No. 864,825.

PATENTED SEPT. 3, 1907.

A. A. BOWERS.

CLUTCH FOR PENCIL HOLDERS, &c.

APPLICATION FILED NOV. 20, 1908.

Fig. 1.

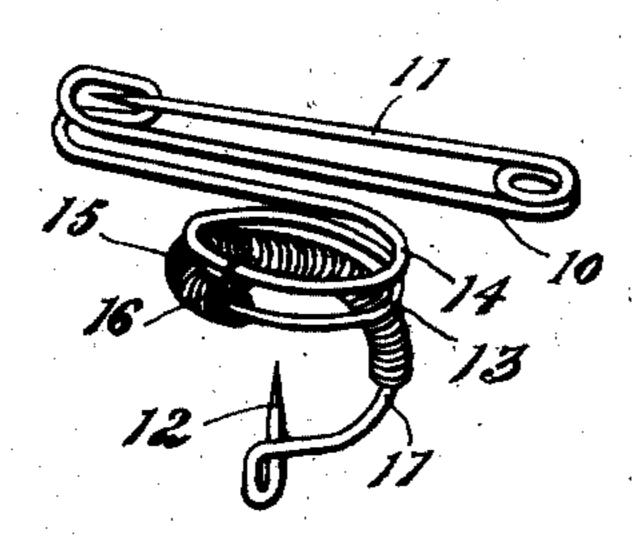


Fig. 2.

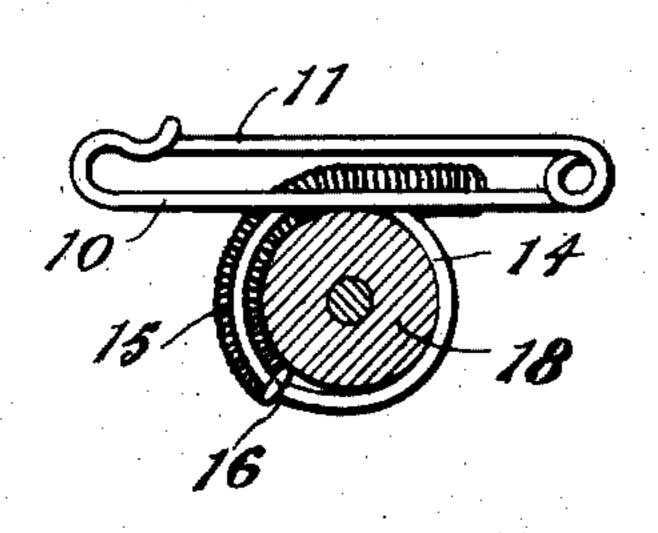
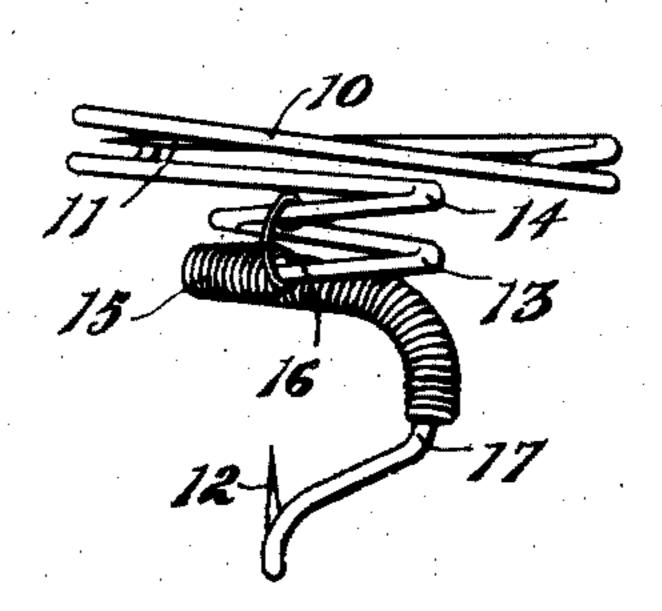


Fig. 3.



Witnesses G.C. Smiffin Afforder Doyle Albert A. Borvers by R. A. Pierson Ottorney.

UNITED STATES PATENT OFFICE.

ALBERT A. BOWERS, OF NEW YORK, N. Y.

CLUTCH FOR PENCIL-HOLDERS, &c.

No. 864,825.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed November 20, 1906. Serial No. 344,203.

To all whom it may concern:

Be it known that I, Albert A. Bowers, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented 5 certain new and useful Improvements in Clutches for Pencil-Holders, &c., of which the following is a specification.

This invention relates to clutches and I will herein describe the same as embodied in a holder for pencils, 10 fountain-pens and other light articles of a rod-like character.

In the accompanying drawings:—Figure 1 is a perspective view of a pencil-holder embodying my invention. Fig. 2 is a plan view of the same and indicating a 15 pencil, in section, as gripped by the clutch. Fig. 3 is a side elevation of the device shown in Fig. 1.

Referring to the drawings, 10 is the frame of the holder bent into the form of a safety-pin 11 at its upper end to provide secure attachment to the apparel of a 20 wearer, and a sharpened hook 12 at its lower end giving a second point of support, whereby the holder may be securely fastened to the garment. Between these fastening devices the wire is bent into two convolutions or coils 13, 14, the lower coil acting as a guide for the 25 clutching-member 15 which is a flexible tube or helix of wire coiled loosely upon the wire frame, and the upper coil 14 acting as a parallel guide engaging the upturned end or projection 16 of the wire at the advance end of the gripping - member 15. Between the lower coil 13 and the hook 12 is a curved portion or bar 17 of the wire frame, which departs from the confines of the gripping portion defined by coil 13, and serves for the storage of that portion of the gripping-member 15 which is not active or not included within said gripping circle. 35 In Fig. 2 I have indicated a pencil 18 as the article that is gripped or clutched.

The mode of operation of this device is to insert the pencil or pen vertically through the aperture embraced by the coils 13, 14 while the gripping-member 15 is sufficiently retracted upon the storage part of the frame to freely admit the passage of said pencil or pen and then by a twisting motion of the latter accompanied preferably by a pushing action of the wearer's finger upon the projection 16, to advance the gripping-member 15 by 45 sliding motion upwardly around its guide coil 13 so as to embrace an increasing amount of the gripping circle. The advance of the gripping-member contracts the central aperture inclosed by the coils and causes the pencil or pen to be firmly gripped and held against withdrawal 50 in an axial direction. To release the pencil or pen the

gripping-member 15 is retracted by a reversal of the above-described motion, consisting of a reverse rotation of the pencil or pen accompanied preferably by retracting pressure exerted on the projection 16. My holder will accommodate pencils or pens of different diame- 55 ters by advancing the gripping-member 15 more or less upon the gripping-circle.

Good operative results may be secured without employing the projection 16 since the pencil itself when twisted exerts considerable traction upon the gripping- 60 member, which is promoted by the corrugated surface offered by the wire convolutions of said member, and the travel of the gripping-member may be assisted by a simple pressure of the wearer's finger. An advantage of the helical guide with more than one complete con- 65 volution, which it possesses over other guides of a general curved form, is to be noted in that with a sufficiently long gripping-member this construction enables the gripping-member to present more than a complete circle (in horizontal projection) and thus increase the 70 gripping extent of said member in a direction axial to the element which is gripped.

My invention broadly considered is also capable of embodiment in articles other than a pencil and pen holder as I believe it to consist essentially in a new form 75 of clutch capable of a variety of uses.

It is to be understood that I do not limit myself to the exact structure illustrated and described, but may variously modify the same within the scope of the appended claims.

I claim:—

1. A clutch comprising a guide so disposed as to embrace a gripping aperture, and an elongated gripper slidable along said guide so as to inclose more or less of said aperture and thereby contract or enlarge the same.

2. A clutch comprising a guide so disposed as to form a curved gripping portion for the active part of the grippingmember and a storage portion which departs from the gripping portion, and elongated gripping means mounted on said guide and movable from said gripping portion to 90 said storage portion.

3. A clutch comprising a curved rod-like guide having a storage extension which departs from the gripping curve, and a flexible tubular gripping-member movable along the curved and storage portions of said guide.

4. A clutch comprising a wire guide formed with a portion embracing a gripping aperture and a storage portion departing externally from said aperture, and an elongated flexible tubular gripping-member inclosing said guide and movable longitudinally thereon.

5. A clutch comprising a guide formed with a curved portion and a storage portion, and a clutching-member longitudinally adjustable on said guide and composed of a wire helix inclosing the guide.

- 6. A clutch comprising a helical wire guide and a flexible tubular gripping-member movable therealong.
- 7. A clutch comprising a wire guide formed with a helix and an externally-departing storage portion, and a tubular gripping-member inclosing said guide and adjustable therealong.
- 8. A clutch comprising a wire guide formed with a plurality of helical convolutions and a storage portion departing therefrom, and a helical wire gripping-member 0 movable along one of the convolutions and the storage

portion of said guide and having a manipulative projection engaging another convolution of the guide.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses, the 19th day of November, 1906.

ALBERT A. BOWERS.

Witnesses:

G. BLAKE,

R. M. PIERSON.