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PENCIL HEAD CONTAINER

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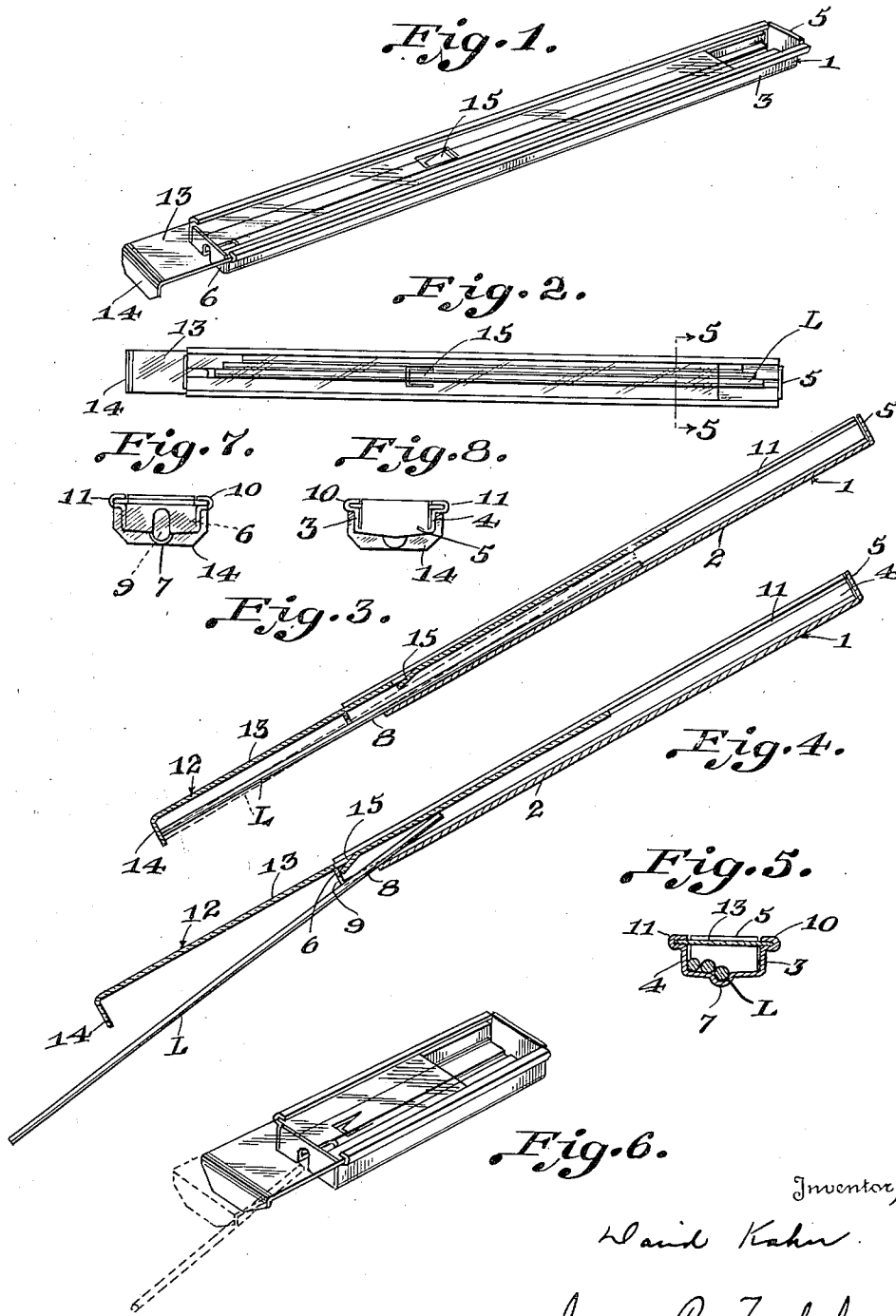


Fig. 6.

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PENCIL HEAD CONTAINER

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10 Claims. (Cl. 206—56)

This invention relates to a pencil lead container, and particularly to a novel construction of a container for leads adapted to be used in mechanical pencils.

The usual mechanical pencils, in general, employ leads of two sizes, that is, a size of approximately an inch and a half in length, and leads of approximately four inches in length. Particularly, in the case of longer leads, the leads are very fragile and easily broken. It has been known in the past to provide a suitable container for these leads when these leads have been sold as refills. The removal of leads from these containers has been somewhat difficult, however, and more particularly when the removal of one lead at a time was desired.

This invention particularly is concerned with a novel type of closure and a novel type of opening whereby lead may be removed from a container of this character.

One of the objects of this invention is the provision of a closure member for a lead container that is transparent in nature so that the quantity of lead in the container may be easily ascertained.

Another object of the invention is the provision of a stop member to prevent the closure for the container from being entirely removed and misplaced.

Another object of the invention is the shaping of the container in such a manner that a single lead will be presented for removal.

Still another object of the invention is to so arrange the closure member so that it cooperates with a suitable opening to permit the removal of a single lead at one time.

Other objects of the invention will become apparent from the specification and claims.

Referring to the drawing:

Figure 1 is a perspective view of a pencil lead container with the closure or slide in a partially opened position.

Figure 2 is a plan view of the lead container with the slide in a partially opened position.

Figure 3 is a longitudinal sectional view with the slide in a partially opened position.

Figure 4 is a longitudinal sectional view with the slide in completely opened position, suitable for lead removal.

Figure 5 is a transverse sectional view taken on the line 5—5 of Figure 2.

Figure 6 is a perspective view of a modified form of the pencil lead container with the slide partially opened in full lines, and completely opened in dotted lines.

Figure 7 is an end view showing the lead-ejecting orifice.

Figure 8 is another end view showing the back of the lead container.

In the form of the invention disclosed in Figures 1 to 5 inclusive, there is disclosed a pencil lead container portion proper 1, having a bottom 2, side walls 3 and 4, and turned-up ends 5 and 6. Formed in the upper surface of the bottom 2 is a groove 7 terminating in a slot 8, which cooperates with an orifice or opening 9 in the end wall 6. The groove 7 is substantially the same size as a portion of the outer circumference of a pencil lead. The leads carried in the container portion proper may be seen in Figures 2 and 5, and are designated by L. The slot or hole 8 is of substantially the same width as the groove 7 so as to permit the passage of a lead therethrough.

It may thus be seen that there is provided in accordance with the above, a pencil container 1 arranged to hold a plurality of leads L disposed in parallel, as shown in Figure 2, and having a bottom 2 sloping into a narrow depending part or groove 7, as shown particularly in Figure 5. The groove or narrow part 7 is substantially the same size as a portion of the pencil lead, i. e., of a width to accommodate and segregate a single lead, as shown in Figure 5, and the narrow dependent part 7 has a slot or longitudinal section 8 cut away to form a lead feeding opening. The lead when fed from this opening is tilted relative to the container 1, as shown in Figure 4.

The container portion 1 is open at the top and has formed integrally therewith a pair of opposed grooves 10 and 11 forming a seat for a sliding member 12, which may be formed of a suitable transparent material. The slide 12 is slidably mounted in grooves 10 and 11 and comprises a body portion 13 and a turned down end 14 shaped as shown in Figures 7 and 8. The slide 12 may carry advertising or other indicia on the upper surface of the body thereof. The movement of the slide 12 in the grooves 10 and 11 is limited by a stop member 15, which may be formed in approximately the center of the slide in any suitable fashion. In the particular embodiment shown, this stop member is struck directly from the material of the slide member. As best shown in Figure 4, this stop member 15 cooperates with the end 6 of the container portion 1 to prevent the complete removal of the slide from the container.

The turned down portion 14 of the slide 6 is adapted to act as a closure for the orifice or

opening 9 and ordinarily when in its closed position prevents removal of a lead from the container. As particularly shown in Figure 3, the proportions of the device are such that unless
 5 the slide 12 is pulled out until the stop 15 is in contact with the end 6, the lead cannot tilt sufficiently so as to clear the turned down portion 14, and thus fall out of the container. As shown in
 10 Figure 4, when the slide is pulled out as far as it will go, i. e. to the point where the stop 15 is in contact with the end 6, the lead tilts and falls out of the container. Due to the width of the slot 8 and the cooperation of the slot with the groove 7, a single lead is fed each time the slide
 15 12 is opened or pulled out to its farthest extent, and the container portion 1 is tilted.

The container portion 1 is, preferably, pressed or formed from a single piece of sheet metal, the guides or opposed grooves 10 and 11 being formed
 20 integrally with the sides 3 and 4 and the ends 5 and 6 being turned up from the bottom 2, as best shown in Figures 7 and 8.

While the sliding member 12, in the preferred embodiment, is formed of transparent material, obviously any other suitable material may be used. The modification shown in perspective in
 25 Figure 6 is similar in construction and operation to that shown in Figures 1 to 5 inclusive, except that it is particularly adapted for the handling of short leads. It may be noted that the shape in general is similar, except for its length, and that it operates in a similar fashion.

The container 1 may be formed in other shapes, other than that specifically illustrated. For example, the container 1 may be triangular in cross
 30 section, and in place of the groove 7, a single lead may tend to be deposited in the apex of the triangle. A suitable slot may also cooperate with this triangular cross section container and the apex thereof so as to feed the lead in a similar
 40 manner to that shown.

Instead of the cross section of the container being triangular, it may also be rectangular, or hexagonal, or may be in the shape of a square,
 45 or other figure. In such case, however, the hole and slot should cooperate with the lead in such a manner so that a single lead will be fed. The turned-down portion of the sliding member, of course, will be shaped so as to facilitate the removal in this manner only when the slide is substantially
 50 opened.

It may thus be seen that there has been illustrated a container for pencil leads comprising
 55 an elongated container portion formed with a groove in one surface thereof terminating in a slot adjacent one end of the container. This groove is formed so that a single lead lodges in said groove and is fed through a slot when the container is tilted to lead-ejecting position, and
 60 a sliding member cooperating with the container portion so as to permit the removal of this lead when the container is in lead-ejecting position. The transparent cover on the container according to the present invention, can be printed with
 65 various information regarding the types of lead contained therein. Any other desirable suitable information may also appear on the transparent cover. It is desired to point out that most containers used for refill leads do not provide transparent covers, and, therefore, do not give the
 70 visibility that the container of the present invention gives. This is best illustrated in Figure 2.

The provision whereby a single piece of lead drops out at one time is also very advantageous,
 75 since when all of the leads, as in the usual con-

tainer, are fed at the same time, a considerable amount of breakage occurs. A container according to the present invention is also easily refillable.

The drawing accompanying the present application is drawn to scale.

I claim:—

1. A container for pencil leads comprising an elongated container portion formed with a groove in one surface therein terminating in a slot adjacent one end of the container, so that
 10 a single lead lodges in said groove in such position as to be fed through said slot upon tilting the container, and a transparent closure member slidably mounted on said container and arranged
 15 and constructed in one position to seal said slot and in another position to uncover said slot so as to permit the feeding of a single lead through said slot upon tilting of the container.

2. A container for pencil leads comprising an elongated container portion formed with a groove in one surface thereof terminating in a slot adjacent one end of the container, a portion
 20 of the slot being formed in a surface of the container and another portion in the aforementioned end of the container, so that a single lead lodges in said groove in such position as to be fed
 25 through said slot upon tilting the container, a closure member slidably carried by said container and arranged and constructed to seal that portion of the slot formed in the end of the container in one position and uncovering said slot
 30 when moved to lead-ejecting position, and means carried by said closure member for stopping said closure member upon reaching lead-ejecting
 35 position.

3. A container for pencil leads comprising an elongated open top container portion, an opposed groove formed in each side of said container portion, an elongated slidable closure member having
 40 a portion thereof carried in said groove and another portion turned at an angle to the first mentioned portion and adapted to be slid to lead-ejecting position, said container portion having
 45 an elongated groove and a slot in alignment with said elongated groove formed in the bottom thereof, said slot being adjacent one end of the container, the end of the container adjacent said slot being provided with an opening therein adapted
 50 to be closed by the turned-down angle portion of the closure portion, said groove and slot and opening cooperating to segregate and feed a single lead from said container when said sliding member is in lead-ejecting position and said container is tilted.

4. A container for pencil leads comprising an elongated container portion formed with a groove in one surface therein terminating in a slot adjacent one end of the container, so that
 60 a single lead lodges in said groove in such position as to be fed through said slot upon tilting of the container, and a closure member slidably mounted on said container and arranged and constructed to seal said slot in one position and
 65 to uncover said slot in another position so as to permit the feeding of a single lead through said slot upon tilting of the container.

5. A pencil lead container constructed and arranged to hold a plurality of pencil leads disposed in parallel and having a bottom sloping
 70 into a narrow depending part of a width to accommodate and segregate a single lead, said narrow dependent part having a longitudinal section thereof cut away to form a lead feeding
 75

opening so as to permit tilting of the lead relative to the container when fed.

5 6. In a pencil lead container constructed and arranged to hold a plurality of pencil leads disposed in parallel, a bottom having a groove therein of a width to accommodate a single lead so as to segregate said lead from the remaining leads in the container, a longitudinal section of said groove being cut away to form a lead feeding opening so as to permit tilting of the lead relative to the container when fed.

10 7. A container shaped to hold a plurality of pencil leads disposed in parallel and having end walls and a bottom sloping into a narrow dependent part of a width to accommodate a single lead and segregate said lead from the remaining leads in the container and having a longitudinal section of the narrow part and an adjacent portion of one of said end walls cut away to form a lead feeding opening to feed said segregated lead upon the tilting of said container, and a closure for the end cut away portion so as to prevent the feeding of said lead therethrough.

15 8. A container shaped to hold a plurality of pencil leads disposed in parallel and having end walls and a bottom sloping into a narrow dependent part of a width to accommodate a single lead and segregate said lead from the remaining leads in the container and having a longitudinal section of the narrow part and an adjacent portion of one of said end walls cut away to form a lead feeding opening to feed said segregated lead upon the tilting of said container, and a closure for the end cut away portion, said closure being movable to one position to prevent

feeding of the lead, and to another position to permit feeding of the lead, and means for stopping said closure member upon reaching said second position.

9. A container shaped to hold a plurality of pencil leads disposed in parallel and having end walls and a bottom sloping into a narrow dependent part of a width to accommodate a single lead and segregate said lead from the remaining leads in the container and having a longitudinal section of the narrow part and an adjacent portion of one of said end walls cut away to form a lead feeding opening to feed said segregated lead upon the tilting of said container, and a closure for the end cut away portion, said closure being movable to one position to prevent feeding of the lead, and to another position to permit feeding of the lead, and a stop member formed integrally with said closure member for stopping the closure member upon reaching said second position.

10. In an open top container shaped to hold a plurality of parallelly disposed pencil leads and having means to segregate a single lead from the remaining leads in the container, an opening in an end of said container in alignment with and adjacent the end of said segregated lead so as to permit the feeding of said lead in a direction parallel to the longitudinal axis thereof, a movable cover for the open top of said container having a turned down end, said end being constructed and arranged to seal the lead feeding opening.

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CERTIFICATE OF CORRECTION.

Patent No. 2,105,424.

January 11, 1938.

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It is hereby certified that error appears in the above numbered patent requiring correction as follows: In the grant, title of invention, for "PENCIL HEAD CONTAINERS" read PENCIL LEAD CONTAINERS, and in the heading to the drawing and specification, for "PENCIL HEAD CONTAINER" read PENCIL LEAD CONTAINER; and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 22nd day of February, A. D. 1938.

Henry Van Arsdale,
Acting Commissioner of Patents.

(Seal)