Aug. 25, 1936. H. THORNTON 2,052,501

PENCIL

Filed June 28, 1935

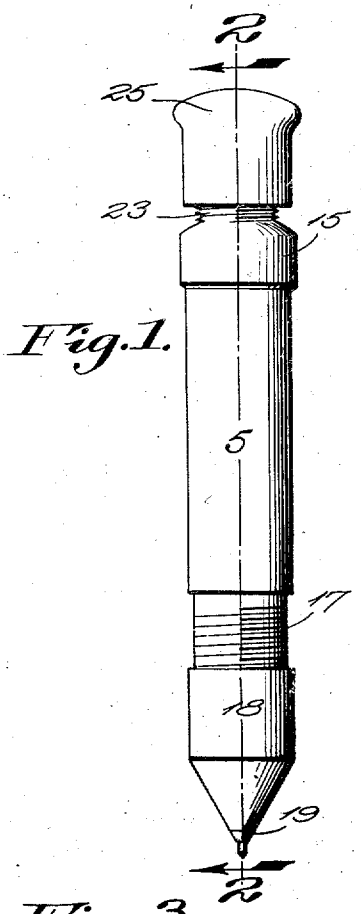


Fig. 1.

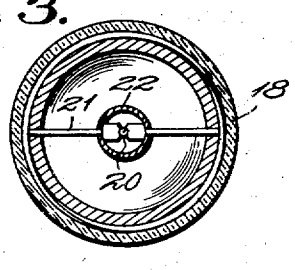


Fig. 3.

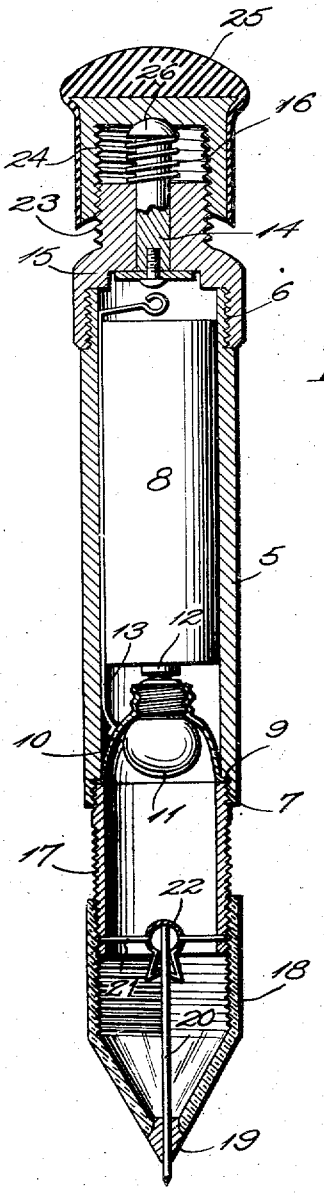


Fig. 2.

Howard Thornton
INVENTOR

BY Victor J. Evans & Co.
ATTORNEY

R. E. Wise
WITNESS

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UNITED STATES PATENT OFFICE

2,052,501

PENCIL

Howard Thornton, Cranston, R. I.

Application June 28, 1935, Serial No. 28,936

1 Claim. (Cl. 240—6.46)

The invention relates to a pencil and more especially to an electrically lighted pencil.

The primary object of the invention is the provision of a pencil of this character, wherein an electric light is arranged internally thereof so that on the lighting of the pencil it can be used in the dark, the pencil being serviceable to State troopers, autoists or other persons when required to write in darkness, the lead of the pencil being adjustable and the light circuit is regulated by a switch manually controlled.

Another object of the invention is the provision of a pencil of this character, which is simple in construction, thoroughly reliable and efficient in its operation, strong, durable, and inexpensive to manufacture.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawing, which discloses the preferred embodiment of the invention and pointed out in the claim hereunto appended.

In the accompanying drawing:

Figure 1 is a side elevation of a pencil constructed in accordance with the invention.

Figure 2 is an enlarged vertical sectional view taken on the line 2—2 of Figure 1 looking in the direction of the arrows.

Figure 3 is a horizontal or transverse sectional view through the pencil.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, the pencil comprises a barrel body 5 having an externally threaded end 6 and an opposite internally threaded end 7, respectively. Within this body 5 is separably received a dry cell battery 8 of standard kind while engaged against a seat 9 formed at the internally threaded end 7 is a light reflector 10 having removably engaged therewith an electric light bulb 11 which through contacts 12 and 13, respectively, is in electrical connection with the battery 8. The circuit between the battery 8 and the bulb 11 having the contacts 12 and 13 therein is controlled for the opening and closing thereof by a switch having a plunger 14 slidably fitted centrally in a coupling 15, it being in threaded engagement with and telescoped over the threaded end 6 of the body 5, the plunger 14 being surrounded by a coiled expansion spring 16 which normally holds the switch in the electric circuit open. When the switch is closed the bulb 11 will be lighted or illuminated and this switch is operated in a manner presently described.

Engaged in the internally threaded end 7 of the body 5 is an externally threaded coupling sleeve 17 having telescoped thereover and threaded therewith a transparent cap 18 having the outwardly tapered tip 19 formed with a central bore or guide passage for a writing lead 20 which is adapted to be fed through the tip 19 the required distance for writing purposes. The coupling sleeve 17 holds the reflector 10 against the seat 9 and separably secured in place within the body 5 of the pencil. The transparence of the cap 18 permits the passage of light from the bulb 11 therethrough so that the pencil may be used in darkness for writing purposes.

Hung within the sleeve 17 by pins 21 centrally of said sleeve is a spring ball clamp 22 into which is detachably engaged the inner end of the lead 20 for the holding of the same in feeding position so that when the cap 18 is turned upon the sleeve 17 by the threaded connection therebetween the lead 20 will be extended the required degree without the pencil through the tip 19 so that fresh lead is at all times available for exposure through the tip 19 of the pencil for writing purposes, it being necessary as the lead wears away to adjust the cap for exposing the lead for writing.

The coupling 15 has a reduced externally threaded portion 23 carrying the plunger 14 of the switch and in threaded engagement with this portion is an erasing supporting head 24, the eraser being indicated at 25 and this head operates directly upon the enlarged end 26 of the plunger 14 so that by the turning of the head 24 on the portion 23 of the coupling 15 in one direction the plunger 14 will be operated for the closing of the switch and by turning the said head 24 in a reverse direction the spring 16 becomes active upon the plunger 14 for the opening of the switch. Of course, it is to be understood that the head 24 can be removed from the portion 23 of the coupling 15 and thus the enlarged end 26 can be pressed by a finger of the hand of a user for the closing of the switch to effect the lighting of the pencil by the bulb 11. The rays of light pass through the cap 18 for illumination of the tip 19 and the lead 20 extended through the latter so that the pencil is available for use in writing in darkness.

What is claimed is:

A pencil comprising a barrel having externally threaded ends, a transparent tip threaded on one

end of the barrel for adjustment, a coupling detachably threaded on the other end of the barrel and having a sliding switch, a central stationary socketed clamp interiorly of the barrel next to the end carrying the tip, a writing lead for projection through the tip and releasably held in the socketed clamp, an electric illuminating means within the barrel for illuminating the tip and controlled by said switch, and a cap threaded on the coupling and active upon the switch for operating the same.

HOWARD THORNTON.

CERTIFICATE OF CORRECTION.

Patent No. 2,052,501. August 25, 1936.

HOWARD THORNTON.

It is hereby certified that the above numbered patent was erroneously issued to the inventor, whereas said patent should have been issued to the inventor, Howard Thornton and Carl A. Sjoquist, of Cranston, Rhode Island, said Sjoquist being assignee of one-half interest in said invention, as shown by the records of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 5th day of January, A. D. 1937.

Henry Van Arsdale

(Seal)

Acting Commissioner of Patents.

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