L. AANERUD.

CLUTCH FOR GRIPPING PINS OR RODS.

APPLICATION FILED MAY 8, 1913.

1,190,362. Patented July 11, 1916.

Fig. 1.

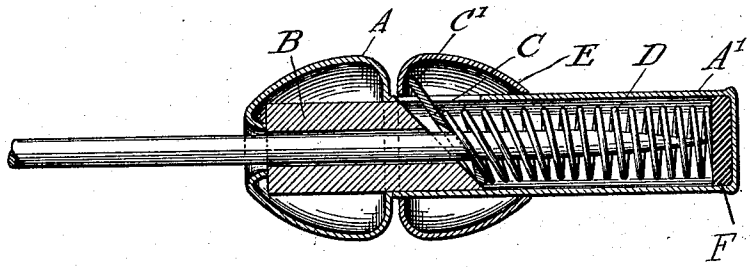


Fig. 2.

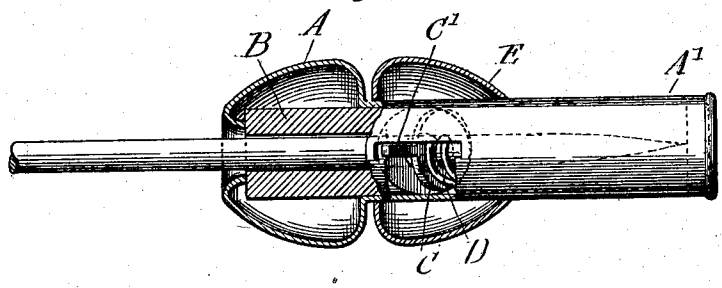


Fig. 3.

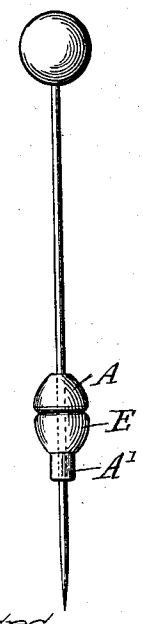
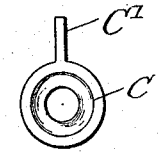


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS AANERUD, OF CHICAGO, ILLINOIS, ASSIGNOR TO F. H. MOBLE & COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

CLUTCH FOR GRIPPING PINS OR RODS.

1,190,362. Specification of Letters Patent. Patented July 11, 1916.

Application filed May 8, 1913. Serial No. 766,276.

To all whom it may concern:

Be it known that I, LOUIS AANERUD, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Clutches for Gripping Pins or Rods, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to clutches which are particularly adapted for use upon scarf pins or other ornamental stick pins to prevent their detachment from articles upon which they may be worn, and also for use upon hatpins, both to guard against their casual displacement and to cover the points so as to guard against injury to those who might come into accidental contact with them.

The object of my invention is to provide a device of this character which shall be simple and easily operated, effective for the purposes for which it is designed, strong, and economical to manufacture.

In the drawings, Figure 1 is a longitudinal section of a form of my device particularly adapted to serve as a point protector for a hatpin; Fig. 2 is a view, partly in section and partly in elevation, taken at right angles to the position shown in Fig. 1; Fig. 3 a view of another form adapted to be used as a retaining device for scarf pins and the like; and Fig. 4 a detail of the clutching element of the device.

Like letters of reference refer to the same parts in the different figures.

Referring to Figs. 1 and 2, the casing which carries the clutching mechanism of my device comprises an enlarged rounded or protuberant portion A of ovoid contour, and a cylindrical or tubular end portion A′. Fixed in the rounded part of the casing, and extending into the cylindrical portion is a perforated block or bushing B, the end of which is struck off obliquely or beveled. Directly opposite the oblique end or face of the bushing the tubular end A′ of the casing is slotted longitudinally. Within the cylindrical bore of such tubular portion of the casing, between the end thereof and the oblique face of the bushing is a clutching disk C having a central perforation which is preferably beveled on the face next to the oblique face of the bushing B. Projecting radially from one edge of the disk C is a tongue C′ which projects through the slot before mentioned in the tubular portion A′ of the casing. Arranged upon the outside of said tubular portion of the casing is a hollow slide E, which in the present instance is of substantially the same shape as the ovoid portion of the casing. A compression spring D within the tubular end of the casing tends to force the disk C toward the bushing B and cause it to lie obliquely with respect to the bore of the casing, with the tongue C′ of the disk in contact with the inside of the wall of the slide E at the base of the latter, so that the slide will be yieldingly held against the protuberant portion A of the casing, the disk then lying nearly flat against the oblique face of the bushing, but preferably not quite so. Inasmuch as the device illustrated in Figs. 1 and 2 is intended as a guard for the point of a hat pin, the outer end of the ovoid portion of the casing only is perforated, the end of the tubular portion at the opposite extremity of the device being imperforate. If desired a block or pad F of any suitable, relatively soft material such as fiber or wood, may be placed at the end of such tubular end to prevent the points of the pins being dulled.

The operation of the clutch will be readily understood without detailed explanation. When the pin is inserted it has a tendency, on entering, to press the clutching disk backward and cause it to assume a position more nearly at right angles to the axial line of the device, the result being that the guard may easily be placed upon the point of the pin; but when the pin and guard are pulled backwardly, or in the opposite direction, the clutching disk will tend to assume a more oblique position with respect to the pin and thus grip it securely and prevent its withdrawal. When, however, the slide E is slid along the tubular portion A′ of the casing away from the ovoid or protuberant portion A,—which may readily be done by squeezing them apart by the thumb and forefinger placed between them—the inner surface of the slide will contact the tongue of the clamping disk and shift the disk and change its inclination so as to release the pin and permit the removal of the device therefrom.

In Fig. 3 is shown a form of my clutch device adapted to serve as a scarf or stick pin retainer. In this form the tubular por-

tion of the device is preferably somewhat shorter than in the hatpin guard, and is perforated at its end so that the device may be attached to the pin at any desired point.

I claim:

1. A clutch for gripping pins and rods comprising a slotted casing having a protuberant portion, a perforated inclined clutching member within the casing extending through the slot of the latter and arranged to fulcrum upon said abutment, a spring tending to press said clutching member against said abutment, and a protuberant slide upon said casing contacting the projecting portion of the clutching member and arranged adjacent the protuberant portion of the casing, whereby the slide may be shifted against the stress of its spring to release the clutch by a pinching pressure between the slide and said protuberant portion of the casing.

2. A clutch for gripping pins or rods comprising a casing formed with a cylindrical bore having an internal abutment at the end opposite its base and formed with a longitudinal slot diametrically opposite said abutment, a perforated disk free within said casing arranged to fulcrum upon said abutment and having a tongue arranged to project through said slot, a spring in said cylinder confined between the base thereof and said disk and tending to press the latter against said abutment, and a slide arranged to engage the projecting end of the tongue upon the disk and move it toward the base of the cylinder to turn the disk to disengaging position.

3. A clutch for gripping pins or rods comprising a casing having a protuberant portion and a tubular end, a perforated bushing in said protuberant portion having an oblique face adjacent said tubular end, a perforated disk in said tubular end adjacent the oblique face of the bushing, a spring in said tubular end tending to press the disk toward such oblique face, and a disengaging slide on the tubular end arranged to engage said disk and shift it against the stress of the spring.

4. A clutch for gripping pins or rods comprising a casing having a protuberant portion and a slotted tubular end, said tubular end forming a cylindrical bore which terminates adjacent the protuberant end of the casing in a perforated oblique face, a perforated disk within said bore adjacent said face and having a tongue arranged to project through the slot in the casing, a spring in said bore tending to press the disk against said oblique face, and a slide arranged to engage the projecting end of the tongue upon the disk and shift it against the stress of the spring.

5. A clutch for gripping pins or rods comprising a casing having a protuberant portion and a slotted tubular end portion, a perforated bushing in said protuberant portion having an oblique face extending into said tubular end, a perforated disk in said tubular end adjacent the oblique face of the bushing and having a tongue arranged to project through the slot in the casing, a spring in said bore tending to press the disk toward said oblique face, and a hollow protuberant slide adjacent the protuberant portion of the casing arranged to cover the projecting end of the tongue upon the disk and engage the same to shift it against the stress of the spring.

LOUIS AANERUD.

Witnessed by—
LOUIS B. ERWIN,
ROBERT DOBBERMAN.

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

Correction in Letters Patent No. 1,190,362.

It is hereby certified that the name of the assignee in Letters Patent No. 1,190,362, granted July 11, 1916, upon the application of Louis Aanerud, of Chicago, Illinois, for an improvement in "Clutches for Gripping Pins or Rods," was erroneously written and printed as "F. H. Moble & Company," whereas said name should have been written and printed as *F. H. Noble & Company*, as shown by the records of assignments in this Office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 15th day of August, A. D., 1916.

[SEAL.]

F. W. H. CLAY,

Acting Commissioner of Patents.

Cl. 24—155.