

(No Model.)

W. TRABUE.
IGNITER OR GAS LIGHTER.

No. 580,298.

Patented Apr. 6, 1897.

Fig. 1.

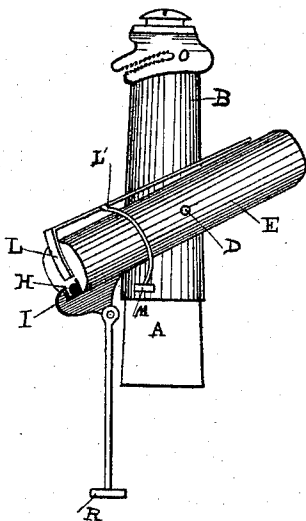


Fig. 3.

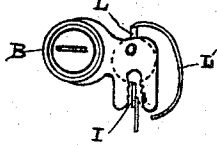


Fig. 2.

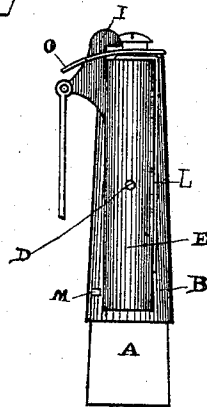


Fig. 4.

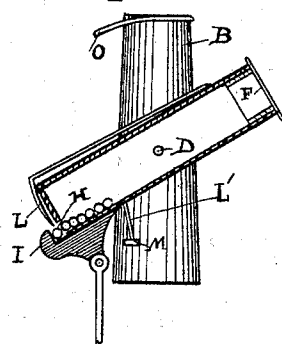


Fig. 6.

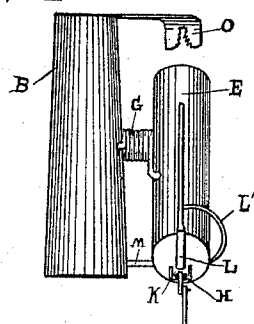


Fig. 7.

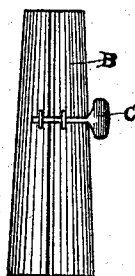


Fig. 8.

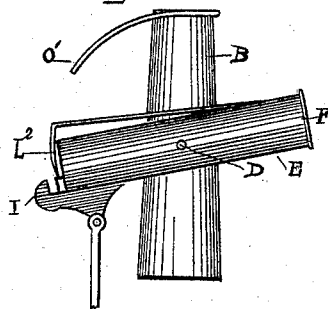
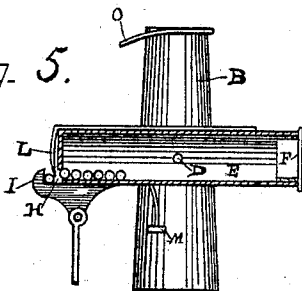


Fig. 5.



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WILLIAM TRABUE, OF LOUISVILLE, KENTUCKY, ASSIGNOR TO CURRAN POPE, OF SAME PLACE.

IGNITER OR GAS-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 580,298, dated April 6, 1897.

Application filed June 26, 1896. Serial No. 596,986. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM TRABUE, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Igniters or Gas-Lighters, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to lighting attachments for gas-burners, lamps, and the like.

The object of the invention is to produce an attachment which can be readily applied to a burner, and especially a gas-burner, and which shall contain igniters of special construction, and which by a movement of a part of the device will convey one of the igniters to a position to be ignited and thereby light the gas or lamp; and the details of construction of this device will hereinafter be pointed out.

Figure 1 is an elevation and partial perspective view of the device attached to a gas-burner. Fig. 2 is a front elevation of the igniter in position for igniting the gas, the tip of the gas-burner being shown. Fig. 3 is a top plan of the igniter and burner-tip. Fig. 4 is an elevation of the holding-sleeve and attachments, the pellet-magazine being in section in position to feed out one igniting-pellet. Fig. 5 is a similar view showing magazine rocked to position to cut off the return of the pellet to the magazine. Fig. 6 is a side elevation of the device with magazine in feeding position. Fig. 7 is a detail elevation of the split sleeve. Fig. 8 is a side view of a modification.

In the form illustrated the lighter, as shown, is adapted to an ordinary gas-burner A, but it will be readily understood that it could be attached to many forms of lamps, oil-burners, &c.

For convenience of attachment a split metallic sleeve B may be used, of such shape as to fit on a common gas-burner, the sleeve being clamped by a set-screw C, passing through ears on the sleeve; but other attaching devices might be used. The sleeve is merely a base or support for other parts of the device.

Projecting from one side of the sleeve or base B there is a pintle D, on which a short cylindrical metallic box or magazine E is piv-

oted. This magazine is provided with a plug or cover F, through which it can be filled with small detonating pills or pellets composed of a fulminating compound to ignite by friction or concussion.

A short spiral spring G may be attached to the sleeve or to the pintle, one end bearing on the box or magazine E in such manner as to turn the box down to the position shown in Figs. 1, 4, and 6, which is the normal position of the magazine, or the weight may be so distributed that the spring G is dispensed with.

One end—that is, the face or operating end—of the magazine is closed, except for a small opening H, which is at the lowest corner of the magazine when the same is in its normal or turned-down position. In front of this opening, at such distance as to stop a pellet when it has moved about its own diameter out from the opening, there is a hook or detaining-stop I, the pellet being held at the sides in a shallow pocket K. A magazine filled with pellets will deliver one pellet into this pocket K whenever the magazine is swung to the feeding position.

A spring check or detent L, being about L shape, is attached to one side of the magazine and extends over the end thereof into proximity with the pellet. This spring-piece, as shown in Figs. 1 and 6, has a projecting piece L', which when the magazine is turned down bears on an abutment M on the sleeve or base, so as to lift the end of the spring-piece away from the opening H; or, as shown in Fig. 8, the spring-piece L may have a tendency to uncover the hole H. The spring-piece L is light, so as not to overcome the tendency of spring G to turn down the magazine.

When the magazine is rocked upward on its pintle or pivot to the position shown in Fig. 5, the projecting piece L' no longer lifts spring L, and the spring-piece L closes over the opening, preventing the pellet which is outside the hole H and in the pocket at the end of the magazine from passing back into the magazine. The further rocking of the magazine on its pintle to the position shown in Fig. 2 carries the pellet under the roughened surface of the scratch-plate or ignition-piece O, which scratch-plate or ignition-piece,

as shown, extends at one side of the sleeve or base-piece B. This scratch-plate is shown to have a notched slot along its central line, and as the magazine B works on its pivot the pellet in the pocket is carried along this slot, the piece I serving to retain it. The contact of the pellet with this scratch-plate ignites the pellet by friction or by concussion between piece I and the end of the slot, and as the pellet is at this time in close proximity to the tip of the burner the gas from the burner is thereby lighted.

In Fig. 8 the spring L² remains normally open, but is pressed into position to close the opening in the magazine by a slight frictional contact with an extension O' of the scratch-plate, the igniting part of said scratch-plate being so formed as to ignite the pellet only when it reaches the proper position to ignite the gas.

The magazine E has a handle, as R, attached, the same being preferably pivoted so as to hang down out of the way, as in Fig. 1. For convenience the same lug which forms the stop I may be utilized for the attachment of the handle.

The magazine may be filled with explosive pellets and will contain several hundreds of such pellets. When in normal or turned-down position, one pellet will roll out of the hole H, and, being prevented from escape by stop I and the shallow pocket, the pellet will lie in such pocket. When the magazine is swung upward, this pellet is ignited by contact with the scratch-plate.

It will be understood that changes in form, size, and materials may be made, so that the general features of the invention are retained; that either a frictional or concussion device may be employed; that the pellets move singly by gravity into the pocket, and that a pellet may be ignited with every swing of the magazine as long as there are pellets in the magazine.

What I claim is—

1. In an igniting attachment for gas and other burners, the supporting-base, a movable magazine thereon capable of containing a number of loose pellets which pellets feed by gravity toward the delivery-aperture, when the magazine is in normal position, means for retaining one of these pellets on the face of the magazine, and an ignition-piece against which

the pellet is carried by the movement of the magazine, all combined substantially as described.

2. In an igniter as described, the pivoted magazine for loose pellets, having an opening in one end of a size to pass a single pellet, the stop-piece in front of said opening, and the spring-piece attached to the magazine and in position to close the opening and an abutment against which the spring-piece is borne by the swing of the magazine on its pivot, to open the pellet-passage, all combined substantially as described.

3. In an igniter or lighter of the character described, the magazine to contain loose pellets and feed them by gravity to the outlet, and means for holding a single pellet at the face of said magazine, and an ignition-piece with which such pellet can be moved into contact while so held, all combined substantially as described.

4. In an igniter or lighter, the sleeve adapted to fit a gas-burner, the magazine pivoted to said sleeve and adapted to contain loose pellets, the pocket, stop, and spring-actuated closer at the mouth of the magazine, and the slotted ignition-piece in position for contact with the pellet at the end of the swinging magazine, all combined substantially as described.

5. In an igniter as described, the supporting-base, the magazine pivoted thereto so as to feed a single pellet by gravity and having means for supporting a single pellet at one face thereof, and the slotted scratch-plate having its friction-surface in the line of movement of the face of the swinging magazine, all combined substantially as described.

6. In an igniter of the character described, the base, magazine operating by gravity to feed a single pellet, and movably connected to the burner, means for holding a single pellet at the face of the magazine, the ignition-plate, and a handle pivotally connected to the magazine, all combined substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM TRABUE.

Witnesses:

W. A. BARTLETT,
CHARLES K. DAVIES.