March 29, 1927. 1,622,316

B. W. HANLE

CLIP FOR PENCILS, PENHOLDERS, AND LIKE ARTICLES

Filed July 24, 1926

Fig. 1

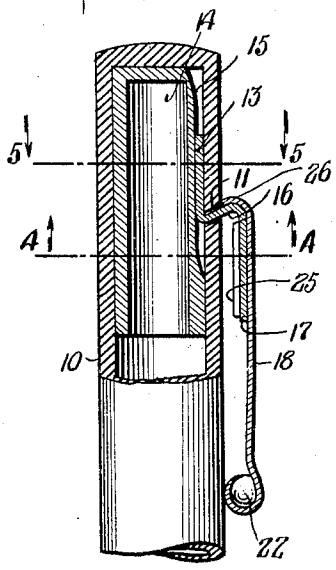


Fig. 2

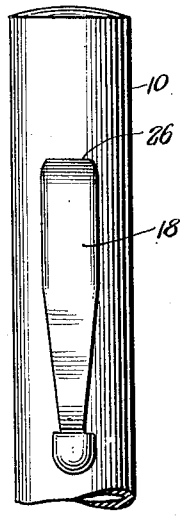


Fig. 3

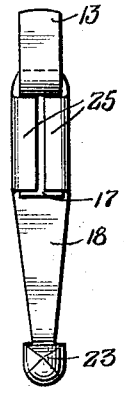


Fig. 4

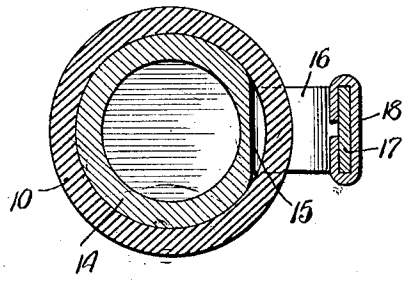


Fig. 6

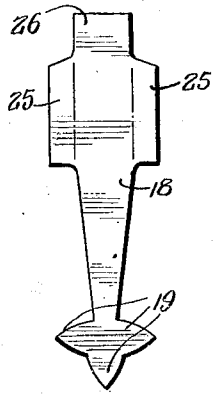


Fig. 7

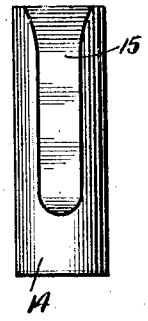
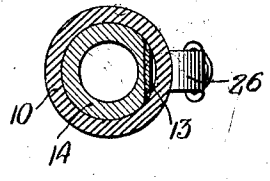


Fig. 5



INVENTOR
Benjamin W. Hanle
BY
Cooper, Kerr & Dunham
ATTORNEYS

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UNITED STATES PATENT OFFICE.

BENJAMIN W. HANLE, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO EAGLE PENCIL COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

CLIP FOR PENCILS, PENHOLDERS, AND LIKE ARTICLES.

Application filed July 24, 1926. Serial No. 124,573.

This invention relates to improvements in what are usually known as pocket clips, such as are used for fountain pens, pencils and the like, and has particular reference to clips of the kind which slip over and engage the top of a pocket to prevent loss of the article.

One difficulty experienced with prior clips of the kind has been that the clip might become bent out of shape, either accidentally or by forcing it over material of unusual thickness. This rendered the clip ineffective to perform its intended purpose and thereby made loss of the pen or pencil possible. Even if the condition was noticed, it was hard to remedy it because of the fact that the shaft or cap of the writing instrument interfered with bending the clip back to its correct position. One of the objects of this invention is to remedy this situation by providing a highly resilient clip which will not be deformed by unusual deflection and which will remain highly resilient for an indefinite length of time.

Another object of the invention is to provide a construction having the advantages just stated which will permit using plated or ornamental rust-proof or non-corrosive material for the part of the clip which is exposed to view when in use without interfering with the resiliency, also to provide a construction whereby such material protects from rust or corrosion a tempered spring upon which the efficiency of the device depends. Incidentally, the applicant's construction is such as to permit manufacture at a comparatively low cost.

With the foregoing and other objects in view, the invention consists in a novel construction and combination of elements, the novel features of which are pointed out in the claims appended hereto and a preferred embodiment of which is hereinafter described with reference to the drawing accompanying and forming a part of this specification.

In said drawings:

Fig. 1 shows, on an enlarged scale, a fountain pen cap partly in cross section, with the novel construction applied.

Fig. 2 is a view in full side elevation of a fountain pen cap equipped with one of the new clips.

Fig. 3 shows the way in which the non-resilient part of the new pocket clip is attached to a resilient spring.

Fig. 4 is a section on the line 4—4, Fig. 1, looking in the direction of the arrow.

Fig. 5 is a section on the line 5—5, Fig. 1, looking in the direction of the arrow.

Fig. 6 is a detail of the non-resilient part of the pocket clip before it has been formed to engage the clip spring.

Fig. 7 is a detail of the inner cap or sleeve which is inserted in the main cap of a fountain pen and shows how the surface is formed to engage the inner end of the spring to hold it in position on the cap.

The embodiment of the invention which is shown in the drawing is one which is particularly adapted for use in connection with a fountain pen. The cap 10 is provided with a short circumferential slot 11 which is preferably cut through the wall of the cap at an angle to the radius of the cap. Extending through the slot 11 is a spring preferably formed of flat material having a portion 13 extending parallel to and in contact with the interior of the cap. An internal cap or tubular element 14 is suitably formed as at 15 (Figs. 1 and 7) to engage the inner end of the spring and fasten it in position in the cap. The portion 16 of the spring which extends through the opening 11 is formed at an acute angle to the portion 13 of the spring and at its outer end said portion 16 merges in a portion 17 which extends parallel to and out of contact with the periphery of the cap. This construction gives a configuration of the spring which makes possible the ready flexing of the spring under stress.

The pocket engaging portion of the clip is preferably formed from a punching of metal which may be non-resilient and is suitable for plating or ornamentation. One of these punchings or plates is shown at 18 in Fig. 6 in the shape it has before the forming operations later described are performed.

The free end of the element 18 has three lugs or ears 19 which are formed around a ball 22, Fig. 1, the manner of forming being best shown on 23 in Fig. 3. The outer portion 17 of the spring tapers slightly towards its free end, the taper being so slight that it cannot readily be shown in the drawing. In attaching the element 18, wings 25

are bent around and under the sides of the spring (as shown in Figs. 3 and 4) and a lug or extension 26 on the element is formed around the curve of the spring where the latter emerges from the cap. In the form shown in the drawing the end of extension 26 is in close juxtaposition to the periphery of the cap, but it is apparent that with a suitable change in the slot the extension 26 may extend into or through the slot so as better to conceal and protect the spring. This method of attaching the element 18 to the spring is not only a very satisfactory one but it serves also to protect the spring from rust and corrosion. It is to be understood, of course, that the assembling of the spring and element 18 is completed before the assembled unit is attached to the cap in the manner previously explained.

It is obvious from the foregoing that the construction shown and described is a very effective one and that it can be produced at a very low manufacturing cost.

While the embodiment shown and described is admirably adapted to fulfill the objects previously stated, the invention is capable of various modifications and changes all coming within the scope of the claims which follow.

What is claimed is:—

1. In a device of the character described, the combination with a cap provided with an opening in its periphery, of a tempered spring secured within the cap and having a bent portion extending out through the opening, said bent portion merging into a second portion extending substantially parallel to and out of contact with the periphery of the cap, and a rust-proof pocket-clip element secured to and covering the exterior surfaces of said second portion of the spring.

2. In a device of the character described, the combination with a tubular element provided with an opening through its periphery, of a spring secured within the cap and extending out through the opening and comprising a flat portion of substantial length parallel to and out of contact with the periphery of the tubular element, said portion being tapered slightly toward its free end, and a rust-proof pocket-clip element provided with portions formed to engage over the tapered sides of the spring and shaped to cover snugly the portion of the spring emerging from the cap.

3. In a device of the character described, a tubular member provided with a short circumferentially extending slot, a tempered steel spring extending through said slot and having one portion parallel to and in contact with the interior surface of the tubular member and a second portion parallel to and out of contact with the exterior of the tubular member, a cylindrical element inserted in the tubular member to engage the spring and fasten the same in position, and a non-corrosive clip element secured to said second portion of the spring and shaped to fit around and over the portions of the spring which are outside of the cap.

4. In a device of the character described, a cap member provided with an opening in the side wall, a spring member made from flat-stock having a first portion extending longitudinally of and secured in contact with the interior of the cap, a second portion formed at an acute angle to said first portion and extending through the slot in the cap, and a third portion extending at an acute angle from the second portion longitudinally of and out of contact with the exterior of the cap; and a clip member shaped to fit over the outer surfaces of the portions of the spring which are outside of the cap and formed to engage over the sides of the spring.

In testimony whereof I hereto affix my signature.

BENJAMIN W. HANLE.