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FOUNTAIN PEN FLASH LIGHT.

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1,193,534. Patented Aug. 8, 1916.

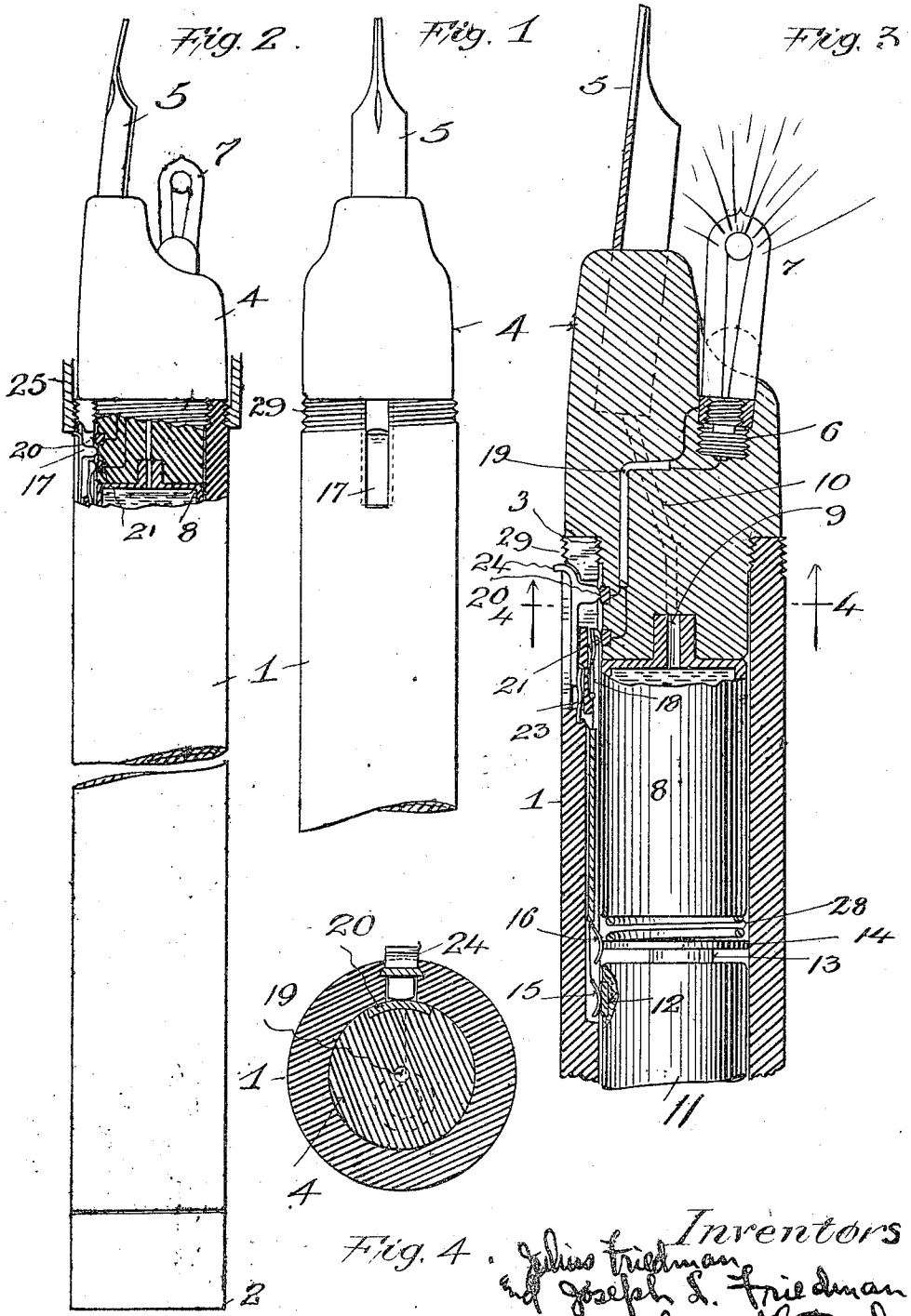

Fig. 4.

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FOUNTAIN-PEN FLASH-LIGHT.

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Application filed October 5, 1915. Serial No. 54,121.

To all whom it may concern:

Be it known that we, JULIUS FRIEDMAN and JOSEPH L. FRIEDMAN, both citizens of the United States, residing at New York, county of Kings, State of New York, have made a certain new and useful Invention in Fountain-Pen Flash-Lights, of which the following is a specification.

This invention relates to fountain pen flashlight.

The object of the invention is to provide a combined fountain pen and flashlight which is simple in construction, efficient in operation and economical of manufacture.

Further objects of the invention will appear more fully hereinafter.

The invention consists substantially in the construction, combination, location and relative arrangement of parts, all as will be more fully hereinafter set forth, as shown by the accompanying drawing, and finally pointed out in the appended claims.

Referring to the drawing,—Figure 1 is a top plan view of a fountain pen constructed in accordance with our invention. Fig. 2 is a side view of the same partly broken, and partly in section. Fig. 3 is a similar view in section. Fig. 4 is a sectional view taken on the line 4, 4, Fig. 3, and looking in the direction of the arrows.

The same part is designated by the same reference numeral wherever it occurs throughout the several views.

In accordance with our invention we provide the usual fountain pen casing generally designated at 1 open at its ends and provided with a removable cap 2, for one end. The inner surface of the other end of the casing is provided with threads as indicated at 3, and in which is screwed the pen and light holder indicated at 4. Our invention in its broad scope, however, is not to be limited in this respect as it is obvious that the pen and light holder may be inserted in the open end of the cylinder to be held by frictional contact therein. The holder 4 forms a suitable seat for the pen 5 in the usual or any desired manner. The holder also affords a rigid seat for the socket 6 into which screws or otherwise rests the electric light bulb 7. An ink well 8 of any desired shape or size is removably secured to the holder 4 as shown, and is provided with a spout 9 which fits into a corresponding depression in the holder 4 to be in communication with a duct 10 through the holder which allows the ink to flow freely from the well 8 to the pen 5, as shown.

In accordance with our invention, we propose to utilize the upper portion of the pen casing as a receptacle for a suitable source of electric current for the lamp 7 and to provide suitable circuit connections therefor relative to the lamp which will allow ready removal of either the pen holder in which the lamp seats, or the source of current. We show one arrangement, wherein the source of the electric current, such for instance as a battery 11, which may be readily inserted in the top end of the casing of the pen and which is provided with a terminal or contacting surface 12 in the side thereof, and another contacting surface 13 at its end which bears against a loose conducting disk 14 as shown. Fixed springs 15 and 16 bear respectively against the contacting surface 12 and the disk 14, respectively, and are each connected to wires passing through a slot in the casing 1. Spring contact 15 is connected by means of one of these wires to movable spring contact 17, and spring contact 16 is connected by means of the other of the wires to a stationary spring contact 18. The pen and light holder 4 is provided with a passage 19 therethrough, through which pass the wires from the light socket 6 to two fixed contact surfaces 20 and 21, respectively carried by the holder 4. To allow for proper adjustment of the holder 4 with its contact surfaces 20 and 21 with respect to their corresponding spring contacts 17 and 18, we prefer to make the surface contacts 20, 21, extend around a portion of the circumference of the holder 4 as shown by Fig. 4.

It will be seen that when the light is in operation, the current will flow from the battery 11, through terminal 13, disk 14, spring contact 16 to spring contact 18, surface contact 21 to the light to surface contact 20, spring contact 17, spring contact 15 and back to the battery at surface contact 12.

While we have shown and described one specific wiring arrangement, and specific means for allowing the removal of the battery and the pen holder and ink well, it will be understood that our broad invention is not to be limited thereto, as many other arrangements will readily occur to those skilled in the art without departing from the broad scope thereof as defined in the claims.

It is desirable to provide means for breaking the circuit of the lamp, so that the same will be lighted only when desired. We show simple means wherein the spring contact 17, as hereinbefore stated, is longitudinally movable in a groove 23 of the casing 1, as shown. To facilitate the movement of the contact 17 into and out of contact we provide the same with a projecting portion 24, as shown. When it is desired to light the lamp, the sliding contact member 17 is moved from the position shown in Fig. 2, to that shown in Fig. 3, thereby completing the circuit of the lamp hereinbefore described.

If desired, and to insure contact between the loose disk 14 and the terminal 13 of the battery, and also to prevent the ink well 8 from jarring loose from the holder 4, a coil spring 28 may be inserted between the well and the disk as shown.

It will be observed that the lamp 7 is carried by the pen holder portion 4, and hence is removable therewith from the casing. It will also be seen that the lamp socket is formed in the end of the pen holder 4 and in such relation as to permit the lamp to extend in the direction of the length and within the circumferential area of said holder. By reason of this arrangement the usual cap cover 25, see Fig. 2, may be telescoped over to inclose the pen holder and lamp, when not required for use, and secured to the casing 1, by screwing onto the threaded portion 29, thereof, in the usual way. In this manner the lamp and pen are housed while the device is being carried in the pocket, thereby avoiding danger of injury to the lamp.

Having now set forth the objects and nature of our invention, and having described one arrangement embodying the principles thereof, what we claim as new and useful and of our own invention and desire to secure by Letters Patent, is,—

1. A combined fountain pen and electric light comprising a casing, a pen holder secured thereto, an electric lamp carried in the end of said holder and extending in the direction of the length and within the circumferential area thereof, a current source carried in said casing, circuit connections therefrom to the lamp, means to control said circuit connections, and a cover cap to telescope over the pen holder and lamp to inclose the same.

2. A combined fountain pen and electric light comprising a casing, a pen holder secured thereto, an electric lamp mounted in the end of the holder and extending in the direction of length and within the circumferential area thereof, an inkwell inclosed within the casing and delivering to the holder, a current source inclosed within the casing, circuit connections between said source and lamp, means for controlling said circuit connections, and a cover cap to telescope over and inclose the holder and lamp, said cap being detachably connected to the casing.

3. A combined fountain pen and electric light comprising a casing having its end threaded both interiorly and exteriorly, a pen holder fitted to the interior threads, a lamp carried by said holder, means to supply current to the lamp, and a cover cap to inclose the holder and lamp and fitted to the exterior threads of the casing.

4. A combined fountain pen and electric light comprising a casing, a pen holder having a depression, an inkwell housed within said casing and having a spout to be received in said depression when the holder is applied to the casing, a duct extending through the holder from said depression to the pen, a lamp carried by the holder, a battery housed within the casing and having circuit connections to the lamp, means to control said connections, and a cap cover detachably connected to the casing and inclosing said holder and lamp.

5. A combined fountain pen and electric light including a casing having an ink chamber therein, a pen holder carried by said casing and communicating with said ink chamber, an electric lamp carried by said holder, a source of current inclosed within said casing, means for establishing an electric circuit between said source and said lamp, a cap for said casing, and means for automatically breaking said circuit when said cap is placed over said casing.

In testimony whereof we have hereunto set our hands on this 1st day of October, A. D., 1915.

JULIUS FRIEDMAN.
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