J. C. COOK.

HOLDER FOR SUBSTANCES TO BE CONSUMED BY ABRASION.

APPLICATION FILED MAY 10, 1918.

1,336,819. **Patented Apr. 13, 1920.**

Fig. 1.

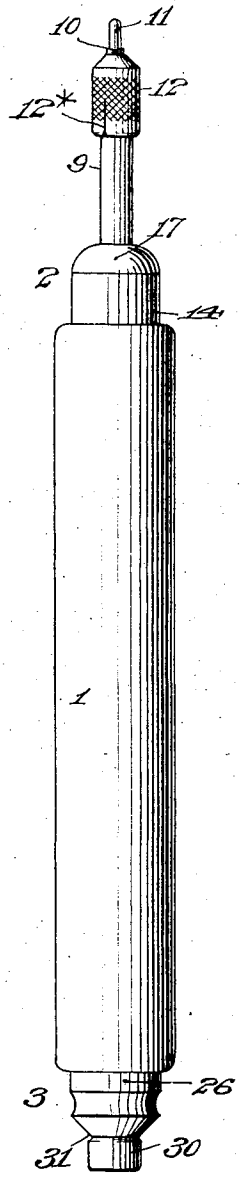


Fig. 2.

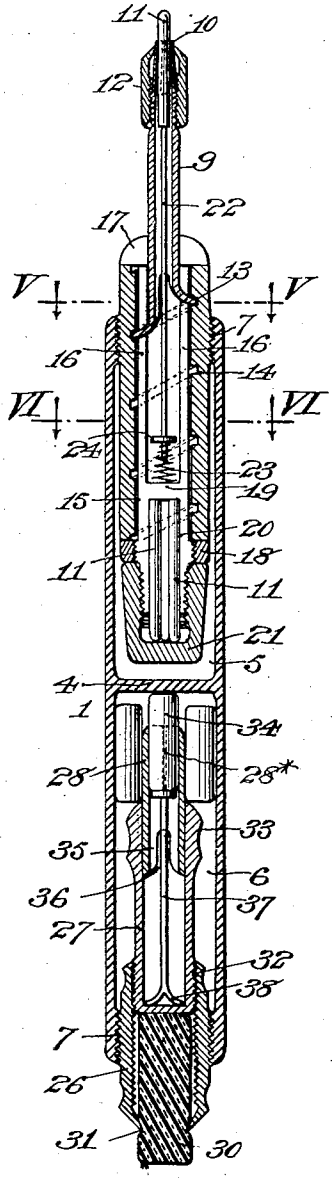


Fig. 3.

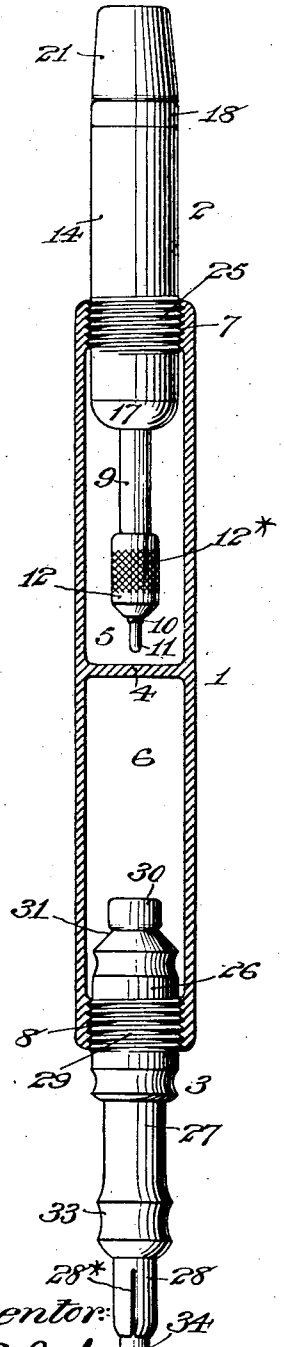


Fig. 4.

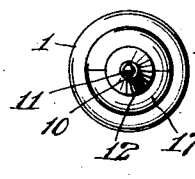


Fig. 5.

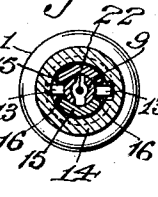
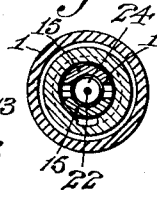


Fig. 6.



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UNITED STATES PATENT OFFICE.

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HOLDER FOR SUBSTANCES TO BE CONSUMED BY ABRASION.

1,336,819. Specification of Letters Patent. Patented Apr. 13, 1920.

Application filed May 10, 1918. Serial No. 233,777.

To all whom it may concern:

Be it known that I, JOHN C. COOK, a subject of the Emperor of Austria, and resident of New London, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Holders for Substances to be Consumed by Abrasion, of which the following is a specification.

This invention relates to a holder for substances to be consumed, and has for an object to provide an article of this character which is very neat, simple, and inexpensive in construction, while effective in operation.

Another object consists in providing such a device in which means is included for automatically exposing a predetermined and proper amount of substance to be consumed while the device is in use.

Another object consists in providing such a device in which the substance to be consumed is yieldingly supported so as to obviate breakage, and in which the substance may be exposed and held in operative position until it is completely consumed.

Another object consists in providing an article of this character in which the holder is removable and adjustable.

Another object consists in providing a device of this character in which one or more holders may be supported in a suitable casing, and are reversible in said casing for the purpose of exposing or protecting the substances to be consumed, as may be desired, which casing may also incorporate a magazine for containing substances to be consumed.

Another object is to provide a device of this character which has a magazine for carrying a supply of substances to be consumed.

A still further object is to provide such a device which has certain improvements in the form, construction and arrangement of the several parts whereby the above named and other objects may be effectively carried out.

A practical embodiment of my invention is represented in the accompanying drawings in which,

Figure 1 represents a side view of a device embodying my invention having exposed for use at one end a pencil or crayon and at the other end an eraser.

Fig. 2 represents a longitudinal central section of the same.

Fig. 3 represents a view of said device displaying another arrangement of the parts in which the pencil holder is reversed to expose the pencil magazine and the eraser holder is reversed to expose a crayon, the holders for the pencil and eraser being shown in side view and the casing in section.

Fig. 4 represents a top plan view of the arrangement shown in Fig. 1.

Fig. 5 represents a horizontal section taken in the plane of the line V—V of Fig. 2, looking in the direction of the arrows, and

Fig. 6 represents a horizontal section taken in the plane of the line VI—VI of Fig. 2, looking in the direction of the arrows.

The device as a whole comprises a casing 1, a pencil holder 2 and an eraser and crayon holder 3. The casing 1 is of hollow tubular construction and has a wall 4 about midway of its length which divides the casing into two compartments 5, 6, the outer ends of the compartments each being provided with interiorly threaded portions 7, 8, the purpose of which will be hereinafter explained.

The pencil holder 2 is of hollow tubular form and has a tubular sheath 9 provided with a conical point 10 which is screw-threaded and slit, as shown, to form jaws which are designed to grasp the lead 11. A clamping cap 12 has a screw-threaded engagement with the sheath, and is provided with slits 12* to allow it to yieldingly grip the threaded end of the sheath and hold it against unintentional movement. The outer end of the cap is contracted to engage the conical slit point 10 of the sheath and thereby clamp the lead between the jaws as the cap is screwed on the sheath. The lower end of the sheath 9 is also slit and the ends 13 turned outwardly in position to engage an interior thread formed in a sleeve 14, the rotation of which sleeve will move the sheath longitudinally in a tube 15, while the sheath will normally be held against accidental movement. This tube 15 is divided longitudinally for convenience in assembling and is formed with slots 16 through which the ends 13 of the sheath project to engage the thread in the sleeve 14. One end of the tube 15 is provided with a head 17 and the other end screw-threaded for en-

gagement with a nut 18, between which head and nut the sleeve 14 is rotatably secured.

The tube 15 also has a bridge 19 which forms a pocket 20 in the threaded end, in which pocket a supply of leads 11 may be retained by a cover 21. The other end of the tube is arranged to receive a rod 22 which acts as a support or carrier for the lead in use. The rod 22 is yieldingly held in position by a spring 23 located between a shoulder 24 on the rod and the bridge 19.

The sleeve 14 is formed with an exterior screw-threaded portion 25 which is arranged to coact with the screw-threaded portion 7 of the compartment 5 to support the holder 2 in either of the positions, shown in Figs. 2 and 3.

The eraser and crayon holder 3 comprises three tubular members 26, 27 and 28, which are arranged to move longitudinally one within the other. The outer member 26 is provided with an exterior screw-threaded portion 29, which coacts with the screw-threaded portion 8 of the compartment 6 to support the holder. This member 26 is arranged to receive an eraser 30 which is securely held therein by means of the inwardly projecting edge 31. The member 26 is also interiorly screw-threaded and arranged to receive the closed threaded end 32 of the member 27 which engages and serves as a support or carrier for the eraser 30. It will be understood that by rotating the member 26, the eraser 30 may be fed outwardly beyond the edge 31.

The free end of the member 27 has an enlarged portion 33 by which the member may be manipulated. This enlarged portion is merely for convenience, and may be omitted if desired. The outer end of the member 28 is provided with longitudinal slits 28* to form sections which are normally turned inwardly to yieldingly grip the crayon 34 therebetween. A gripping member like the cap 12 may be substituted for the member 26, if desired. The member 28 is held in frictional engagement with the member 27 by means of the end 35 which is slit at 36 and slightly spread apart so as to yieldingly engage the inner walls of the member 27.

The crayon 34 is seated upon a headed rod or carrier 37 which is supported by outwardly turned feet 38 resting on the closed end of the member 27. These feet may be flexible if desired. As the crayon is consumed, the member 28 may be forced into the member 27 to present more surface to be used. The rod or carrier 37 may be replaced by a carrier and spring like parts 22 and 23, if desired.

The compartment 6 may be used as a magazine for crayons, as clearly shown in Fig. 2.

To use the crayon, the member 26 is reversed from the position shown in Figs. 1 and 2 and screwed into the threaded portion of the compartment, as shown in Fig. 3.

While I have shown a casing having two compartments, both of which are arranged to receive holders, I wish it understood that I may omit one holder so that compartment could be used as a cap for a fountain pen or pencil, or be provided with a cover and used as a magazine.

In operation a lead 11, or other substance to be consumed, may be forced between the jaws 10 until it abuts the carrier 22 and be frictionally held in said position by the action of the said jaws under the influence of the cap 12. The sleeve 14 may be turned with one hand while the head 17 of the tube 15 is held motionless so as to cause the lead to project the proper distance for use. In this condition, the holder may be screwed into the casing 1, and the assembled parts be used as an ordinary pencil. While in use the lead 11 will be yieldingly supported by the carrier rod 22 and will also be automatically held in its projecting position until consumed. By periodic rotation of the sleeve 14 with respect to the tube 15, the sheath 9 of the holder may be retracted so as to expose more and more of the lead until the latter has been consumed. It will be noted that, during this operation, the carrier rod 22 remains in its fixed position while the holder sheath 9 moves with respect to it; and that, since the carrier 22 does not grip the lead, the latter may be entirely, or almost entirely, consumed, thus effecting a considerable economy. Furthermore, in case of an excessive pressure upon the lead 11 when in use, it will be permitted to yield and move back into the holder, so as to avoid breakage, while the action of the spring 23 and carrier 22 will return it to its normal position when the excessive pressure is removed. When the lead 11 is exhausted another may be supplied from the magazine which is combined with the holder 2, by merely unscrewing the cover 21.

With reference to the holder 2, which I have shown as being provided with an eraser and a crayon; the eraser may be placed in the member 26 by inserting it from the rear end thereof until it projects a suitable distance from the outer end. The member 27 will then be screwed in the member 26 until it abuts the eraser. As the eraser is consumed by use it may be urged forward for further exposure by screwing the member 27 further into the member 26. The fact that the member 26 is provided with gripping ends, as previously explained, prevents unintentional movement of these parts. The crayon 34 may be forced into the split end of the member 28 until a suitable amount of it is left exposed for use. The member 28 may then be forced into the

member 27 until the crayon engages the end of the carrier rod 37. The member 28 will be held in this position by frictional contact with the member 27, and the former may be manually forced further into the latter in order to expose more crayon as needed. As already indicated, a yielding support or carrier, like the part 22 with its spring 23, may be substituted for carrier rod 37, in which case the operation will be similar to that already described in connection with the parts 22, 23. When a crayon has been completely used, another may be withdrawn from the magazine in the casing 1 and placed in position as described. It will be noted that this arrangement of the parts 27, 28 and 37 is such as to permit the crayon to be completely consumed, as is the case with the holder for the lead already mentioned.

When it is desired to use the device as a pencil with an eraser, the holders 1 and 2 will be arranged in the casing as shown in Fig. 2. If it is desired to use the device as a two colored pencil, the holder 3 may be reversed so as to expose the crayon. If it is desired to use the pencil merely as a colored pencil, the holders 2 and 3 may be arranged in the casing as shown in Fig. 3; and if it is desired to protect both the lead and crayon, the holder 3 may be reversed in the casing from its position shown in Fig. 3.

It will be noted that the holders 2 and 3 are not only reversible in either end of the casing, but that either one of the holders may be fitted in either end of the casing.

I desire also to call attention to the fact that, while I have shown only one side or compartment of the casing itself in use as a reservoir for the substances to be consumed, either side or compartment may be used for this purpose, or both may be used.

It is evident that various changes may be resorted to in the form, construction and arrangement of the several parts and in the substances to be consumed without departing from the spirit and scope of my invention and hence I do not intend to be limited to the details herein shown and described except as they may be specifically included in the claims.

What I claim is:

1. A device of the character described comprising a casing, a holder removably secured therein and having a magazine for substances to be consumed, means for holding a substance for use, and means adapted to be rotated to move said substance holding means for exposing the substance.

2. A device of the character described comprising, a holder for laterally supporting a substance to be consumed, a slit clamping cap having a threaded engagement with said holder, a carrier located within the holder for longitudinally supporting said substance, a sleeve having an abutment upon which the carrier is mounted, said holder having a rotatably adjustable engagement with said sleeve, whereby the holder may be moved longitudinally in the sleeve with respect to the carrier for causing the latter to urge the substance outwardly.

3. A device of the character described comprising, a holder for laterally supporting a substance to be consumed, a slit clamping cap having a threaded engagement with said holder, a carrier located within the holder for longitudinally supporting said substance, a sleeve having an abutment upon which the carrier is yieldingly mounted, said holder having a threaded engagement with said sleeve, whereby the holder may be moved longitudinally in the sleeve with respect to the carrier for causing the latter to urge the substance outwardly.

4. A device of the character described comprising, a holder for laterally supporting a substance to be consumed, a carrier located within the holder for longitudinally supporting said substance, a tube having an abutment upon which the carrier is mounted, said tube being provided with a longitudinal slot and said holder having a lateral projection fitted to enter said slot whereby the holder may have longitudinal movement in the tube but is fixed against relative rotary movement therein, a sleeve surrounding the tube having an interior thread in which the lateral projection on the holder enters, said tube having enlarged ends for preventing longitudinal movement of the sleeve thereupon, whereby rotation of the sleeve with respect to the tube will engender longitudinal movement between the holder and carrier for urging the substance outwardly.

In testimony that I claim the foregoing as my invention, I have signed my name this April 22nd, 1918.

JOHN C. COOK.