March 31, 1925. 1,531,419

W. A. SHEAFFER

PENCIL CLIP

Filed Nov. 23, 1921

Fig. 1

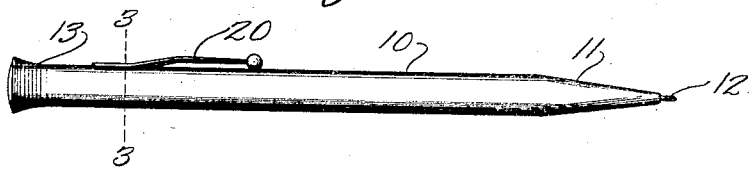


Fig. 2

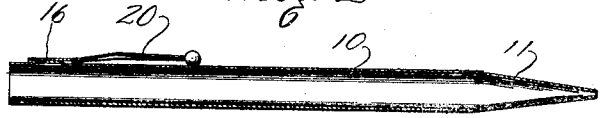


Fig. 3

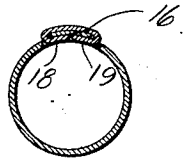


Fig. 5

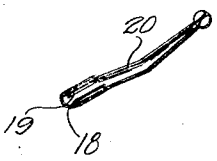


Fig. 6

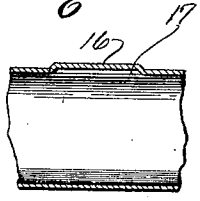
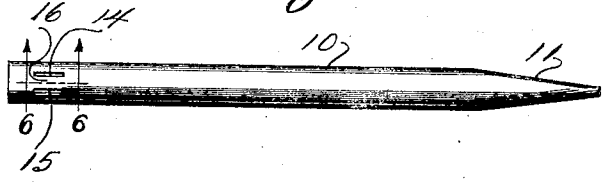


Fig. 4



Witness
J. L. Brown.

Inventor
Walter A. Sheaffer.
By Spindler Hopkins & McHale
Attys.

Patented Mar. 31, 1925. 1,531,419

UNITED STATES PATENT OFFICE.

WALTER A. SHEAFFER, OF FORT MADISON, IOWA.

PENCIL CLIP.

Application filed November 23, 1921. Serial No. 517,375.

To all whom it may concern:

Be it known that I, WALTER A. SHEAFFER, a citizen of the United States, residing at Fort Madison, in the county of Lee and State of Iowa, have invented certain new and useful Improvements in Pencil Clips, of which the following is a specification.

My invention relates to improved means for securing clips to casings of lead pencils for retaining the pencil in the pocket, and more particularly to that class of lead pencils having a metallic outer casing, such for instance, as pencils having rotatable mechanism within the casing for moving the pencil lead longitudinally thereof.

The invention has for its primary object the securing of a pencil clip to a pencil casing without the use of solder, screws, rivets or the like and in such manner as to preserve a smooth and unobstructed inner surface of the casing, thus avoiding interference with the pencil lead moving mechanism within the casing.

Other objects of the invention will appear from the following description, which is directed to the preferred embodiment of the invention, reference being made to the following drawing forming a part of the specification, in which—

Fig. 1 is an elevation view of a lead pencil having a metallic casing with the clip secured thereto in accordance with my invention.

Fig. 2 is a vertical sectional view taken through the center of Fig. 1.

Fig. 3 is a transverse sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a top plan view of the pencil casing as shown in Fig. 1 with the cap removed showing the openings through the wall of the casing for securing the clip thereto.

Fig. 5 is a detailed perspective view of the clip showing the ears thereon for engaging the pencil casing.

Fig. 6 is a fragmental longitudinal sectional view taken on the dotted line 6—6 of Fig. 4 and looking in the direction of the arrows.

In the drawings, I have shown a lead pencil of the character referred to having a casing 10 which is adapted to receive therein a rotatable pencil lead moving mechanism of any of the well known types, the casing 10 being tapered or conically shaped at one of its ends as at 11 and having the usual axial bore therethrough for the reciprocal movement therein of a pencil lead 12. The casing 10 carries at its opposite end the usual rotatable operating cap 13.

All of the foregoing structure being old forms no part of my present invention.

I will now proceed to describe my improved means for securing a clip to the outer casing of a lead pencil of the character above referred to.

In my improved method of securing a clip to a lead pencil casing, the casing 10 is provided with two preferably elongated and substantially parallel openings 14 and 15 adjacent the butt end of the casing and the metal intermediate the openings is raised or struck up from the plane of the wall of the casing forming a boss or raised strip 16, with the plane of the underside of the boss spaced from the plane of the casing forming a clearance 17 for the reception therein of ears 18 and 19 formed on the opposite sides of the base of clip 20 which is of the usual construction otherwise. The ears 18 and 19 are adapted to be inserted through the openings 14 and 15 respectively in casing 10 and are bent toward each other with their projecting edges meeting and the ears contacting with the underside of boss or strip 16, as clearly shown in Fig. 3 thus entirely surrounding the raised or struck up strip between the longitudinal slots and securely clinching the clip 20 to the casing 10.

The ears 18 and 19 may be bent and forced into engagement with boss or raised strip 16 in any suitable way, as for instance, by inserting a mandrel in the casing 10 and simultaneously applying outward and inward pressure to the parts.

In order that the invention might be understood the details of the preferred embodiment of the invention have been described, but it is not desired to be limited to the exact details, since it will be apparent that persons skilled in the art may resort to various modifications without departing from the purpose and spirit of the invention.

I claim:

A pencil casing formed of ductile metal and having a pair of spaced apart slots extending longitudinally of the casing and through the wall thereof and being substantially parallel with the axis of the casing, the material in the wall of the casing between the said spaced apart slots being

elongated and forced outwardly forming a longitudinally extending strip, and an elongated clip having ears formed on the opposite sides thereof and extending longitudinally of the same, the said ears being in width substantially equal to the length of said slots and said ears being passed through said slots and formed to contact with and to cover the underside of said longitudinally extending strip with their projecting edges substantially meeting for securing said clip to said casing.

In testimony whereof I have signed my name to this specification on this 18th day of November, A. D. 1921.

WALTER A. SHEAFFER.