S. DOBROVITS.

HATPIN PROTECTOR.

APPLICATION FILED JULY 28, 1919.

1,357,035. Patented Oct. 26, 1920.

Fig. 3

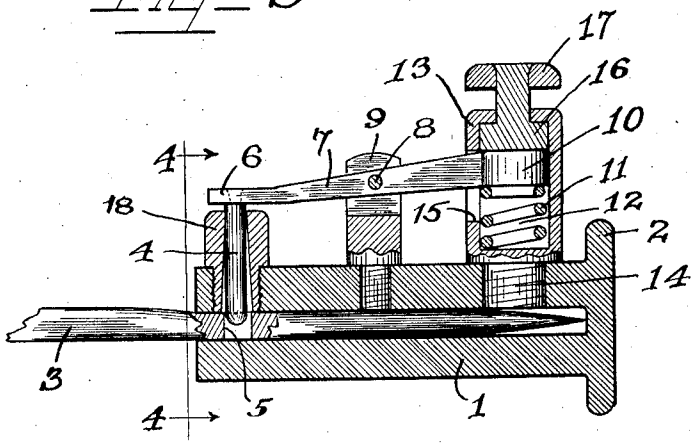


Fig. 1

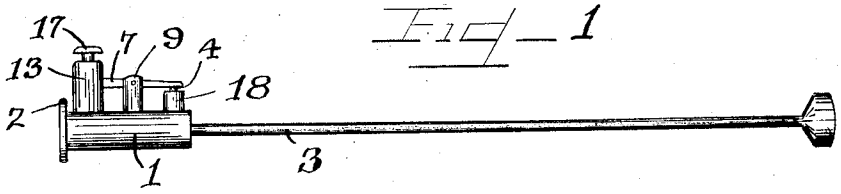


Fig. 5

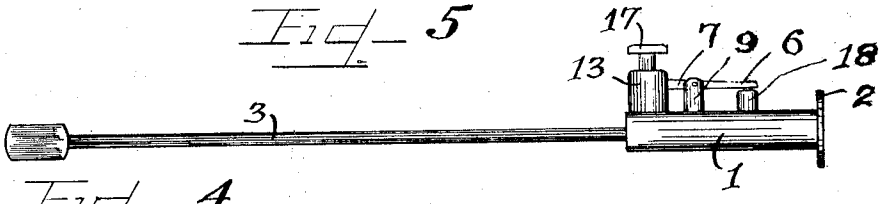


Fig. 4

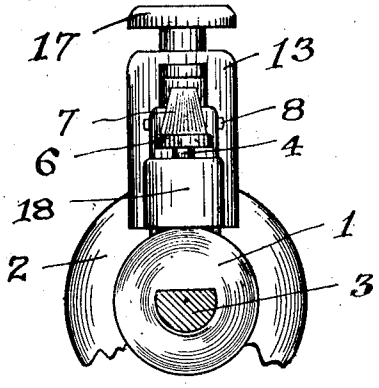
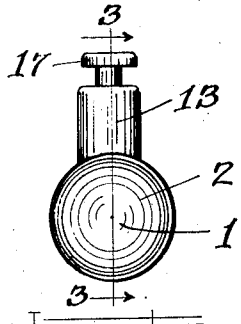


Fig. 2



Inventor

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UNITED STATES PATENT OFFICE.

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HATPIN-PROTECTOR.

1,357,035. Specification of Letters Patent. Patented Oct. 26, 1920.

Application filed July 28, 1919. Serial No. 313,721.

To all whom it may concern:

Be it known that I, STEVE DOBROVITS, a former subject of the Emperor of Hungary, but have declared my intention of becoming a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hatpin-Protectors; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

This invention relates to hat-pin protectors adapted to be firmly but detachably secured to the pointed end of a hat-pin.

Protectors of this character as heretofore constructed have been liable to become accidentally detached as the result of insecure locking means between the protector and pin.

It is an object therefore of the present invention to provide a hat-pin protector which is positively locked to the pin.

A further object of the invention is to provide a protector which may be quickly and readily attached to or detached from the end of the pin.

It is also an object of the invention to provide a cheap, simple, easily constructed form of hat-pin protector.

Other and further important objects of this invention will be apparent from the disclosures in the following specification and the accompanying drawings.

The invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

On the drawings:

Figure 1 is a side elevation of a pin and a protector applied thereto embodying the features of the present invention.

Fig. 2 is an end view of the protector.

Fig. 3 is a section on the line 3—3 of Fig. 2.

Fig. 4 is a section on the line 4—4 of Fig. 3.

Fig. 5 is a side elevation of a modified form of protector.

As shown on the drawings:

The protector comprises a tube 1, closed at one end, having a flange 2, at such closed end for aiding in the attachment or removal of the protector from the end of the pin 3. For securing the protector to the pin, a locking or catch pin 4, is provided adapted to enter a recess or preferably an aperture 5, passing entirely through the hat-pin. This catch pin is secured to one end 6, of a rocker 7, which is pivotally mounted at 8, on a lug 9, secured to the tube. The other end 10, of the rocker 7, is normally pressed outwardly by a spring 11, so that the locking pin 4, is held in engagement with the aperture 5, until the end 10, of the rocker is depressed against the pressure of the spring. The spring 11, is arranged within a chamber 12, of a cylinder 13, which may be attached to the tube by means of a boss 14, soldered or otherwise secured in an aperture in the tube. A slot 15, is provided in the wall of this cylinder for the passage of the end 10, of the rocker therethrough. In the upper part of the cylinder is arranged a plunger or piston 16, connected to an externally arranged press-button so that by depressing the button 17, the end 10, of the rocker may be depressed against the action of the spring 11, thereby lifting the opposite end of the rocker to withdraw the catch pin 4, out of engagement with the hat-pin 3. The catch pin 4, may conveniently be supported and guided by means of a lug 18, which may be secured to the tube in any suitable way such as screwing its lower end into a threaded aperture in the tube. The plunger or piston 16 by engagement with the upper end of cylinder 13 will be limited in movement in that direction, thereby limiting the projection of pin 4 into the tube 1, as shown in Fig. 3, whereby the pin 3 when inserted will be engaged automatically thereby, as its pointed end will force said pin 4 outward until the aperture 5 therein registers with said pin.

The modification shown in Fig. 5, is similar to that shown in Figs. 1 to 4, inclusive, except that the position of the parts is reversed so that the cylinder 13, is arranged on the opposite end of the tube to the flange 2, instead of on the same end.

In order to aid the engagement of the locking pin 4, with the aperture 5, in the hat-pin, the end of the latter is preferably formed of irregular cross area, and the bore of the tube 1, is formed with the same cross-section so that the hat-pin is automatically brought into engagement with the tube in such a position that the locking pin can readily enter the aperture 5.

I am aware that numerous details of con-

struction may be varied through a wide range without departing from the principles of this invention and I therefore do not purpose limiting the patent granted otherwise than necessitated by the appended claims.

I claim as my invention:

1. A hat pin protector, comprising a tube adapted to slide over the end of the pin, a rocker pivotally mounted on said tube, a catch pin connected to one end of the rocker and adapted to project into the tube to engage said pin, a chamber secured to the tube and having a lateral aperture to receive therein the other end of the rocker, a spring in said chamber adapted to press said end of the rocker outward, a plunger in said chamber adapted to press the same inward against the action of the spring, an externally arranged button for operating the plunger, and means for limiting the projection of said catch pin into said tube to such position that the hat pin when inserted will engage the end of said catch pin and force the same outward, whereby an aperture in said hat pin may be engaged automatically thereby.

2. A hat pin protector, comprising a tube adapted to slide over the end of the pin, a rocker pivotally mounted on said tube, a catch pin connected to one end of the rocker and adapted to project into the tube to engage said pin, a chamber secured to the tube and having a lateral aperture to receive therein the other end of the rocker, a spring in said chamber adapted to press said end of the rocker outward, a plunger in said chamber limiting the outward movement of said rocker end and adapted to press the same inward against the action of the spring, and an externally arranged button for operating the plunger.

3. The combination with a hat pin formed at its end of irregular cross area, of a closed tube formed internally of the same cross section and adapted to fit over the end of said pin, means on said tube for automatically engaging an aperture in said pin, and means for retracting said engaging means, the corresponding cross area of said pin and tube causing the two to engage in such manner that said engaging means will register with the aperture in said pin.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

STEVE DOBROVITS.

Witnesses:

J. E. ZAREMBA,

CHARLES W. HILLS, Jr.