July 12, 1949. J. V. WUESTMAN 2,475,934

ADVERTISING PENCIL OR LIKE DEVICE

Filed June 6, 1946

Fig. 1

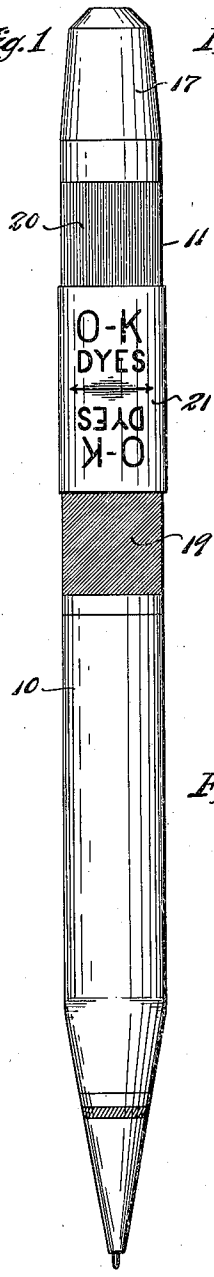


Fig. 2

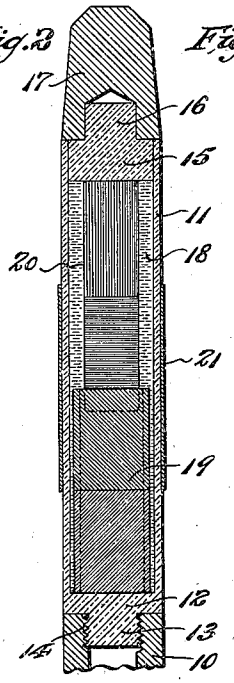


Fig. 3

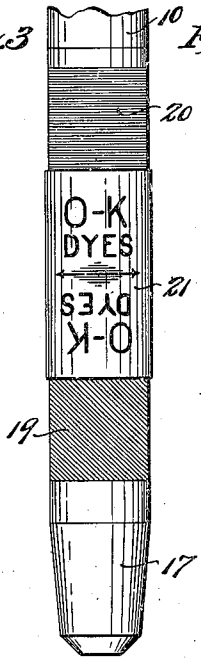


Fig. 4

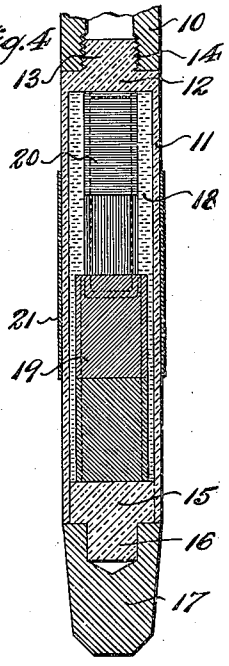


Fig. 5

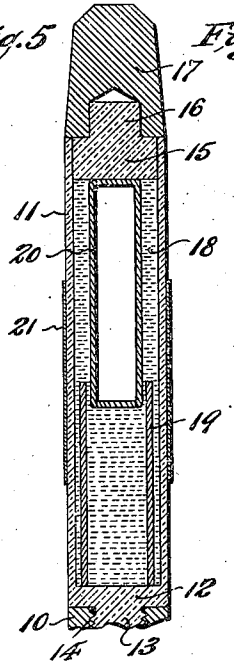


Fig. 6

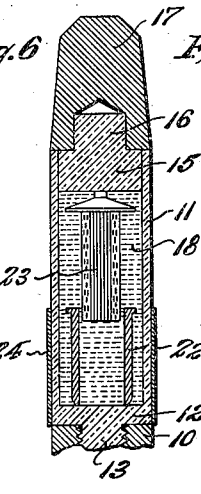
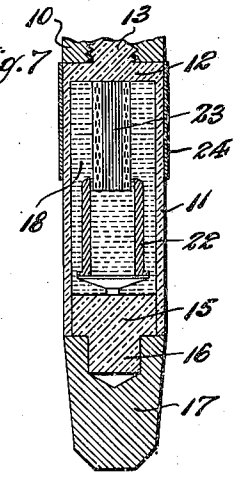


Fig. 7



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ADVERTISING PENCIL OR LIKE DEVICE

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9 Claims. (Cl. 40—19)

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This invention relates to pencils, pens or like styliform devices having incorporated therein a novel combination of relatively movable advertising elements.

The invention has for an object to provide in a pencil or other styliform device a transparent closed chambered section which is wholly filled with a transparent liquid, in which liquid are submerged a plurality of relatively movable elements, at least one of said elements being of greater specific gravity than that of the liquid, so as to descend through the liquid by gravity, and at least another said element being of lesser specific gravity than that of the liquid, so that it will, by virtue of its buoyancy, ascend through the liquid, whereby said elements may be caused to make counter directional movements when the device is reversed end for end.

The invention has for another object to provide in a pencil or other styliform device a transparent closed chambered section which is wholly filled with a body of transparent liquid containing a plurality of relatively movable elements capable of counter directional movements through the liquid when the device is reversed end for end, said chambered section having a non-transparent portion or means relative to which said counter directionally movable elements may move, whereby to be in whole or in part exposed or concealed according to given end positions thereof within said chambered section.

Other objects of this invention, not at this time more particularly enumerated, will be understood from the following detailed description of the same.

Illustrative embodiments of this invention are shown in the accompanying drawings, in which:

Fig. 1 is an elevational view of a pencil provided with a transparent liquid filled chamber containing relatively movable elements capable of counter directional movements through the liquid, said chambered section also including a stationary non-transparent portion or means relative to which said counter directionally movable elements may move, the latter being shown in one display position; Fig. 2 is a fragmentary longitudinal sectional view of the liquid filled chambered section of the pencil, with the internal movable elements shown in elevation, and in the display position shown in Fig. 1; Fig. 3 is a fragmentary elevational view of the chambered section of the pencil in end for end reversed position whereby said internal movable elements are moved to another display position; Fig. 4 is a longitudinal view of the chambered section of

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the pencil in the reversed position shown in Fig. 3, and with the internal movable elements shown in elevation, and in the display position of Fig. 3; and Fig. 5 is a longitudinal sectional view similar to that of Fig. 2, but showing said internal movable elements also in longitudinal section.

Fig. 6 is a sectional view similar to that of Fig. 2 but showing a modified arrangement and form of the internal movable elements and of the stationary non-transparent portion or means of the chambered section in relation to which said internal elements are movable; and Fig. 7 is a similar view of the same in end for end reversed position.

Similar characters of reference are employed in the above described views, to indicate corresponding parts.

In one illustrative embodiment of this invention as shown in Figs. 1 to 5 inclusive, the invention is applied to the barrel 10 of a mechanical pencil, although it will be understood that the same may be applied to other forms of pencils, to pen and pencil cases, or to any styliform or other device.

To the upper end of the pencil barrel 10 is affixed a transparent chambered section. This chambered section comprises a tubular and preferably cylindrical body member 11 made of any suitable transparent material, such as glass or a transparent plastic composition, preferably the latter. Said body member 11 is closed and sealed at its lower end portion by a bottom end wall 12, which may be integral therewith or otherwise arranged in unitary relation thereto. Said end wall 12 is provided with an external, axially extending coupling element 13 of reduced diameter, the same being adapted to engage and be secured in the upper end portion of the pencil barrel 10, whereby said chambered body 11 becomes a unitary part of the latter. Preferably said coupling element 13 is provided with external screw threads 14 to screw into said upper end of the pencil barrel 10. Similarly, the body member 11 is closed and sealed at its upper end portion by an upper end plug 15. If desired, said upper end plug 15 is also provided with an external axially extending coupling element 16 of reduced diameter, the same being adapted to engage and be secured in an ornamental end piece 17 which may be provided to furnish a pleasing finish to the combined structure.

The interior of the chambered body member 11 is filled with a transparent liquid 18, such e. g. as a light transparent oil, in which liquid

the internal counterdirectionally movable elements of the device are submerged.

The internal elements of the device, which are submerged in the liquid content of the chambered body 11, comprise at least two in number which are capable of counterdirectional relative movements through the liquid from end to end of the chambered body. To this end, one said element is made of material possessing a specific gravity which is greater than that of the liquid 18, whereby, when free to do so, it will sink through said liquid, while the other said element is so constructed or is made of such material that its specific gravity is less than that of the liquid 18, whereby, when free to do so, it will rise through the liquid by virtue of its buoyancy. Said elements may be made in any suitable form, but preferably in forms whereby they are capable of mutually guiding one another as they respectively move endwise in opposite directions through the liquid 18. Said elements may be given desired form or may be provided with any selected indicia, display matter, color or other decoration suitable to characterize the same for desired advertising effect, or merely for ornamental effect, as the case may be.

As shown in Figs. 1 to 5 inclusive, one illustrative form and mutual relation of the internal movable elements, characterized as above stated, comprises an outer tubular element 19 of somewhat smaller external diameter than the internal diameter of the chambered body 11, whereby the same is free to move endwise through the liquid 18 from one to another end of said chambered body, and an inner element 20 of somewhat smaller external diameter than the internal diameter of said outer tubular element 19, whereby to be capable of endwise movement through the liquid 18, and through the bore of said tubular element 19, from one to another end of said chambered body. One of said elements is gravitational in the liquid 18 while the other is buoyant in said liquid. For example, as shown, the outer tubular element 19 is gravitational, while the inner element 20 is buoyant. The buoyant inner element 20 may comprise a hollow body (see Fig. 5) whereby air entrapped within the same accounts for its buoyancy, or it may comprise a solid body made of material of less specific gravity than that of the liquid 18. It will be obvious that when the pencil 10 is disposed point down (see Figs. 1 and 2), the gravitational tubular element 19 will sink and thus descend through the liquid 18 until brought to rest by the end wall 12, whereas the buoyant element 20 will rise through the liquid 18 until brought to rest by the end plug 15. If, after this, the pencil is reversed end for end (see Figs. 3 and 4), the outer tubular element 19 will again descend through the liquid 18 until stopped by the end plug 15, whereas the inner element 20 will again rise through the liquid 18 until stopped by the bottom wall 12. It will thus be understood that the relative movements of the outer and inner elements 19 and 20 are always counterdirectional.

Said chambered body 11 is provided with a suitably formed and located stationary non-transparent portion or means relative to which the internal counterdirectionally movable elements 19 and 20 may move, whereby to be in whole or in part exposed or concealed according to given end positions thereof within said chambered body 11.

A preferred means to provide the stationary non-transparent portion or means in connection with the chambered body 11 comprises an external opaque shielding sleeve 21 of suitable length, which is preferably affixed to the exterior surface of the chambered body 11 at a selected location intermediate its ends. In one illustrative arrangement of said shielding sleeve 21, as shown in Figs. 1 to 5 inclusive, the same is placed midway between the ends of the chambered body 11, whereby to provide the latter with a lower transparent section or zone and an upper transparent section or zone. Said sleeve 21 may be provided with any selected indicia, display matter, color or other decoration suitable to characterize the same for a desired advertising effect, or merely for ornamental effect, as the case may be. In said illustrative arrangement thereof, the stationary sleeve 21 is of such length as to cover and conceal adjacent end portions of the internal movable elements 19 and 20, when the latter occupy positions of rest.

By reason of the ability of the internal movable elements 19 and 20 to move up and down counterdirectionally within the liquid filled chambered body 11, changes in the appearance or display of the advertising matter or decoration carried thereby may be attained by the shifting of portions of the elements 19 and 20 from concealed position behind the stationary sleeve 21 to exposed positions which renders them visible through the transparent sections or zones of the chambered body 11. For example, one half of the gravitational element 19 may be given one color or may carry one form of indicia or display and the opposite half thereof may be given another color, indicia or display; and in like manner, one half of the buoyant element 20 may be given a different color, indicia or display, and the other half thereof still another color, indicia or display. Illustrative of this, such parts of the movable elements 19 and 20 have been lined for differentiated color indication in Figs. 1 to 4 inclusive, whereby one half of the gravitational element 19 is colored brown and the other half is colored green, and whereby one half of the buoyant element 20 is colored red and the other half thereof is colored blue. In such illustrative make up, when the pencil is disposed in normal point down position, the gravitational element 19 will sink to rest in position to expose its brown part through the lower transparent section or zone of the chambered body, while its green part will be concealed by the stationary shielding sleeve 21, whereas the buoyant element 20 will rise and come to rest in position to expose its red part through the upper transparent section or zone of the chambered body, while its blue part will be concealed by the stationary shielding sleeve 21; all whereby one set of visible color effects is associated with said shielding sleeve 21 (see Figs. 1 and 2). When, however, the pencil is reversed end for end, the gravitational element 19 will again sink and come to rest in position to expose its green part through the upper transparent section or zone of the chambered body 11, while its brown part will be concealed by the shielding sleeve 21, whereas the buoyant element 20 will again rise and come to rest in position to expose its blue part through the lower transparent section or zone of the chambered body 11, while its red part will be concealed by the shielding sleeve 21; all whereby a different set of color effects is associated with the shielding sleeve (see Figs. 3 and 4). The variable color changes thus possible may be used for

ornamental effect, or for advertising effect, as e. g. in association with a dye advertisement carried by the sleeve 21.

In another arrangement of the internal counterdirectionally movable elements as related to each other and to a stationary shielding sleeve, said elements may be respectively formed to simulate a selected subject desired to be advertised, such e. g. as a container and content, and the shielding sleeve may be so located as to conceal one element and expose the other when the pencil is held in one position, but when the pencil is reversed end for end to conceal said last mentioned element and expose said first mentioned element. An arrangement of this character is shown in Figs. 6 and 7, wherein a gravitational element 22 of tubular form and externally shaped to simulate the appearance of a casing or holder (illustratively shown by way of example as that of an oil filter device) is submerged in the liquid 18 contained in the chambered body 11. Also submerged within said liquid 18 is a buoyant element 23, adapted to telescopically cooperate with said gravitational element 22, said buoyant element 23 being shaped to simulate the appearance of the content of casing or holder simulated by said gravitational element 22 (said buoyant element being illustratively shown by way of example as simulating the appearance of a removable oil filter unit). A stationary shielding sleeve 24 is affixed to the chambered body 11 in connection with one end portion thereof, whereby to provide a transparent section or zone at the opposite end portion of said chambered body 11. The shielding sleeve 24 may carry suitable advertising matter.

In operation of the last described arrangement, when the pencil is held in normal position, the gravitational element 22 will sink to a position behind and so as to be concealed by the shielding sleeve 24, whereas the buoyant element 23 will rise so as to be visible through the transparent section or zone of the chambered body 11 above the sleeve 24 (see Fig. 6). When the pencil is reversed end for end, the gravitational and buoyant elements will move counter-directionally, so that the buoyant element, which simulates the filter unit, will appear to enter the casing or holder simulated by the gravitational element, but when the movements of said elements end as they come to rest, the buoyant element will be concealed by the shielding sleeve 24 but the gravitational element will be visibly exposed through the transparent section or zone, and the casing or holder and the filter unit will appear to be assembled (see Fig. 7).

It will be obvious that many variations in the forms and appearance of the internal elements may be made to adapt the same to various advertising purposes and displays, or to obtain various changeable ornamental or other effects. It will also be understood, that the shielding means may be variously formed and located according to given cooperative relation to the internal elements desired to be obtained in any given case. It will be further understood that in devices wherein the use of the counter-directionally movable internal elements alone is desired, that the shielding sleeve or equivalent means may be omitted.

Having now described my invention, I claim:

1. In a styliform device, a barrel including a transparent chambered body section having closed ends, a transparent liquid filling said body, at least two movable advertising elements submerged in said liquid, one of said elements being of greater specific gravity than that of the liquid so as to gravitate therein, and the other of said elements being of less specific gravity than that of the liquid so as to rise therein by virtue of its buoyancy, all whereby said elements are capable of simultaneous counter-directional relative movements through said liquid when the device is turned end for end.

2. In a styliform device, a barrel including a transparent chambered body section having closed ends, a transparent liquid filling said body, at least two movable advertising elements submerged in said liquid, one of said elements being of greater specific gravity than that of the liquid so as to gravitate therein, the other of said elements being of less specific gravity than that of the liquid so as to rise therein by virtue of its buoyancy, all whereby said elements are capable of simultaneous counter-directional relative movements through said liquid when the device is turned end for end, and opaque means in fixed relation to a selected portion of said body section adapted to conceal said internal elements or portions thereof when the same come to rest in given positions within said body section.

3. In a styliform device, a barrel including a transparent chambered body section having closed ends, a transparent liquid filling said body, a plurality of movable elements bearing advertising indicia submerged in said liquid, at least one of said elements being of greater specific gravity than that of the liquid so as to gravitate therein, at least another of said elements being of less specific gravity than that of the liquid so as to rise therein by virtue of its buoyancy, all whereby said elements are capable of simultaneous counter-directional relative movements through said liquid when the device is turned end for end, and a stationary non-transparent shielding sleeve affixed to a selected portion of said body and adapted to conceal an element when at rest in a given position within said body section.

4. In a styliform device, a barrel including a transparent chambered body section having closed ends, a transparent liquid filling said body, a pair of internal elements bearing advertising indicia submerged in said liquid, one said element being of greater and the other of less specific gravity than that of the liquid in said body section so as to be capable of simultaneous counter-directional relative movements through said liquid when the device is turned end for end, and said elements being so relatively shaped as to mutually guide one another during their counter-directional relative movements.

5. In styliform device, a barrel including a transparent chambered body section having closed end, a transparent liquid filling said body, a pair of internal elements bearing advertising indicia submerged in said liquid, one said element being of greater and the other of less specific gravity than that of the liquid in said body section so as to be capable of simultaneous counter-directional relative movements through said liquid when the device is turned end for end, said elements being so relatively shaped as to mutually guide one another during their counter-directional relative movements, said chambered body section having a stationary non-transparent shielding means affixed to a selected portion thereof relative to which said elements move, whereby to be in whole or in part exposed or concealed in certain of their positions of rest.

6. In a styliform device, a barrel including a transparent chambered body section having closed ends, a transparent liquid filling said body, and a pair of telescopically related internal elements submerged in said liquid, said elements bearing advertising indicia, one of said elements being of greater specific gravity than that of the liquid so as to gravitate therein and the other being of less specific gravity than that of the liquid so as to rise therein by virtue of its buoyancy, whereby said elements are capable of counter-directional relative movements through said liquid when the device is turned end for end.

7. In a styliform device, a barrel including a transparent chambered body section having closed ends, a transparent liquid filling said body, a pair of telescopically related internal elements submerged in said liquid, said elements bearing advertising indicia one of said elements being of greater specific gravity than that of the liquid so as to gravitate therein and the other being of less specific gravity than that of the liquid so as to rise therein by virtue of its buoyancy, whereby said elements are capable of counter-directional relative movements through said liquid when the device is turned end for end, and said chambered body section having a stationary non-transparent shielding means affixed to a selected portion thereof relative to which said elements move, whereby to be in whole or in part exposed or concealed.

8. In a styliform device, a barrel including a transparent chambered body section having closed ends, a transparent liquid filling said body section, and a plurality of internal advertising elements submerged in said liquid so as to be visible therethrough and through the walls of said body section, at least one of said elements being of greater and others of less specific gravity than that of the liquid in said body section so as to be capable of simultaneous counter directional relative movements through said liquid when the device is turned end for end.

9. In a styliform device, a barrel including a transparent chambered body section having closed ends, a transparent liquid filling said body section, and a plurality of internal advertising elements submerged in said liquid so as to be visible therethrough and through the walls of said body section, at least one of said elements being of greater and others of less specific gravity than that of the liquid in said body section so as to be capable of simultaneous counter directional relative movements through said liquid when the device is turned end for end, and opaque means in fixed relation to a selected portion of said body section adapted to conceal said internal elements or portions thereof when the same come to rest in given positions within said body section.

JOSEPH V. WUESTMAN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,850,190	Welch	Mar. 22, 1932
1,912,602	Stoneberg	June 6, 1933