

F. R. GREENWALD.

HAT PIN GUARD.

APPLICATION FILED FEB. 10, 1909.

984,806.

Patented Sept. 14, 1909.

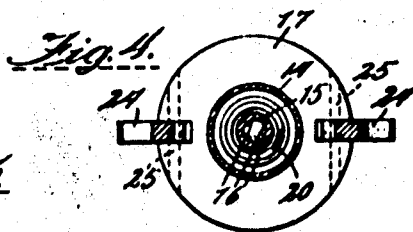
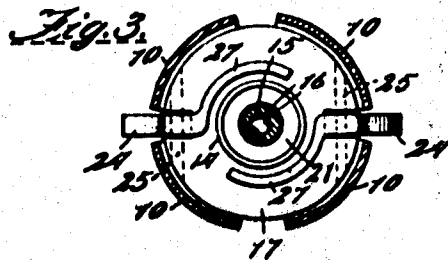
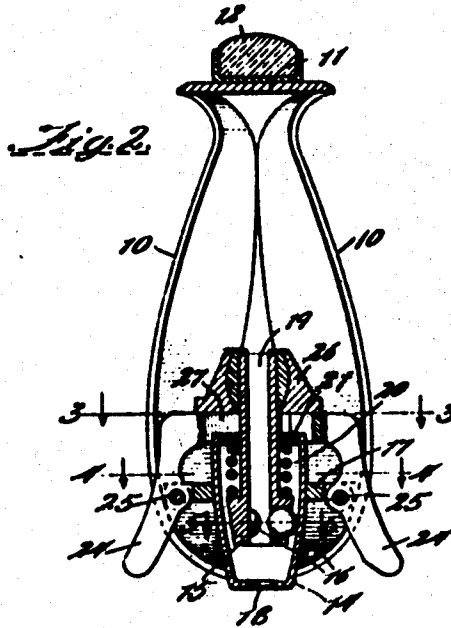
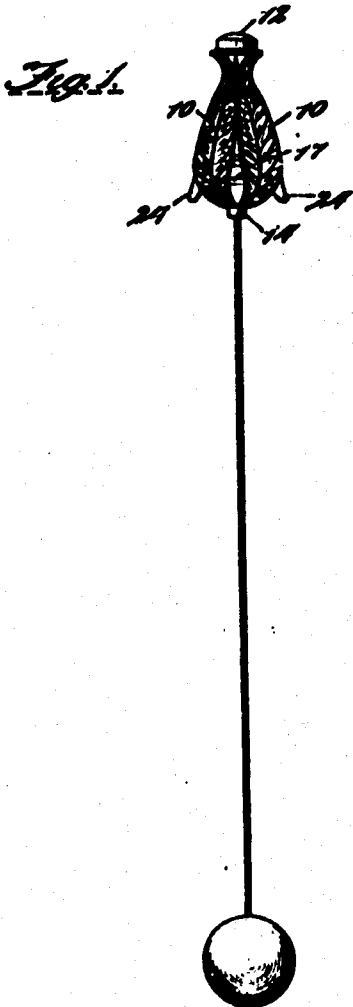
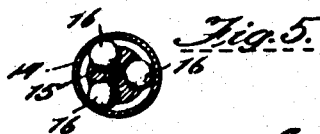
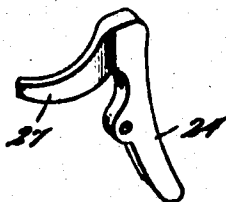


Fig. 6.



Witnesses:
Frank R. Greenwald
G. W. Dumas

Inventor:
Frank R. Greenwald
 By *Cheever & Cox*
Attorneys

UNITED STATES PATENT OFFICE.

FRANK R. GREENWALD, OF CHICAGO, ILLINOIS.

HAT-PIN GUARD.

934,306.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed February 18, 1909. Serial No. 478,090.

To all whom it may concern:

Be it known that I, FRANK R. GREENWALD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Hat-Pin Guard, of which the following is a specification.

My invention relates to guards for hat pins for women, and the object of the invention is to provide means for inclosing or protecting the point of the pin.

Women's hat pins frequently project through the hat when being worn and are therefore dangerous, especially in public places where persons are crowded together. The projecting pin point is frequently a menace also when the hat is not being worn, for example in theaters and drawing rooms.

My purpose is to provide a guard which may be readily applied and removed with one hand, and which, when applied, will hold itself firmly in place.

It is also an object of the invention to provide means for limiting the distance to which the guard may be slipped over the point of the pin to prevent the pin from projecting through the guard.

A further object is to provide a device of this character which shall be ornamental in its nature.

I accomplish my objects in the manner shown in the accompanying drawings in which—

Figure 1 shows the guard in position upon the pin; Fig. 2 is a longitudinal vertical section of the guard drawn to an increased scale; Figs. 3, 4, and 5 are sectional views taken respectively on the lines 3—3, 4—4 and 5—5 of Fig. 2; and Fig. 6 is a perspective view of one of the releasing levers.

Similar numerals refer to similar parts throughout the several views.

The device in general consists, in the form here selected for illustrating the invention, of two portions, the protecting portion, cap or shield, which is preferably ornamental in character and serves to inclose the point of the pin, and the clutch mechanism, which is preferably more or less completely hidden within the ornamental shield or cap. In the present instance the protecting cap consists of leaf shaped side pieces 10 having at the top thereof a stop 11 adapted to limit the distance to which the device may be slipped over the end of the pin. In the de-

sign here shown a stone 12 is mounted upon the stop 11 for ornamental purposes.

The clutch mechanism is secured to and preferably inclosed within the cap 10—11—12, and comprises a casing 14, a ball holder 15, balls 16, and means for operating the same. The taper casing 14 is rigidly secured to the parts 10 of the casing through the medium of an annular plate 17 and has an aperture 18 at its lower extremity through which the pin may be inserted. The ball holder 15 is longitudinally movable within the casing 14 and has an aperture 19 through which the point may be inserted. The parts are so arranged that when the holder is moved toward the lower smaller end of the taper casing, the balls 16 will be forced inwardly toward the center to clutch the sides of the pin, and when moved in the opposite direction will permit the balls to move outwardly to release the pin. The ball holder is urged toward the smaller end of the taper casing by means of a spring 20, one end of which engages said holder, and the other end abuts a ring 21 secured to the upper part of said casing. Thus the mechanism tends normally to engage the pin but will yield to permit the pin to enter. After the pin has entered, an attempt to forcibly withdraw it will merely serve to increase the clutching action. The ball holder may be retracted by means of the levers 24 which are pivoted upon the fulcrums 25, and are adapted to engage the collar 26 rigidly secured to the upper portion of the ball holder 15. In the preferred form these levers are all inclosed within the cap or casing except at their lower extremities, which project in order that they may be readily grasped by the fingers of the user. In the best form, here shown, the levers have circular extensions 27 at their upper ends for partially encircling the stem of the holder 15 to give greater travel to the collar 26 and increased bearing of said collar upon said levers.

It is desirable to form the ball holder in the manner shown with an aperture extending from beneath the balls, through the compression spring 20, past the extension 27 of the levers 24, and through the greater portion of the collar 26. This gives a long bearing surface along the pin and holds the device more firmly in position thereon.

In operation, to apply the device it is merely necessary to slip the same over the

end of the pin as far as it will go, the movement being limited by the stop 11 coming against the end of the pin. This may be done without looking directly at the device and consequently it may be easily applied by touch, without the aid of a mirror when the hat is upon the head. The device may be removed by merely pinching or applying the pressure of the fingers to the levers 24, it being observed that in this, the preferred form, the said levers are placed diametrically opposite to each other. When the clutch mechanism is released as a result of this inward pressure of the fingers, the device may be withdrawn without necessitating any direct pull upon the pin itself. Consequently the guard may be removed with one hand.

(Of course the parts inclosing the clutch mechanism may be greatly altered in form and appearance without departing from the spirit of the invention.

What I claim as new, and desire to secure by Letters Patent, is:

1. A hat pin guard consisting of means for protecting the point of the pin, means for automatically holding said protecting means in position when slipped over the end of the pin, and a pair of levers adapted to be operated by the fingers of the wearer for releasing said holding means, said levers being pivoted to said holding means and having separate parallel fulcrum axes arranged on opposite sides of the pin.

2. A hat pin guard consisting of a cap for covering the point of the pin, a clutch for

gripping the pin when slipped over the end thereof, and levers placed substantially diametrically opposite to each other for releasing said clutch to permit the pin to be withdrawn.

3. A hat pin guard consisting of a cap for inclosing the point of the pin, balls adapted to contact the sides of the pin, a ball holder adapted to encircle the pin, a taper casing adapted to act upon said balls to force them toward said pin to clutch the same, a spring for forcing said ball holder toward the smaller end of said taper casing and levers pivoted to said casing and operable by the fingers of the wearer for forcing said ball holder toward the larger end of the taper casing for releasing the parts from the pin.

4. In a hat pin guard the combination with a stop for limiting the movement of the device along the pin, of a clutch comprising a tapered member and means movable relatively thereto for causing the clutch to grip or to release, a spring for urging the clutch parts to acting position and levers arranged approximately on opposite sides of the device and adapted to release the clutch when pressed by the fingers of the user.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

FRANK R. GREENWALD.

Witnesses:

M. S. ROSENZWEIG.

C. J. CHRISTOFFEL.