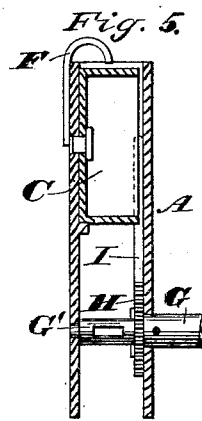
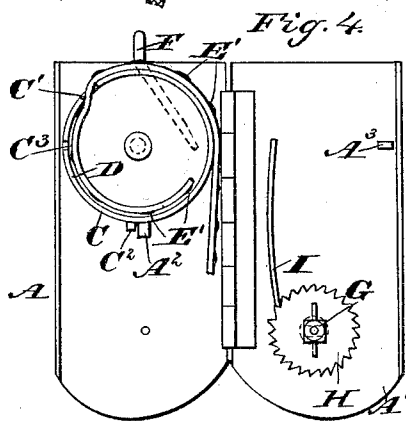
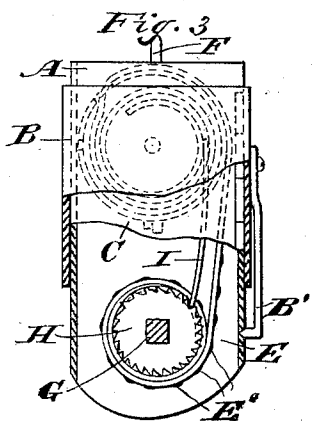
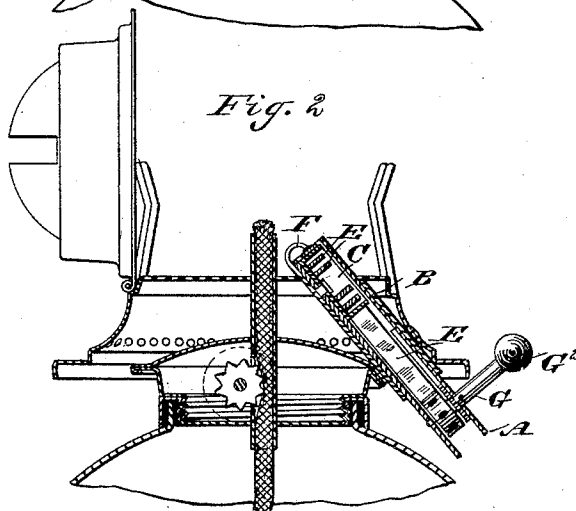
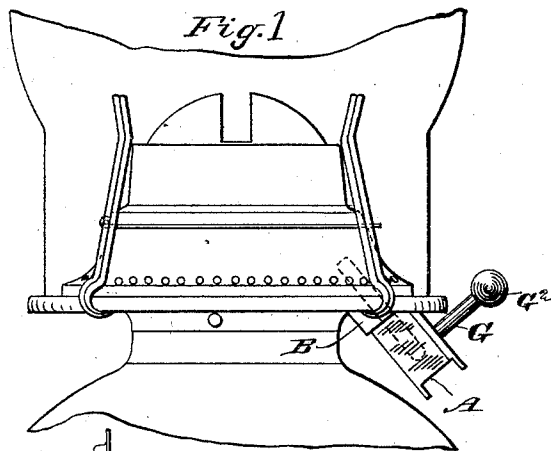


(No Model.)

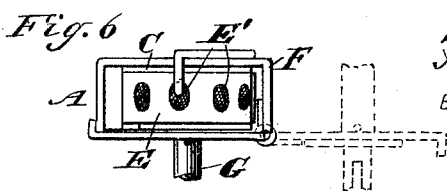
B. H. PENDLETON.
LIGHTING DEVICE.

No. 482,587.

Patented Sept. 13, 1892.



WITNESSES:
J. A. Berghman
C. Sedgwick



INVENTOR:
B. H. Pendleton
BY *Munn & Co.*

ATTORNEYS

UNITED STATES PATENT OFFICE.

BRADFORD H. PENDLETON, OF EVANSTON, ILLINOIS.

LIGHTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 482,587, dated September 13, 1892.

Application filed November 19, 1891. Serial No. 412,407. (No model.)

To all whom it may concern:

Be it known that I, BRADFORD H. PENDLETON, of Evanston, in the county of Cook and State of Illinois, have invented a new and Improved Lighting Device, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved device for conveniently lighting lamps, lanterns, gas-jets, &c., without removing the chimney or globe, and which is arranged to be at all times ready for immediate use, dispensing entirely with matches and similar devices for igniting purposes.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement as applied on a lamp. Fig. 2 is a sectional side elevation of the same. Fig. 3 is an enlarged face view of the box with parts in section. Fig. 4 is a like view of the same with the cover of the box in an open position. Fig. 5 is a transverse section of the same, and Fig. 6 is a plan view of the same.

The improved lighting device is provided with a box A, adapted to be passed into a sleeve B, secured in an inclined position on the lamp, lantern, or gas-jet on which the lighting device is to be used. A spring B', secured on one side of the sleeve B, is adapted to engage with its free end a notch in one side of the box A to hold the latter in position in the sleeve, as is plainly illustrated in Fig. 3. The box A is provided with a hinged lid or cover A', which can be opened to conveniently get at the contents of the box. The ends of the latter are open, as is plainly shown in the drawings.

In the upper end of the box A is arranged a circular casing C, adapted to receive a strip E of canvas or other suitable material and provided on its outer surface with points or protuberances E', made of an igniting substance and placed suitable distances apart, as is plainly shown in the drawings. The strip E is adapted to pass through a slot C' in the rim D of the circular casing C, and then the strip is

extended over part of the said rim to finally wind at its outer end on the inner end G' of a shaft G, mounted to turn in suitable bearings in the box A, preferably, however, in the cover A', so that the latter can be opened with the shaft in position. The shaft G swings outward with the cover when the latter is opened, thus permitting the ready removal of the used-up strip coiled thereon or the insertion of the end of the new strip. The tape may be more readily removed from the shaft when carried by the hinged cover than if said shaft was mounted in the box for the reason that the shaft is fully exposed and accessible and the fingers of the operator do not have to be passed into any narrow space such as would exist between the sides of a box and a shaft therebetween. A reduced part of the inner end G' is adapted to engage a bearing in the back of the box A when the cover is closed, and as is plainly shown in Fig. 5. The outer end of the shaft G is provided with a suitable knob or handle G² for conveniently turning the shaft in its bearings to wind up the strip E, as hereinafter more fully described.

On the shaft G, inside of the cover A', is secured a ratchet-wheel H, engaged by the free end of a spring I, secured to the inner surface of the lid or cover A' and serving to prevent a return movement of the said ratchet-wheel and its shaft G to prevent unwinding of the strip E.

On the back of the box A is secured a scratcher F, bent over the upper open end of the box A and extending in close proximity to the outer surface of the strip E, so that when the latter is passed over the stationary casing C the lower end of the scratcher F comes in contact with the igniting-point E', so that on pulling the strip E the point E' is ignited.

The casing is mounted to turn on a stud in the back of the box A; but the movement is limited by a lug C² on the casing abutting on a lug A² on the back of the box A, as shown in Fig. 4. A lug A³ on the inside of the cover A' is adapted to engage a notch C³ in the edge of the rim of the casing C when the lug C² abuts on the lug A².

To insert a coil-strip, the cover A' is swung open, which releases the drum D and uncovers its open end. The drum is now turned to

the right till its slot C' is uppermost or adjacent to the scratcher F, which is the most convenient position for inserting the coil-strip E, said strip being now inserted and its end carried through said slot and through the slot G' in the shaft G. The drum C is now turned back until its lug C² engages lug A², which will bring the slot C' in proper relation to the scratcher F (see Fig. 4) and the notch C³ in register with lug A³. The cover may now be closed, and by rotating shaft G the igniting-points E' will be successively brought against the scratcher F. As shown in Fig. 2, the upper end of the box A containing the scratcher F, is in close proximity to the wick or jet of the lamp, so that when one of the igniting-points E' is fired by coming in contact with the scratcher F then the wick or jet is ignited by the flame of the ignited point. It will be seen that when the operator turns the knob G² part of the strip E is wound up, the said strip being pulled out of the casing C through the notch C' and over part of the rim of the casing under the scratcher F. By this movement one of the igniting-points E' comes in contact with the scratcher F, and is consequently ignited, as above described, thus igniting the wick. When the entire strip E has been used up, the spring B' is drawn to one side to permit of removing the box A from the sleeve B. The cover A' of the box is then opened, the used-up strip is removed, and a new strip in the shape of a roll is placed in the casing, the outer end being passed through the notch C', arranged in one side of the rim of the casing, then passed over the top of the rim down one side and to the end G' of the shaft G, on which end it is fastened by passing the end of the strip crosswise through an aperture in the shaft. (See Fig. 5.) Casing C is then turned backward, or toward scratcher F, until it is stopped by lug C² on rim of casing C coming in contact with lug A² on inside of back of box A. The cover A' is then again closed and the box A, with its contents, is slipped into the sleeve B and locked in place therein by engagement with the spring B', in the manner described.

It will be seen that a lighting device constructed in this manner is always ready for use and permits of conveniently lighting the lamp, lantern, or jet without removing the chimney or globe.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A lighting device comprising a box adapted to be secured on a lamp or lantern and provided with a scratcher, a circular casing pivoted in the said box, means for locking said casing, a strip arranged in a roll and placed in the said casing, the said strip being provided with igniting-points and passed through a slot in the rim of the casing and over the said rim, and a shaft mounted to turn in the box and adapted to wind up the said igniting-strip, substantially as shown and described.

2. In a lighting device, the combination, with a box having a hinged lid provided with a lug, of a casing mounted to turn in the said box and having in its rim a notch adapted to be engaged by the said lug on the lid, a scratcher fixed on the said box, and a strip provided with igniting-points and arranged in a roll held loosely in the said casing, substantially as shown and described.

3. In a lighting device, the combination, with a box having a scratcher and a hinged lid provided with a lug, of a casing mounted to turn in the said box and having in its rim a slot for the passage of a strip carrying igniting-points, a notch in the edge of the casing to receive the lug on the lid, and a lug held on the said casing and adapted to butt on a lug in the box when the said notch is in position to receive the lid-lug, substantially as shown and described.

4. The combination, with the burner provided with the open-ended tube or sleeve B, provided with a catch B', of the lighting device comprising a box extending through the tube or sleeve, locked therein by said catch and provided adjacent to the burner-tip with a scratcher, a circular slotted tape-carrying casing pivoted in the upper open end of the box adjacent to the scratcher, means for locking the casing against rotation, and a tape-operating shaft mounted in the lower or outer end of the box exterior to the said tube or sleeve, substantially as set forth.

BRADFORD H. PENDLETON.

Witnesses:

J. BEE,

F. W. JERREMS.