Feb. 3, 1942. B. M. TAPNER 2,272,139

WRITING INSTRUMENT

Filed Oct. 17, 1940

Fig. 1.

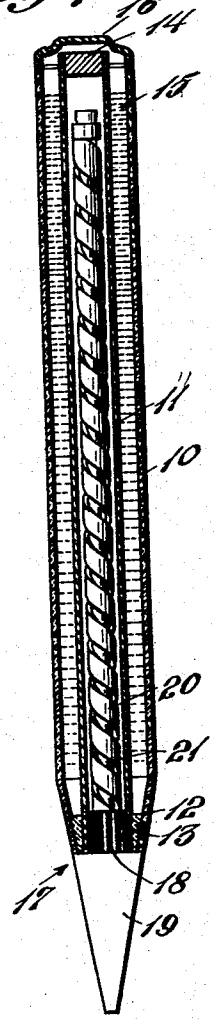


Fig. 2.

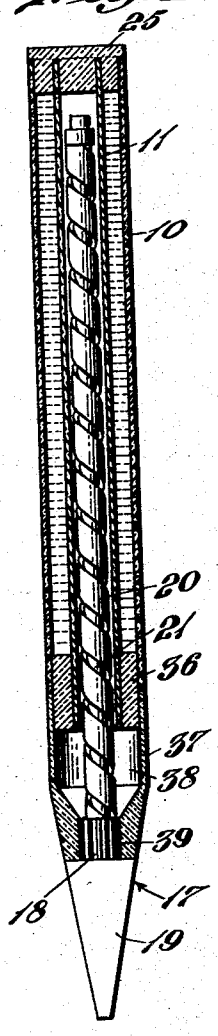


Fig. 3.

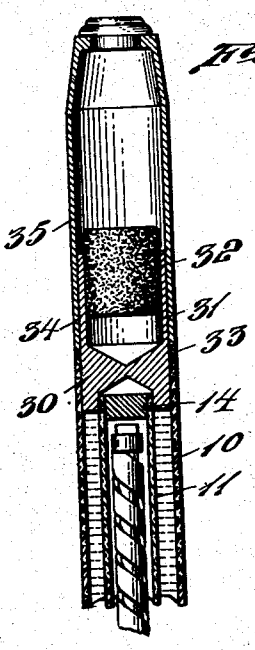


Fig. 4.

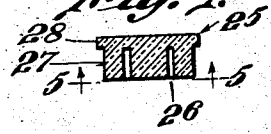
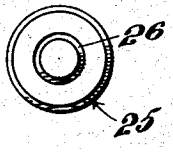


Fig. 5.



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WRITING INSTRUMENT

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Application October 17, 1940, Serial No. 361,505

7 Claims. (Cl. 120—9)

This invention relates to a writing instrument, more particularly a mechanical pencil in which there is a mechanical movement for manipulating the lead.

The invention has for one of its objects to provide a novel appearing pencil especially adapted for advertising by the visible carrying of merchandise or printed matter relating thereto.

Another object of the invention is to provide an arrangement whereby a liquid may be maintained within a transparent tubular barrel in which there is a mechanical lead-manipulating mechanism located and yet one from which the liquid present within the barrel cannot escape.

Another object of the invention is to so seal a liquid within a transparent barrel that the pencil movement may be exposed to view and yet there may be provided an erasure or lead-containing compartment for additional functions usually performed by a mechanical pencil.

Another object of the invention is to provide for the containing of a liquid in only a part of the length of the pencil.

Another object of the invention is to provide a pencil which will attract attention by reason of the presentation of the appearance of the mechanical action operating in a lubricant.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawing:

Fig. 1 is a central sectional view through the pencil constructed in accordance with this invention;

Fig. 2 is a view similar to Fig. 1 of a modified form;

Fig. 3 is a fragmental sectional view of the end portion of a writing instrument, modified differently from that shown in Figs. 1 and 2;

Fig. 4 is a sectional view of the cap used in Fig. 2;

Fig. 5 is an end view thereof on line 5—5 of Fig. 4.

Transparent pencils have been provided in which the working parts of the pencil may be viewed through a transparent tubular barrel member; and in order to further enhance the interest in the mechanical action of a pencil, I have conceived of placing merchandise within this transparent barrel either of solid or liquid form and when the latter is used almost filling the same but leaving sufficient air so that a bubble will be apparent upon rocking the pencil from one position to another, and if oil is displayed giving the appearance that the mechanical action of the pencil is operating in oil. However, if liquid were placed within the ordinary pencil, the same would leak through the mechanical action, and the pencil could not be used. Accordingly, I have arranged to seal oil between two transparent tubes, the inner tube being scarcely visible through the oil, thus giving this attracting appearance to the pencil which is very desirable when the pencil is used for advertising purposes and yet providing a pencil which is usable and cannot leak; and the following is a more detailed description of the present embodiment of this invention, illustrating the preferred means by which these advantageous results may be accomplished:

With reference to the drawing, I have provided an outer transparent tubular member 10 of Celluloid or some suitable material and also an inner transparent tubular member of a like suitable material. The outer member is tapered as at 12 so as to come in closer proximity to the inner member 11 at the point end, while a sealing means 13 consisting of some suitable material, but preferably one which may be cemented, welded or amalgamated in some way to each of the tubes 10 and 11, is provided at this taper so as to provide a liquid-tight joint between the tubes and also hold the two members in desired concentric spaced relation. At the opposite end of the instrument, the mechanical movement housing tube 11 is closed by means of a plug 14, and the material to be displayed, such as the liquid 15, is placed between the two tubes 10 and 11 and sealed in position by means of a cap 16 closing the outer tube. Other merchandise such as sugar, flour, or salt may be used instead of the oil.

The mechanical point and movement designated generally 17 is provided with a friction collar 18 which is forced into the tube 11 to have a friction-tight fit therewith so as to be relatively fixed thereto, while the point 19 is rotatable with reference to the collar 18. A helically-slotted tube 20 is fixed to the collar 18, while a longitudinally-slotted tube 21 is attached to and is movable with the point end 19. Suitable lead-carrier mechanism is manipulated by means of the relative movement of the portions 20 and 21 for movement of the lead longitudinally of the writing instrument.

Both of the tubes 10 and 11 being transparent readily shows the mechanical movement of the writing instrument through them and through the merchandise, if it is also transparent, one example of which is good quality oil, and assists in obscuring the inner tube. Thus, the mechanically moving parts of the pencil appear to be operating in oil. If the merchandise is not transparent, the inner tube may be of any material whether or not transparent.

In some instances, instead of the construction illustrated in Fig. 1, the construction may be varied. For instance, in Fig. 2, I have illustrated a cap 25 (see Fig. 4) which is provided with a circular slot 26 to receive the tubular member 11 within the slot, while the tubular member 10 fits

over the outer surface 27 to abut the flange 28 of the cap and by reason of the telescoping portions of the cap and the barrels, there is a sealing of this end of the instrument so that no liquid can communicate or leak from the space between the barrels.

As shown in Fig. 3, a still different arrangement is provided. In this case, the inner tubular member 11 is provided with a plug 14 as heretofore shown, while the outer member is closed by means of an erasure-containing plug 30 which fits within the tubular member 10 and about the tubular member 11, while being provided with a recess 31 to contain an erasure 32. A ring 33 is fixed to the plug 30 to form a flange which limits the insertion of the plug into the space between the barrels while providing on its outer surface 34 an arrangement for mounting a removable cap 35 which may be pulled from this position for the sealing of the space between the tubes 10 and exposing the erasure for use.

In Fig. 2 I have illustrated a modification of 11 by means of a cylindrical plug 36 in the ends of the member 10 which provides for the telescopingly mounting or the tubular member 37 thereover in which tubular member there is a bore 38 and 39, the latter of which retains the collar 18 of the point end movement designated generally 17 and with the parts numbered correspondingly with the same parts shown in Fig. 1. In this case, the collar 18 is mounted within a continuation of the outer tubular member and projects within the inner tubular member rather than being held by its own friction with the inner tubular member as heretofore.

From the above it will be apparent that any merchandise or advertising copy may be contained between the two tubes which are so sealed that even liquid does not reach the mechanism and consequently cannot leak through the mechanism, and when oil is used, there is provided the appearance that the mechanism is operating in oil.

The foregoing description is directed solely towards the construction illustrated, but I desire it to be understood that I reserve the privilege of resorting to all the mechanical changes to which the device is susceptible.

I claim:

1. An illusion-creating device comprising concentric, transparent, tubular members positioned one within the other, means for holding the same in spaced relation and sealing the space therebetween providing a sealed chamber between said tubular members, the transparency of said members being such as to make the inner member imperceptible from a casual observation of the device, a material partially filling said space and capable of movement therein, and a mechanism housed within the inner tubular member and having movable elements thereon visible through said material.

2. An illusion-creating device comprising concentric, transparent, tubular members positioned one within the other, means for holding the same in spaced relation and sealing the space at one end of said tubular members, means for closing the outer and inner tubular members at the other end providing a sealed chamber between said members, a transparent fluid partially filling said chamber and capable of movement therein, and a mechanism housed within the inner tubular member and with the movable parts thereof visible through said fluid.

3. An illusion-creating device comprising transparent, tubular members positioned one within the other, means for holding the same in spaced relation and sealing the space therebetween providing a sealed chamber between said tubular members, a material partially filling said space and capable of movement in said chamber, and a mechanism housed within the inner tubular member and having movable elements visible through said material.

4. An illusion-creating device comprising transparent, tubular members positioned one within the other, means for holding the same in spaced relation and sealing the space at one end of said tubular members, means for closing the outer and inner members at the other end providing a sealed chamber therebetween, said means including a cap positioned between the tubular members at said end and secured thereto, a transparent fluid in said chamber and a mechanism contained within said inner tubular member having movable elements visible through said fluid.

5. An illusion-creating device comprising transparent, tubular members positioned one within the other, means for holding the same in spaced relation and sealing the space at one end of said tubular members, means for closing the outer tubular member at the other end thereof, and means for closing the other end of the inner tubular member providing a sealed chamber in the space between said members, a transparent fluid in said chamber and a mechanism contained within said inner tubular member having movable elements visible through said fluid.

6. An illusion-creating device comprising transparent, hollow members positioned one within the other and in spaced relation to each other and with the space therebetween sealed at the ends of the members providing a sealed chamber therebetween, a transparent fluid in said chamber capable of movement therein, and a mechanism housed within the inner member and extending therefrom and relatively movable with respect to said transparent members, said mechanism having movable elements visible through said tubular members and fluid, the transparency of said fluid being such as to make the inner member imperceptible from a casual observation when viewed through said outer member and fluid.

7. A unit part or an illusion-creating device comprising elongated transparent members positioned in spaced relation one within the other and with the space adjacent to the ends thereof sealed providing a sealed chamber therebetween, and a transparent fluid partially filling said chamber, said inner member having a transparency as to make said inner member imperceptible from a casual observation when viewed through the outer member, said unit part providing a body portion for a mechanical writing instrument and capable of housing within the inner member mechanism of the writing instrument.

BURTON M. TAPNER.