convergent casing, balls or rollers 19 making contact with the casing and body of the pin, so that the device will be securely held upon the pin. At this time, if an attempt is made to separate the device from the hat pin, as by applying force to cause it to slide from the pin, all parts of the device may be moved a limited distance, except the compression-member; this member, by this operation, will obtain a seating in a still narrower part of the convergent casing, and the contact of the balls or rollers mentioned, will tend to prevent the removal of the device.

By reason of the provision of apertures 6 in shank 5 and the use of holder 15, the device may be removed, manually, from the pin whenever desired. The operation to effect this removal is simply, by use of thumb

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and finger of the operator, to move handle 15 in the direction of head 4. This may be readily accomplished, since handle 15 is accessible by reason of apertures 6. By moving handle 15 together with the compression-member, as last described, bearing-head 16 will, of course, be moved to that part of the convergent wall 9 of casing 8 which has a greater diameter, and balls or rollers 19 will thereby be released from engagement with the casing and body of the pin.

Having fully described the several parts and their uses, a further explanation relating to operation is not necessary.

What I claim and desire to secure by Letters Patent is,—

In a device of the character described, the combination with a head, of a hollow shank carried thereby, a casing carried by said shank having its inner walls tapering toward its outer end, said casing lying in longitudinal alinement with said hollow shank,

a plunger having a head and having an opening therethrough for the passage of a hat pin, said plunger comprising an enlarged terminal portion having transverse openings therein, balls seated in said openings, a transverse fixed member above said terminal portion, and a spring bearing between said terminal portion and said fixed member which normally tends to force said terminal portion toward the outer end of the casing, there being opposed openings formed in the side walls of the hollow shank portion opposite the head of the plunger through which said head may be manually engaged.

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

WALTER T. SCHROEDER.

Witnesses:

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