Aug. 18, 1942. E. J. FORREST 2,293,430

RETAINING CLIP AND CAP FOR PENS OR PENCILS

Filed Oct. 20, 1941

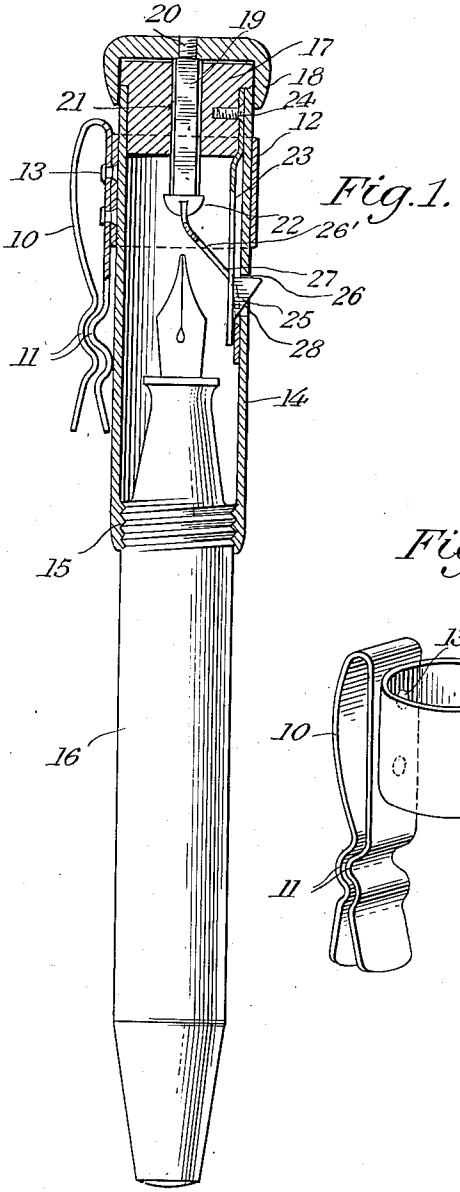


Fig.1.

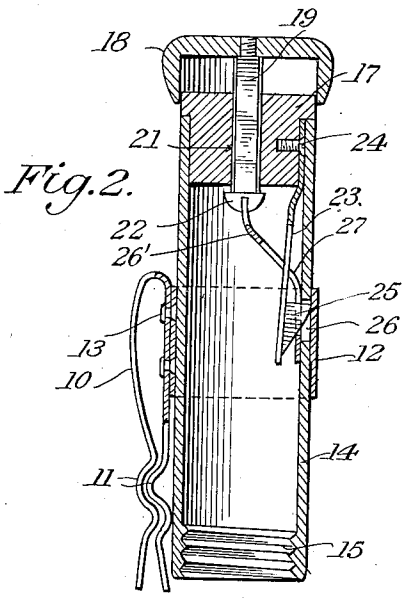


Fig.2.

Fig.3.

Fig.4.

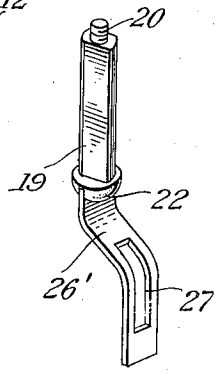
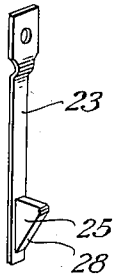


Fig.5.



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RETAINING CLIP AND CAP FOR PENS OR PENCILS

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3 Claims. (Cl. 24—11)

This invention relates to a retaining clip and cap for a pen or pencil.

Hitherto retaining clips which are attached to the pocket of the wearer and have clamping jaws, permit the pen or pencil to become lost by slipping from the jaws.

With the above in mind the present invention has for an object to provide a pen or pencil cap having a retaining clip releasably locked to the cap so that a spring dog must be manually released before the cap can be removed from the clip and thus the pen or pencil of which the cap is a part, cannot become accidentally lost by slipping from the retaining clip.

A further object is to provide apparatus of this character which will be formed of a few strong, simple and durable parts, which will be inexpensive to manufacture, and which will not easily get out of order.

With the above and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter fully described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing forming a part of this specification:

Figure 1 is a longitudinal sectional view of a retaining clip and cap constructed in accordance with the invention, the cap being a part of a pen.

Figure 2 is a longitudinal sectional view of the retaining clip and cap showing the dog released to permit the cap being removed from the retaining clip.

Figure 3 is a detail perspective view of the retaining clip and cap supporting ring thereof.

Figure 4 is a perspective view of the push rod for releasing the dog.

Figure 5 is a perspective view of the releasable dog.

Referring now to the drawing in which like characters of reference designate similar parts in the various views, 10 designates a resilient loop forming the jaw member of the retaining clip, the jaw member being provided with corrugations 11 adapted to crimp the material of the pocket of the wearer and prevent dislodgement of the clip. A ring 12 is secured to one side of the jaw member by rivets 13 or other connectors.

In accordance with the invention it is proposed to eliminate the conventional cap for a pen or pencil and substitute therefor a cap 14 which may be provided at its open end with screw threads 15 to receive a conventional pen 16 or a pencil may be substituted for the pen, the pen being herein shown merely for the purpose of an example. The cap 14 is tubular, as is conventional, and is closed at the upper end by a plug 17. A flanged button 18 embraces the upper end of the cap and the plug. A push rod 19 of rectangular cross section has one end threadedly engaged as shown at 20 in the button to secure the push rod to the button. The push rod is slidably engaged in an axial opening 21 formed in the plug 17, the opening also being of rectangular contour to prevent rotation of the push rod. The push rod is of greater length than the plug and is provided at the lower end with a head 22. The push rod connects the button 18 to the cap 14 for limited upward movement with relation to the cap.

A resilient dog is disposed within the cap 14 and comprises a leaf spring shank 23 which is secured by a screw 24 to the plug 17. The leaf spring shank is provided at its lower end with a tooth 25 which passes through an opening 26 formed in the side of the cap 14 below the ring 12 of the retaining clip, see Figure 1. The tooth of the dog prevents the cap 14, of a pen or pencil, from becoming accidentally detached from the ring of the clip.

A leaf spring 26 is secured to the lower end of the push rod 19 and is provided with a longitudinal slot 27 through which the lower end of the dog, carrying the tooth 25, passes. The lower side 28 of the tooth is inclined upwardly and outwardly and the bottom wall of the slot 27 of the leaf spring contacts with the lower end of said side of the tooth, see Figure 1.

To release the cap of the pen or pencil from the ring 12 of the retaining clip the button 18 is pulled upwardly with relation to the clamp 14. This upward movement of the button causes the bottom wall of the slot 27 to ride up on the inclined side 28 and retract the dog inwardly into the cap 14 to permit the cap being detached from the ring 12 of the retaining clip to effect removal of a pen or pencil from the clip.

Since the operation of the parts has been described as the description of the parts progressed it is thought the invention will be fully understood without further explanation.

What is claimed is:

1. A cap for a pen or pencil comprising a tubular cap closed at one end and having an open end adapted to receive a pen or pencil, a removable ring embracing said cap, a resilient dog within the cap secured at one end to the closed

end of the cap and having a tooth engaged through an opening in the cap below the ring to prevent removal of the cap from the ring, and manually operable means connected to the resilient dog for releasing the dog to permit removal of the cap from the ring.

2. A cap for a pen or pencil comprising a tubular cap closed at one end and having an open end adapted to receive a pen or pencil, a removable ring embracing said cap, a resilient dog within the cap secured at one end to the closed end of the cap and having a tooth engaged through an opening in the cap below said ring to prevent removal of the cap from the ring, and a push rod slidably connected to the cap having a portion engageable with the tooth and adapted to withdraw the tooth into the cap when the push rod and cap are moved relatively to permit removal of the cap from said ring.

3. A cap for a pen or pencil comprising a tubular cap closed at one end and having an open end adapted to receive a pen or pencil, a ring embracing said cap, a resilient dog within the cap secured at one end to the closed end of the cap and having a tooth engaged through an opening in the cap below said ring, a push rod slidably connected to the cap, a button on the push rod for operating the push rod, and a leaf spring connected to the push rod having a longitudinal slot receiving the tooth, said tooth having an inclined edge engageable with a wall of said slot, said wall riding upon said edge to withdraw the tooth into the cap when the push rod and cap are moved relatively to each other to permit removal of the cap from said ring.

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