Jan. 8, 1929. 1,698,353

F. J. VIERLING

PENCIL

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Fig. 1

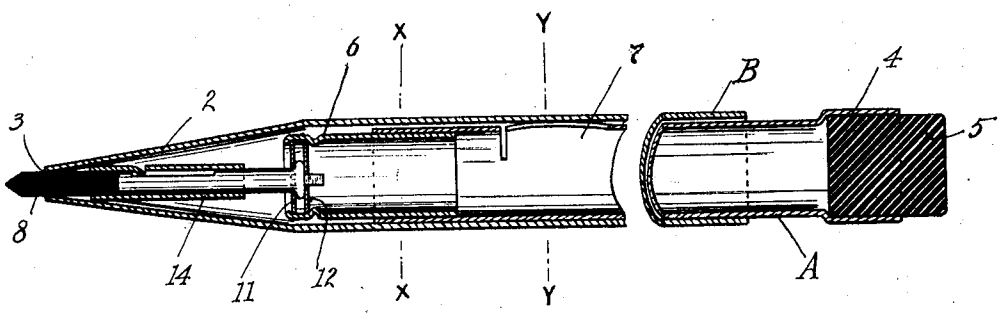


Fig. 2

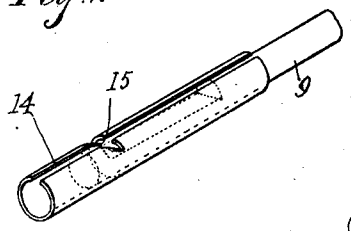


Fig. 3

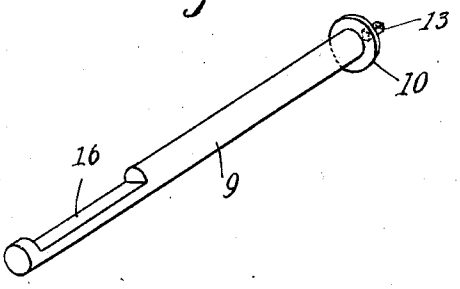


Fig. 4

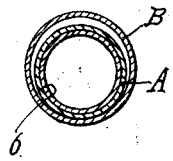
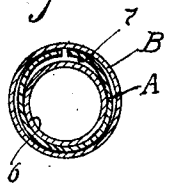


Fig. 5



Inventor

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Jan. 8, 1929. 1,698,353

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PENCIL

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Fig. 6

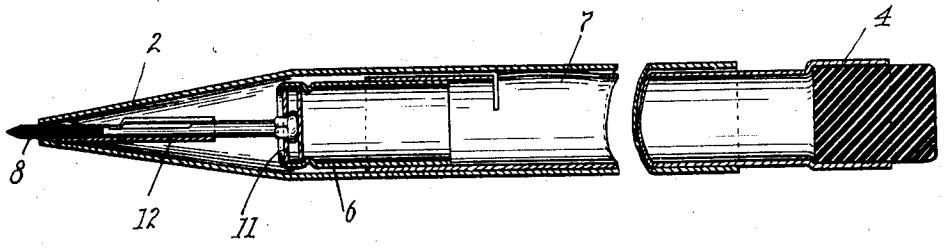


Fig. 7

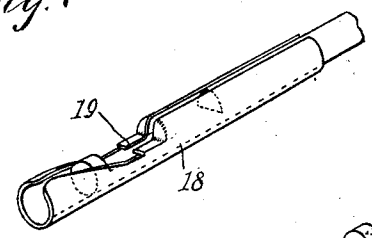
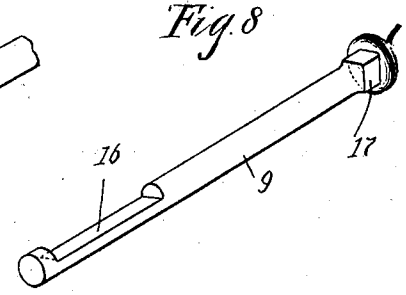


Fig. 8



Inventor

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Patented Jan. 8, 1929. 1,698,353

UNITED STATES PATENT OFFICE.

FRANK J. VIERLING, OF MINNEAPOLIS, MINNESOTA.

PENCIL.

Application filed February 1, 1924. Serial No. 689,870.

My invention relates to improvements in magazine pencils of that class in which a lead-carrying member telescopingly fits within an outer casing, the object of the invention being particularly to provide improved means for removably supporting the lead on the end of the inner member, and to this end my invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

In the accompanying drawings:

Figure 1, represents a longitudinal central cross section of a pencil containing my features of invention.

Figure 2, is a perspective view of the lead holding portion of the pencil.

Figure 3, is a perspective view of one member of the lead holding means.

Figure 4, is a section on line x—x of Figure 1.

Figure 5, is a section on line y—y of Figure 1.

Figure 6, represents a longitudinal central cross section of a modified form of my pencil.

Figure 7, is a perspective view of the lead holding means embodied in the construction shown in Figure 6; and

Figure 8, is a perspective view of one member of said lead holding means.

Referring to the drawings, A and B represent respectively inner and outer telescoping sections. The outer casing has a contracted end, the tip of said end being formed with an opening 3 through which the lead may be fed or retracted by the sliding of the inner within the outer casing. The opposite or inner end of the outer casing is open to permit the insertion or removal of the inner casing. The outer end of the inner casing may be circumferentially expanded to afford a holder 4 for an eraser 5, the inner end of said holder portion forming a stop for the inner casing. The casing is preferably formed with a removable inner end 6. By removing the inner end 6, extra leads may be placed in the inner casing to permit the same serving as a holding magazine.

Frictional engagement between the inner and outer casings may be secured as by a slotted expansion portion 7 in the wall of the inner casing.

For the purpose of supporting the lead or crayon 8, I provide in the form shown in Figure 1, the following described means. These means comprise a stem 9 having a head 10 held between washers 11 and 12 supported in the inner end of the inner casing section 6. The washers are affixed in the inner end of the inner casing by crimping in the wall of the casing to grip the washers and firmly hold them against rotation. The stem extends outwardly through an opening in the washer 11 and is formed with a rectangular pin 13 extending through a rectangular opening in the washer 12, whereby to prevent rotation of the stem. Slidably supported upon the outer end of the stem is the sleeve 14, the sleeve being slidably held in position upon the stem by means of the inturned portion 15 projecting into a slot 16 formed in one side of the stem. The sleeve is preferably of longitudinally spit construction, as shown in Figure 2, to permit its projecting end to maintain a spring grip upon the contained lead or crayon.

In the modified construction shown in Figure 6, the stem at one end is formed with a squared shoulder 17 extending through a corresponding opening in the washer 11, said squared shoulder performing the function of the pin 13 of the form shown in Figure 1. The lead or crayon holding sleeve 18 in the form shown in Figure 6 differs from the sleeve shown in Figure 1, in being cut away on one side and formed with flanges 19, positioned within the slot 16 of the stem 9, to form the locking engagement between the sleeve and stem. The constructions shown in Figures 1 and 6, outside of these changes in mechanical form, are similar. In use, the lead is fed or retracted by rotating and sliding the inner casing within the outer casing. The particular construction of pencil through which the lead is retracted or fed is not a part of the present invention, and any desired construction may be applied. The present invention provides a lead holding means whereby a slidable lead holding sleeve may be used in freeing the lead or crayon and wherein the lead is protected in use and in the freeing operation by the hereinbefore described means for preventing rotation of the stem. In removing the lead the sleeve is simply pulled back over the stem to free the lead, and in placing the lead in position the sleeve is moved outwardly beyond the stem over the lead.

The word lead is employed in this case as including ordinary leads, crayons, or other markers.

I claim:

1. A pencil comprising telescoping sec-

tions, separated washers fitted within one of said sections, one of said washers having an angular recess therein, a stem formed with a head positioned between said washers, said stem being formed with a lead holding sleeve on its free end to hold a lead projecting through the other section, and said stem being formed at its supported end with an angular portion in engagement with said angular recess in said washer to prevent rotation of said stem.

2. A pencil comprising inner and outer telescoping casings, the inner casing having washer means mounted in its inner end, a stem formed with a head movably supported by said washer means and with an angular portion fitting in a correspondingly shaped opening in said means to prevent rotation of the stem, and a lead holding sleeve supported upon the outer end of said stem.

In testimony whereof I affix my signature.

FRANK J. VIERLING.