C. H. FRANK & C. HERMAN.

HAT PIN GUARD AND RETAINER.

APPLICATION FILED MAY 31, 1911.

1,041,766.

Patented Oct. 22, 1912.

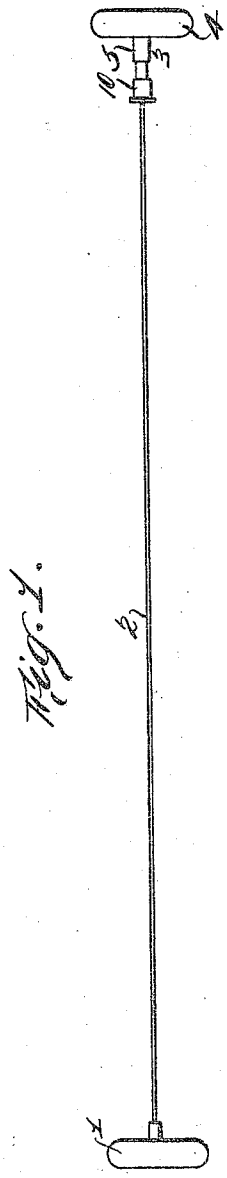

Fig. 1.

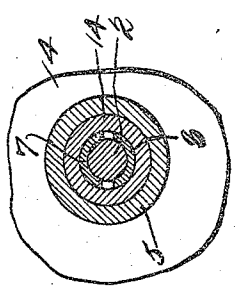

Fig. 3.

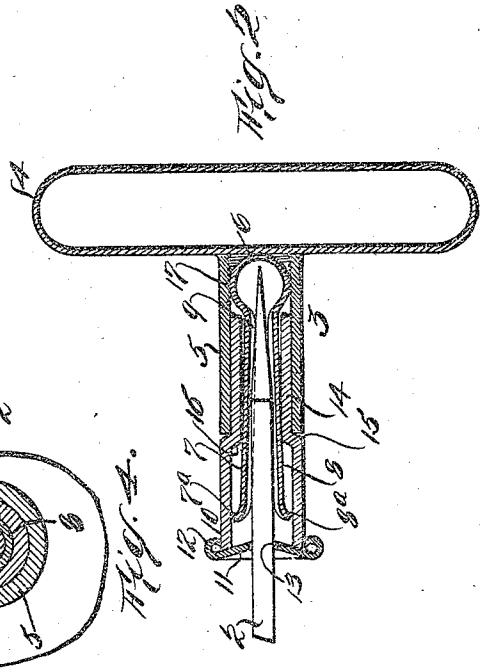

Fig. 2.

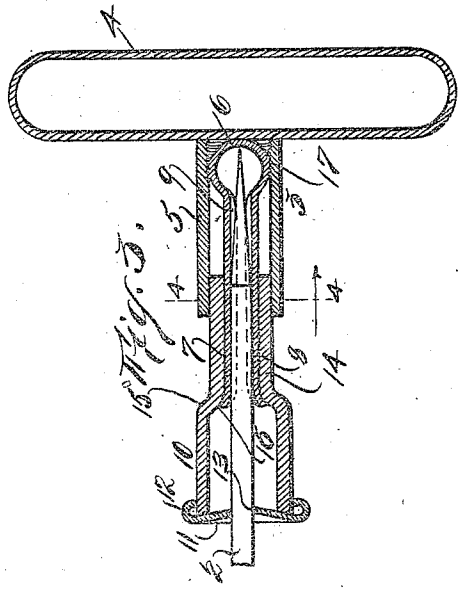

Fig. 4.

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HAT-PIN GUARD AND RETAINER.

1,041,766. Specification of Letters Patent. Patented Oct. 22, 1912.

Application filed May 31, 1911. Serial No. 630,365.

To all whom it may concern:

Be it known that we, CONSTANTIN H. FRANK, a subject of the Emperor of Germany, and CHRISTOPHER HERMAN, a citizen of the United States, both residing at New York, borough of Manhattan, and county and State of New York, have invented certain new and useful Improvements in Hat-Pin Guards and Retainers, of which the following is a specification.

This invention relates to hatpin guards and retainers, and the objects of the invention are to provide means for application to the end of a hatpin so that the pin will be retained in the hat, and to provide a hatpin guard and retainer which may be readily applied to the end of a hatpin and which may be operated to securely and firmly grip the end of the pin.

Further objects are to provide a simple, practical and efficient hatpin guard and retainer.

These being among the objects of the invention, the same consists of certain features of construction and combinations of parts to be hereinafter described and then claimed with reference to the accompanying drawings illustrating a desirable embodiment of the invention, and in which—

Figure 1 is a side elevation of a hatpin with the improved guard and retainer applied; Fig. 2 is an enlarged longitudinal sectional view of the improved guard and retainer, the parts being in position for application to the pin; Fig. 3 is a similar view showing the parts in the position in which the pin is gripped; and Fig. 4 is a transverse section on the line 4—4 Fig. 3.

Referring to the drawings, the cap or other pin head 1 and the pin proper 2 may be of any suitable type, as the invention is applicable to any kind of pin to assure it against removal.

The improved hatpin guard and retainer 3 may be constructed in various ways and of any suitable material, and a desirable construction is as follows:

A head or button 4 is provided and preferably the same is of a size and design corresponding with the size and design of the hatpin head 1. Said head 4 is provided with a hollow or tubular shank 5 which is brazed, soldered or otherwise suitably secured to the central portion of the head 4. Within the shank 5 is a transversely bent up length of spring metal comprising a bent up portion 6 and a pair of arms or jaws 7, 8, which jaws are concaved or grooved on their adjacent surfaces, to provide a suitable passage 9 for the pointed end of the pin 2, said passage being coincident with the longitudinal axis of the tubular shank 5. The described parts 6, 7 and 8 constitute a gripping member which is suitably secured in the tubular shank. The jaws 7, 8, are preferably of spring material and normally diverge slightly as shown in Fig. 2, the end portions of the gripping jaws more abruptly diverging as at 7^a, 8^a. Preferably the end portions of the jaws 7, 8 extend beyond the tubular shank 5.

Suitable means are provided for closing the jaws on to a pin, the same comprising a tubular member 10 which telescopes with the tubular shank 5, and is practically closed at its outer end by means of a dished portion or cap 11 having a rim 12 to which the outer end of the tubular member 10 is secured in any suitable manner, either by soldering or brazing or the like. The dished portion or cap 11 extends somewhat into the outer end of the tubular member 10, and is provided with an apical orifice 13, the diameter of which is approximately that of the pin. It will be seen that the orifice 13 and the passage 9 between the gripping jaws are in substantial alinement so that when the end of a hatpin is inserted there will be two bearing points for the same, namely at the wall of the orifice 13 and at the walls of the passage 9, in consequence of which the pin when gripped as now to be described will be so combined with the guard and retainer that the head 1 of the pin and the head 4 of the retainer will both constitute firm and rigid ornamental terminals for the pin. It will therefore be practically impossible for an observer to determine which is the head of the pin and which is the head of the retainer. For the purpose of actuating the gripping jaws, the telescoping portion 14 of the tubular member 10 is preferably of less diameter than the outer portion, so as to provide an inclined annular shoulder 15

where the contracted portion 14 adjoins with the main body of the member 10. Inside the tubular member 10 opposite the annular shoulder 15, there is an inclined or beveled annular surface 16, the object of which is to engage the terminals 7^a, 8^a of the gripping jaws and press the jaws toward each other, as shown in Fig. 3.

Gripping member 6, 7 and 8 may be secured axially in the tubular member 5 in any suitable manner but preferably by a screw-thread connection 17 between the bent up portion 6 of the gripping member and the inner end of the shank.

The improved hatpin guard and retainer is used as follows: Normally the parts are in the position shown in Fig. 2 where it will be seen that the shoulder 15 limits the inward movement of the tubular member by abutting against the end of shank 5. The parts being in the position shown, the guard and retainer is engaged over the protruding end of the hatpin 1, 2, the pin 2 being guided into the orifice 13 by reason of the dishing of the cap portion 11, the pin also entering into the passage 9 between the gripping jaws. The guard and retainer having now been applied to the hatpin, the latter is firmly gripped and bound by the gripping member by taking hold of the tubular member 10 and pulling it outwardly away from the shank 5 until the inclined or beveled inner surface 16 of the tubular member bears upon the diverging terminals 7^a, 8^a of the gripping jaws, which causes the jaws to be pressed firmly upon the pin. The parts will now be in the position shown in Fig. 3. It will be observed that a considerable surface of each of the jaws 7, 8, will now be in frictional contact with the pin so that the retainer and guard will be firmly and securely bound to the pin. It will be observed that the inclined or beveled inner surface 16 of the tubular member performs the double function of binding the jaws upon the hatpin and of limiting the outward movement of the tubular member so that the same will be retained in the shank 5 of button 4.

Obviously the invention is susceptible of various modifications, as parts may be omitted, parts added and parts modified without changing the scope of the invention. For instance, the jaws 7, 8, instead of normally springing away from each other may normally spring toward each other, in which case the hatpin would be engaged and gripped by the self-movement of the jaws. To spread the jaws apart in a direction contrary to their natural inward movement, obviously the jaws could then be of a length sufficient to engage with the convex or tapered inner surface of the dished portion or cap 11. Such a modification is apparent without illustration.

It is apparent that by the described improvement the sharp end of a hatpin is covered and guarded, and as the guard will at all times be firmly bound to the pin when in use, the sharp end of the pin cannot injure any person, while at the same time both ends of the pin are ornamental.

Obviously this invention may be applied to protect and guard pins other than hatpins.

What we claim as new is:

1. In a pin guard and retainer, the combination of a head or button, having a hollow shank, a springy gripping member secured in said shank, and an apertured member slidably attached to said shank and held in its inner position by friction between it and said shank, said apertured member serving to guide a pin to said gripping member, and said apertured member having operating means to engage and act directly on said springy gripping member to cause it to grip a pin.

2. In a pin guard and retainer, the combination of a head or button, having a hollow shank, a gripping member secured in said shank, and an apertured member slidably attached to and extending longitudinally beyond said shank and gripping member and provided with means for acting directly on said gripping member to close it upon a hat pin, said gripping member acting to hold said apertured member in both its inner and outer positions, and said apertured member and shank having frictional contact to assist said gripping member in holding said apertured member in said two positions.

3. In a pin guard and retainer, the combination of a head or button, having a hollow shank, a gripping member secured in said shank, and an apertured member telescoping with said shank, and provided with means for acting on said gripping member to close it upon a hat pin, said means constituting a stop to limit the inward movement of said telescoping member.

4. In a pin guard and retainer, the combination of a head or button having a tubular shank, a gripping member composed of a transversely bent up length of spring metal providing jaws, the bent portion of said member having transverse screw threads and said shank being threaded for engagement by said threads, and a tubular member telescoping with said shank and provided with means for acting on said gripping jaws to close them upon a hat pin.

5. In a pin guard and retainer, the combination of a head or button having a tubular shank, a gripping member provided with jaws, and secured in said shank, and a tubular member telescoping with said shank having an inner bevel or incline, said tubular member having a pin-guiding aperture in

front of said bevel or incline, and said jaws being located behind said aperture and diverging in juxtaposition to said bevel or incline, whereby the outward longitudinal movement of said tubular member is adapted to close said jaws upon a hat pin, the outer side of said bevel or incline abutting against said shank to limit the movement of the tubular member when the latter is pushed in.

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