

July 12, 1938.

G. SEVERIN

2,123,810

MAGAZINE PENCIL

Filed Aug. 9, 1937

2 Sheets-Sheet 1

Fig. 1.

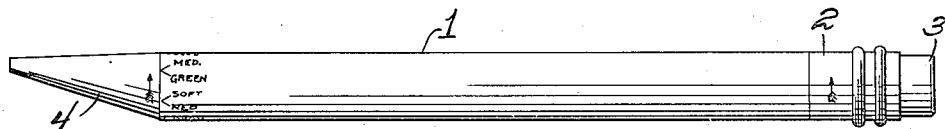


Fig. 4. Fig. 5. Fig. 6. Fig. 7.

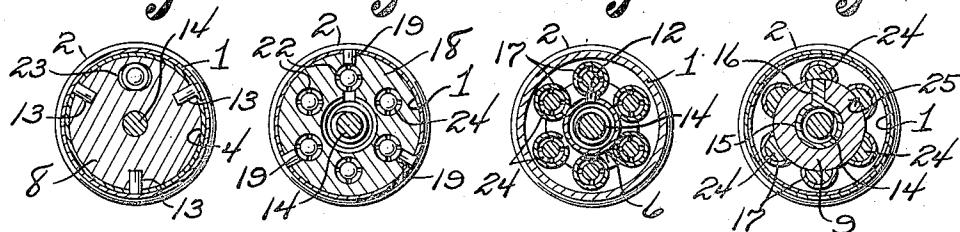


Fig. 2.

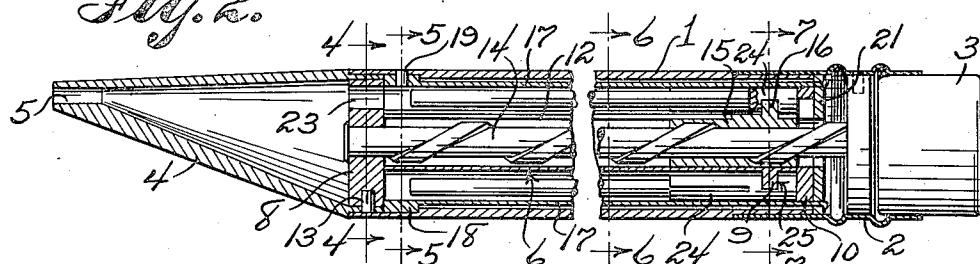


Fig. 3. Fig. 15. Fig. 16.

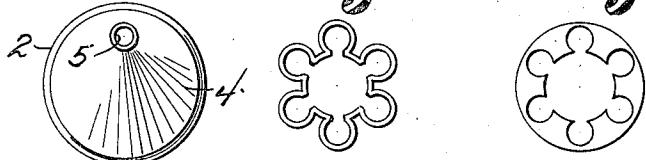


Fig. 17.



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Fig. 8.

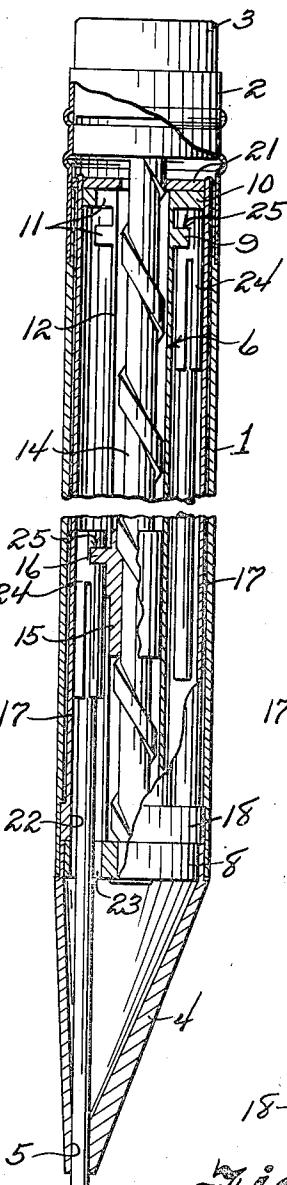


Fig. 9

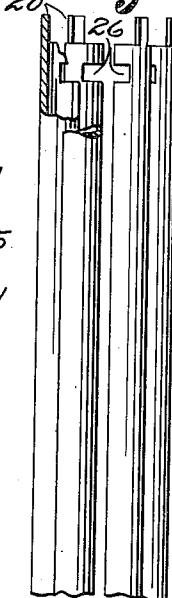


Fig. 11.

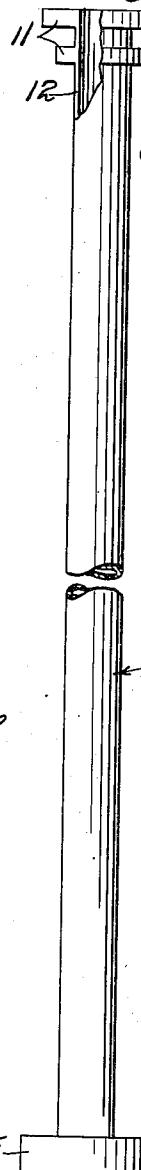


Fig. 12.

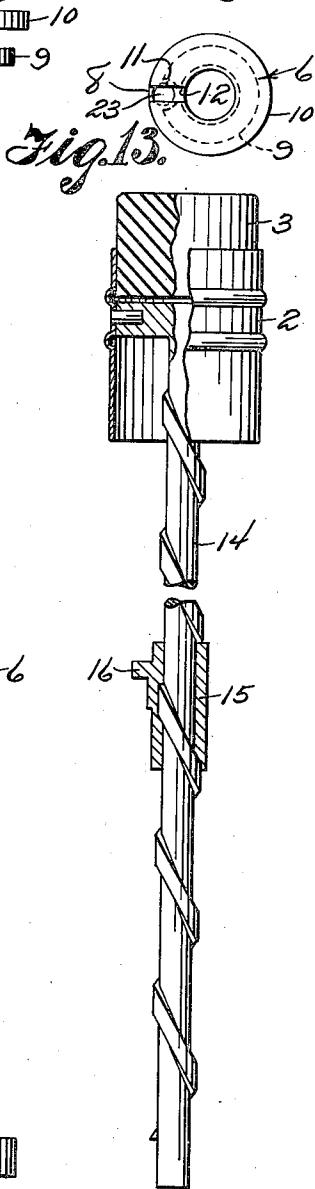


Fig. 13.

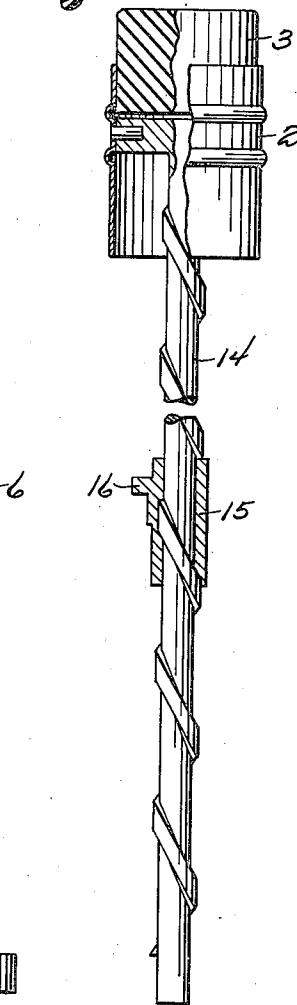


Fig. 14.

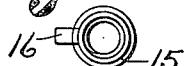
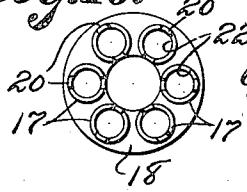


Fig. 10.



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UNITED STATES PATENT OFFICE

2,123,810

MAGAZINE PENCIL

Gordon Severin, Oklahoma City, Okla.

Application August 9, 1937, Serial No. 158,217

3 Claims. (Cl. 120—14)

This invention relates to magazine pencils and has for the primary object the provision of a device of this character which will accommodate a plurality and different kinds of leads and may be readily adjusted to bring any one of the leads into writing position and to return said lead to a position within the magazine of the device whenever desired.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawings, in which

Figure 1 is a plan view illustrating a magazine pencil constructed in accordance with my invention.

Figure 2 is a vertical sectional view illustrating the same.

Figure 3 is an end elevation illustrating a lead holder.

Figure 4 is a transverse sectional view taken on the line 4—4 of Figure 2.

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

Figure 6 is a transverse sectional view taken on the line 6—6 of Figure 2.

Figure 7 is a transverse sectional view taken on the line 7—7 of Figure 2.

Figure 8 is a vertical sectional view illustrating the pencil adjusted to present one of the leads in writing position.

Figure 9 is a plan view, partly in section, illustrating a lead magazine.

Figure 10 is an end elevation illustrating said lead magazine.

Figure 11 is a plan view partly broken away showing a lead selector tube.

Figure 12 is an end elevation illustrating said lead selector tube.

Figure 13 is a plan view partly in section illustrating a lead feeding device.

Figure 14 is an end view illustrating a feed nut.

Figure 15 is an end view illustrating a modified form of lead magazine.

Figure 16 is an end view illustrating another modified form of a lead magazine, and

Figure 17 is a plan view, partly in section, showing a modified form of lead grip.

Referring in detail to the drawings, the numeral 1 indicates a body of a pencil which is in the form of a shell and may be of any desired shape and constructed from any material suitable for the purpose. A finger piece 2 is journaled on one end of the body and forms a holder for an eraser 3. Journaled in the other end of

the body 1 is a lead holder 4 of substantially conical shape having a lead opening 5 in the apex thereof and which opening is arranged eccentrically of the longitudinal axis of the body.

A lead selector tube 6 is provided at one end 5 with a head 8 and is provided adjacent its opposite end with spaced flanges 9 and 10 each having a slot 11 therein. The tube 6 has a slot 12 extending substantially its full length and in communication with the slots 11. The tube 6 is 10 arranged in the body 1, the head 8 being pinned to the lead holder, as shown at 13, so that said lead selector tube 6 will be compelled to rotate with the lead holder. A threaded feed shaft 14 extends through the tube 6 and has one end 15 journaled in the head 8 and its opposite end secured on the finger piece 2. A feed nut 15 is mounted on the feed shaft 14 for endwise movement thereon by the rotation of said feed shaft. A lug 16 is formed on the feed nut and extends 20 through the slot in the tube 6 and the latter being manually held by gripping the lead holder 4 will bring about endwise movement of the feed nut by the rotation of the feed shaft.

Grouped about the tube 6 is a plurality of 25 slotted lead magazine tubes 17 joined together by a head 18 and the latter is secured against movement in the body 1 by being pinned to the body, as shown at 19. If desired, the tubes 17 may be integrally connected with the body 1 30 of the pencil. The opposite ends of the tubes 17 have formed thereon projections 20 adapted to extend through openings or slots in a retaining disc 21 and are bent into engagement with the latter so that said disc 21 will cooperate with the head 18 in holding the magazine tubes properly 35 assembled. The disc 21 abuts one end of the body 1. The head 18 has lead openings 22 aligning with the lead magazine tubes 17 and the head 8 has a lead opening 23 which aligns with 40 the lead opening 5 of the lead holder 4 and may be brought into registration with any one of the lead openings 22 by the rotation of the lead holder 4 relative to the body 1. Different kinds of leads are positioned in the lead magazine tubes 45 and the body 1 has characters applied thereto, as shown in Figure 1, to indicate the kinds of lead in the various lead magazine tubes so that a person may readily position or rotate the lead holder 4 to bring the lead opening 5 thereof in 50 alignment with a lead magazine tube having the kind of lead therein desired for use.

Slidable in the lead magazine tubes are lead grips 24 adapted to grip the leads and each consists of a split sleeve to receive a portion of the 55 lead and grip the same and also is provided with a notch 25 aligning with the slot 12 of the tube 6 so that the lug 16 of the feed nut may be caused to move into and out of the notches of the grips 24 by the rotation of the sleeve 6. This arrange- 60

ment permits the user of the pencil to readily position the feed nut so that the lug will enter a notch of a lead grip carrying a selected kind of lead to be moved into writing position, as shown in Figure 8, by extending a desired distance beyond the apex of the lead holder 4. It is to be understood that after the lug of the feed nut has engaged in the notch of the lead grip the finger piece 2 is rotated in the direction indicated by the arrow in Figure 1 which causes the feed nut to move towards the lead holder 4 shoving the desired lead through the lead holder and the lead opening 5 thereof to a desired distance beyond the apex of the lead holder for writing purposes. The lead in writing position can be returned into its respective lead magazine tubes by the rotation of the finger piece in a reverse direction. To change from one lead to another, all leads must be in their respective lead magazine tubes with the feed nut on the feed shaft positioned as shown in Figure 2. Then by rotating the lead holder 4 on the body 1 the lead opening 23 can be brought into alignment with any one of the lead magazine tubes, at the same time imparting rotation to the tube 6 causing the nut to turn and enter the notch of the lead grip of the lead magazine tube selected. The lead magazine tubes besides having slots extending longitudinally thereof also have slots 26 which will permit the lug during the rotation of the feed nut to move into and out of the notches of the various lead grips. The flange 9 of the tube 6 enters the notches of the lead grips 24 and thereby secures the leads against movement in their lead magazine tubes except the notch 11 of the flange 9 will free one at a time the lead grips so that the freed lead grip when engaged by the lug of the feed nut may slide with the latter for moving the lead thereof into writing position. It is to be understood that when the notch 11 in the flange 9 of the tube 6 has been positioned to free a certain lead grip the lug of the nut then extends in the notch of the freed lead grip by extending through the notch provided in the flange 9.

The lead grips may be provided with grooved heads 27, as shown in Figure 17, in lieu of the notches and also the lead magazine tubes may be cast integral with each other as suggested in Figures 15 and 16, Figure 15 showing one shape of casting the lead magazine tubes integral with each other and Figure 16 showing another shape.

In operation, a person rotates the lead holder 4 until the opening 5 thereof registers with a selected character on the body 1, bringing the lead opening 23 in registration with the lead magazine tube having the selected kind of lead. The rotation of the lead holder also imparts rotation to the tube 6 so that the flange 9 will be rotated to free the lead grip of the selected lead and at the same time position the lug of the feed nut in the notch of the lead grip of the lead selected. The finger piece 2 is then rotated causing the feed nut to travel endwise to bring the selected lead in writing position by extending through the lead opening 5 to a selected distance. Whenever it is desired to return a lead from writing position the finger piece is rotated in a reverse direction.

What is claimed is:

1. A magazine pencil comprising a body, a finger piece journaled on the body, a lead holder journaled on said body and having a lead opening arranged eccentrically of the longitudinal axis of the body, a plurality of slotted lead magazine tubes

mounted in said body and grouped in annular formation so that the rotation of the lead holder relative to the body may bring the opening thereof in alignment with any one of the lead magazine tubes, a selector tube secured to and rotatable with the lead holder and arranged centrally of the lead magazine tubes and having a slot extending substantially the full length thereof, a slotted flange secured on said tube, lead grips in the lead magazine tubes and having frictional fit with the leads and provided with notched portions to receive the flange with one of the lead grips free of said flange by the slot in the latter, a feed shaft extending through the selector tube, a feed nut on said feed shaft, and a lug formed on the feed nut and extending through the slot of the selector tube and adapted to be moved thereby to engage in a notch of a grip of a selected lead, and means for rotating the feed shaft.

2. A magazine pencil comprising a body, a finger piece journaled on the body, a lead holder journaled on said body and having a lead opening arranged eccentrically of the longitudinal axis of the body, a plurality of slotted lead magazine tubes mounted in said body and grouped in annular formation so that the rotation of the lead holder relative to the body may bring the opening thereof in alignment with any one of the lead magazine tubes, a selector tube secured to and rotatable with the lead holder and arranged centrally of the lead magazine tubes and having a slot extending substantially the full length thereof, a slotted flange secured on said tube, lead grips in the lead magazine tubes and having frictional fit with the leads and provided with notched portions to receive the flange with one of the lead grips free of said flange by the slot in the latter, a feed shaft extending through the selector tube, a feed nut on said feed shaft, a lug formed on the feed nut and extending through the slot of the selector tube and adapted to be moved thereby to engage in a notch of a grip of a selected lead, and means for rotating the feed shaft.

3. A magazine pencil comprising a hollow body, a plurality of lead magazine tubes grouped in said body in annular formation and each tube having a slot, a lead holder journaled on said body and having aligned lead openings arranged eccentrically of the longitudinal axis of the body and capable of being brought into alignment with any one of the lead magazine tubes, lead grips slidable in said lead magazine tubes and having notches, a selector tube secured on the lead holder and extending centrally through the group of lead magazine tubes and having a slot, a feed shaft extending through said selector tube and having one end rotatably supported by the lead holder, a slotted flange formed on said selector tube to move freely through the notches of the lead grips whereby said lead grips will be held against sliding movement except when the notch of said flange aligns with the notch of the lead grip and thereby free said lead grip for sliding movement, a feed nut on said feed shaft, a lug on said feed nut and extending through the slot of the selector tube and adapted to be positioned in the notch of the freed lead grip by said selector tube, and a finger piece journaled on the body and secured to the feed shaft.

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