

May 19, 1925.

1,538,055

A. OLSEN

COMBINED PENCIL, PEN, AND FLASH LIGHT

Filed May 31, 1924

Fig. 1.

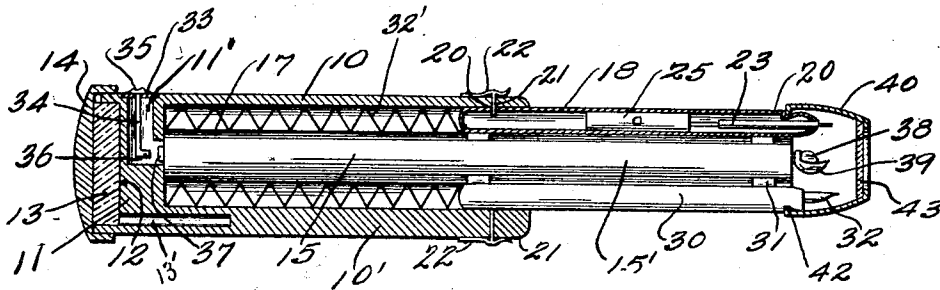


Fig. 2.

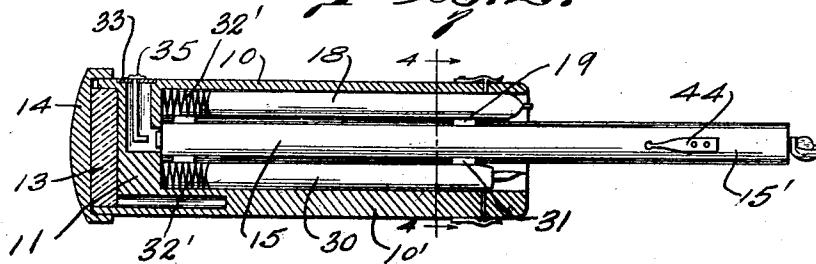


Fig. 3.

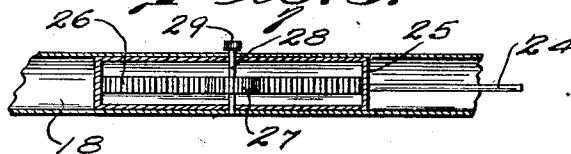


Fig. 4.

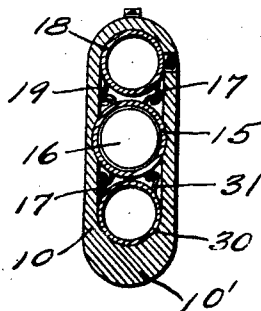
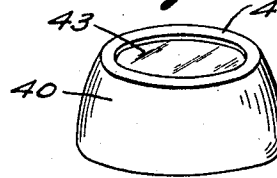


Fig. 5.



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By

Attorney

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UNITED STATES PATENT OFFICE.

ARNT OLSEN, OF NEW YORK, N. Y.

COMBINED PENCIL, PEN, AND FLASH LIGHT.

Application filed May 31, 1924. Serial No. 717,020.

To all whom it may concern:

Be it known that I, ARNT OLSEN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in a Combined Pencil, Pen, and Flash Light, of which the following is a specification.

This invention relates to improvements in marking implements.

An important object of the invention is to provide a combined pencil and pen having illuminating means associated therewith for lighting the surface immediately surrounding the point of the implement.

A further object of the invention is to provide a device of this character which may be used for writing in the dark and also as a means of illumination alone.

A still further object of the invention is to provide a device of this character which is comparatively simple, yet durable in construction and efficient for the purpose intended.

Other objects and advantages of this invention will be apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a side elevation of my device parts being broken away to illustrate the interior construction thereof and the device being in the open position,

Figure 2 is a similar view showing the device in the collapsed position.

Figure 3 is an enlarged detail view of one of the parts,

Figure 4 is an enlarged transverse section taken on the line 4—4 of Figure 2, and

Figure 5 is a perspective view of one of the detail parts.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 10 generally indicates the receptacle or casing of my device, this casing being substantially rectangular in form with rounded edges. The bore formed in the casing is positioned somewhat off the center of the casing providing a comparatively thick edge 10' on one side of the casing the purpose of which will be hereinafter described. One extremity of the casing is provided with a partition 11 having formed therein an angular

groove 11' for the reception of a switch contact. The extremity of the closed portion of the casing is provided with a recess adapted to retain an eraser 13 therein, a cap 14 being fitted over the eraser and casing when the eraser is not being used. A longitudinal bore 13' is formed in the extremity of the heavier edge of the casing and connects with the eraser recess. This bore is intended to be used for carrying extra leads for a pencil used in connection with the device, and is closed by the eraser. A cylindrical container 15 is positioned within the central portion of the casing bore and extends a substantial distance from the open extremity thereof as indicated at 15', the casing being adapted to carry a battery 16 which is retained in position by end plates and is of the common dry cell variety. Mounted on the sides of the container 15 are two pair of guide strips 17 extending substantially the entire length of the container and firmly secured thereto.

A pencil generally denoted by the numeral 18 is slidably mounted within one side of the casing 10 the inner side thereof carrying a pair of guide engaging clips 19 at the upper and lower extremities, the said clips engaging the guide strips 17 and adapted to slide thereon. The outer side of the pencil is provided with a pair of apertures 20 at the upper and lower extremities for the purpose of engaging an extension prong 21 formed upon the inner side of a spring clip 22 which is riveted to the casing 10 and holds the pencil in position. The lower extremity of the pencil carries a guide sleeve 23 in the central portion thereof the lead being positioned within the guides and adjusted by means of a comparatively thin extension rod 24 secured to one extremity of a movable cylinder 25. The movable cylinder 25 has a rack 26 secured to one side therein and is actuated by means of a pinion gear 27 rigidly secured to a shaft 28 and rotated by a knurled knob 29. It is obvious that rotation of the knob 29 will actuate the cylinder 25 and rod 24 forcing the lead through the guide sleeve 23 as it becomes worn down.

A pen 30 is slidably mounted within the other side of the casing 10 and has similar guide engaging clips 31 adapted to engage the guide strips 17. The pen 30 may be of any conventional fountain variety and has the usual point 32 mounted in the lower extremity, the outer side provided with in-

dentations to receive the prong 21 secured to the spring clip for retaining same in a desired position.

As it is desirable to automatically force the pencil and pen from the casing when the retaining prong is raised, I provide a pair of coiled springs 32' positioned within the casing 10 in the grooves adapted for the pen and pencil and secured to the extremities thereof. These tension springs will cause the pen and pencil to issue from the receptacle when the spring clips are released, although entire separation of the device from the casing will be prevented by the engagement of the spring prongs with suitable openings formed in the upper extremities of the pencil and pen.

The upper casing groove 11' is covered by a plate 33 which is provided with a longitudinal slot to permit movement of a sliding contact 34 operated by means of a corrugated projection 35 extending upon the outer side of the casing. The extremity of the contact 34 is provided with a projection 36 which is adapted to make contact with a projection 37 formed on the battery thereby closing the battery terminals and operating the same. The lower extremity of the battery carries a comparatively small electric light bulb 38 which is threadedly mounted in a suitable socket and carries a removable revolving shade 39 capable of being turned about the bulb shank to cast the light rays in the desired direction. In order to enclose the extremity of the device when using same as a flashlight I provide a substantially semi-circular cap 40 the lower extremity being opened and having a flange 41 formed thereon, the upper extremity being provided with a similar flange 42 adapted to engage grooves formed in the pencil and pen and retained thereon. The lower portion carries a glass lens 43 positioned within the cap against the flange 41 forming a flashlight lens.

As it is desirable to carry the device in the pocket I provide a spring clip 44 riveted or otherwise secured to the battery casing adapted to engage the edge of the pocket and prevent removal of the device.

In use, the device may be readily carried in the pocket and when it is desired to use a pencil in the dark the clip 22 is raised and the pencil withdrawn from the casing the spring action of the clip engaging the upper opening of the pencil when it has been sufficiently withdrawn. The sliding contact member 34 is then forced downwardly to close the circuit in the battery and light the electric bulb, the rotatable shade 39 being placed in the desired position to cast the light directly beneath the pencil point. The same operation will bring the fountain pen into use enabling the writer to use either pencil or ink and casting the light rays wherever desired. When using the device

simply as a flashlight both the pen and pencil are withdrawn from the casing, the shade 39 removed and the cap 40 inserted in position thus permitting the rays to be used as desired.

It is to be understood that the form of my invention herewith shown and described is to be taken as the preferred example of the same, and that various changes as to the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention, or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A device of the character described comprising a casing member, an electric light battery mounted in the central portion of the said casing, a pencil slidably mounted within the said casing, a pen slidably mounted within the said casing, means for preventing displacement of the said pen and pencil, an electric light bulb secured to the extremity of the said battery, and a cap removably mounted upon the extremity of the said pen and pencil.

2. A device of the character described comprising a casing having an angular groove formed in the upper extremity thereof, a battery container secured within the said casing, a pencil slidably mounted in one section of the said casing, a pen slidably mounted in another section of the said casing, means for controlling the movement of the said pen and pencil, an electric light battery positioned within the said container, electric light bulb mounted in the extremity of the said battery, a movable shade mounted upon the said bulb, a removable cap mounted upon the extremity of the pen and pencil, a glass positioned in one extremity of the said cap, and a movable contact member mounted within the said casing groove adapted to control the electric light.

3. A combined pencil, pen and flashlight, comprising a casing member having an angular groove formed in the upper extremity thereof, an eraser secured to the extremity of the said casing, a battery container securely fastened within the said casing and extending outwardly therefrom, an electric light battery positioned within the said container, an electric light bulb positioned in one extremity of the said battery and container, a movable shade mounted upon the said bulb, a movable contact member mounted within the angular groove of the casing and acting as a switch for the electric light, a pencil movably mounted in one extremity of the said casing, a plurality of clips secured to the pencil adapted to engage suitable guides formed on the battery container, spring clips secured to the sides of the container and adapted to engage recesses formed in the pencil, a fountain pen movably mount-

ed within the other extremity of the casing, a plurality of guide clips secured to the fountain pen, the said guide clips engaging suitable guide strips formed upon the battery container, a spring clip adapted to retain the said fountain pen in position, a removable cap slidably mounted upon the said pen and pencil, tension spring members positioned within the casing forcing the pen and pencil in the extended position, a glass lens positioned within the said removable cap, and a retaining clip secured to the said battery container.

4. A combined pencil, pen and flashlight comprising a longitudinal casing having an angular groove formed therein, a recess formed in one extremity and a longitudinal slot formed in one side thereof, a circular battery container secured within the casing and extending outwardly therefrom, a plurality of guide strips mounted on the sides of the said container, an electric light battery positioned within the said container, an electric light bulb threadedly mounted in one extremity of the container and adapted to contact with the said battery, a rotatable shade mounted upon the said electric light bulb, an angular contact strip movably mounted within the angular groove casing, means for actuating said contact member,

a pencil movably mounted in one side of the container, a plurality of spring clips mounted on the sides of the pencil and adapted to engage the guide strip, a lead guide positioned within the said pencil, a reciprocating cylinder mounted within the central portion of the said pencil a lead adjusting rod secured to the reciprocating piston and adapted to adjust the lead within the lead guide, a toothed rack mounted within the said cylindrical piston, a toothed gear pivotally mounted within the pencil and adapted to actuate the said rack, means for rotating the said toothed gear, a fountain pen movably mounted on the other side of the said container, a plurality of clips secured to the inner side of the fountain engaging the guide strip, a pair of spring clips having projections formed thereon secured to the sides of the container and adapted to engage suitable apertures in the pen and pencil, a cap removably mounted upon the extremity of the pencil and pen, and a glass lens securely mounted within the said cap.

In testimony whereof, I have affixed my signature in the presence of two witnesses.

ARNT OLSEN.

Witnesses:

ANDREW F. L. NORTHGARD,
EGIL ELIASSEN.