

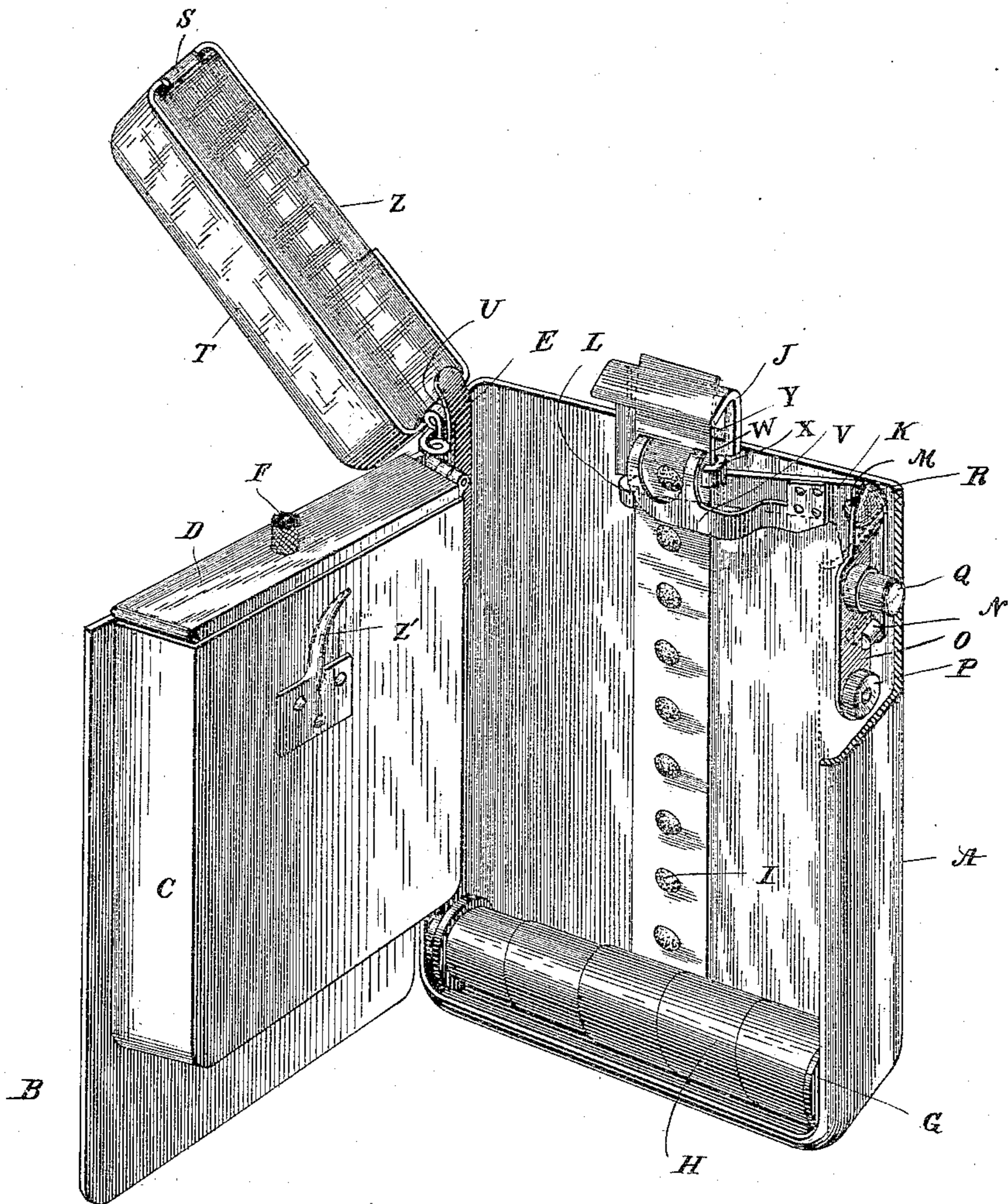
(No Model.)

H. KNIGHT.

POCKET LAMP.

No. 430,584.

Patented June 17, 1890.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## POCKET-LAMP.

SPECIFICATION forming part of Letters Patent No. 430,584, dated June 17, 1890.

Application filed March 3, 1890. Serial No. 342,363. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT KNIGHT, a citizen of the United States, residing in the city, county, and State of New York, have  
5 invented certain new and useful Improvements in Pocket-Lamps, of which the following is a specification.

My invention relates to a lighting contrivance of such a size as that it may be conveniently carried in the pocket, and is provided with a wick or oil receptacle and wick and with a band or tape of fulminates or ignitable pellets arranged so as to be fed upwardly toward the burning-point of the wick by  
15 mechanism hereinafter described, so that upon reaching a certain position a scratcher will be forced against one of the fulminates, causing it to ignite, the latter being in such a position as to transfer its momentary flame  
20 immediately to the upper end of the wick aforesaid.

My invention also relates to a lever connected to the press-button which liberates the lamp-casing lid, and having a forked  
25 spring-arm for straddling the fulminates or ignitable pellets and biting against the aforesaid band or tape containing the same, whereby when the push-button is pressed inwardly, so as to liberate the lamp-casing cover, the  
30 band or fulminates will be fed upwardly and the scratcher aforesaid will operate in the manner set forth.

My invention also relates to a novel construction of spool or bobbin containing the  
35 band or tape of fulminates, it being arranged across the entire lamp-casing at the bottom thereof and below the wick-receptacle or oil-chamber, the latter being approached sufficiently to enter the casing above the aforesaid bobbin, so as not to come in contact there-  
40 with or enough for its operation.

My invention also relates to a severing device, which is adapted to cut or clip the burned ends of the band or tape after the said band  
45 or tape has been fed beyond its operative position.

Referring to the accompanying drawing, which forms a part of this specification, the figure therein shown represents a perspective  
50 view of my improved pocket-lamp.

In this drawing, A is a casing, provided with

a side door B, hinged thereto, said side door supporting a wick-receptacle or oil-chamber C. This wick-receptacle or oil-chamber has a cover D, hinged thereto at E, and is further  
55 provided with a wick F, preferably centrally located, as shown.

At the bottom of the lamp-casing A, I arrange a spool or bobbin G, having wound thereon a band or tape H, provided with ful-  
60 minates or ignitable pellets I. This spool or bobbin is constructed, preferably, of wood, paper, or some cheap material and is adapted to be easily inserted in the bottom of and removed from the lamp-casing. This band or  
65 tape of fulminates extends upwardly and through the guide-plate J at the top of the lamp-casing A. The wick-receiver will lie entirely above the spool or bobbin when the lamp is closed.

At K, I show a bell-crank lever extending around and at the back of the band H and provided with a keeper L at the farther side for forming a guard or guide and support at that point. This lever is pivoted  
75 at its elbow to the lamp-casing A by means of the pin M, and at its lower end has embracing-fingers N to clasp a spring-plate O, riveted to the interior of the casing A at P. This spring-plate is provided with a push-  
80 button Q, extending through and protruding from the outside of the casing, and which, when pressed against, will cause the spring-plate O to move inwardly. This motion will, through the medium of the fingers N at-  
85 tached to the bell-crank lever K, cause the latter to turn on its pivot M.

At the upper end of the spring-plate O is a lug R, which is adapted to slip behind the shoulder or lip S of the lid or cover T, and  
90 which, when the push-button is pressed in, will recede from its position behind the lip S, thereby causing the lid or cover to be liberated. A spring U is provided at the rear of the casing, which is normally in contact with  
95 the lid or cover, and which will cause it to fly open and assume the position shown in the drawings, when the releasing and retaining spring O liberates it.

A spring-arm V is attached to the bell-crank  
100 lever K, and is provided with nipping-fingers W, which bite into the band or tape H near

both edges thereof, and which, when the lever K is moved upwardly, will travel with it and cause the fulminate band H to be fed in an upward direction. I preferably form the  
 5 spring-arm V with the fingers W, as by this means I can obtain a better hold on the band or tape, and am at the same time able to straddle the fulminates or ignitable pellets, thus preventing any accidental ignition. A  
 10 guard X is provided for the purpose of guiding the tape at this point.

At Y, I show a knife-edge, and at Z, I show a similar knife on the lid or cover, and which is adapted to sever the fulminate band or  
 15 tape when the lid is closed down.

At Z', I show a scratcher attached to the wick-receptacle having a point at its upper end adapted to ignite the pellets when they have reached a position opposite the upper  
 20 end of the wick F. This scratcher serves also as a lock or retainer to hold the tape in position when the bell-crank lever K is retreating, thus preventing the nipping-fingers W from carrying the tape with them.

It will be seen that when pressure is applied to the push-button Q the lid or cover of the lamp-casing will be liberated, and at the same time the fulminate band or tape will be fed upwardly, so as to bring a pellet oppo-  
 30 site the upper end of the wick F and at the same time the scratcher Z' will cause the ignition of said pellet and the consequent transfer of the flame to the wick F, all of which will be accomplished simultaneously and by  
 35 one movement of the operator's thumb or finger upon the push-button Q. It will also be seen that when it is desired to close the cover or lid of the casing the knives Y Z will cause the band or tape of exhausted fulminates to  
 40 be severed as the lid descends to its normal and closed position.

Having thus described my invention, the

following is what I claim as new therein and desire to secure by Letters Patent:

1. In a pocket-lamp, the combination of a 45 lamp-case, a wick-receiver, a wick, a spool or bobbin containing a fulminate band or tape arranged in the lamp-case below the wick-receiver, means for feeding the fulminate band toward the wick-point, an igniting de- 50 vice, and a band-severing knife, all arranged substantially as and for the purposes set forth.

2. In a pocket-lamp, the combination of a lamp-case, a wick-receiver, a wick, a spool or bobbin containing a fulminate band or tape, 55 a spring-piece, press-button, and lever for releasing the lid and raising the band, and means, substantially as shown and described, for severing the band on the closing of the lid. 60

3. In a pocket-lamp, the combination of a lamp-case, a wick-receiver, a wick, a spool or bobbin containing a fulminate band or tape, means for simultaneously feeding the same toward the wick-point and igniting it, and a 65 centrally-located guide at the top of the lamp-casing, said guide being provided with a knife-edge, as and for the purposes set forth.

4. In a pocket-lamp, the combination of a lamp-case, a wick-receiver, a wick, a spool or 70 bobbin containing a fulminate band or tape, a bell-crank lever pivoted to the lamp-casing, a spring and push-button connected thereto, a forked-shaped spring-arm attached to the aforesaid lever and adapted to grasp the band 75 in connection therewith and to feed it upward toward the wick-point, and a pellet-igniting and tape-locking device, all arranged substantially as and for the purposes set forth.

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Witnesses:

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