

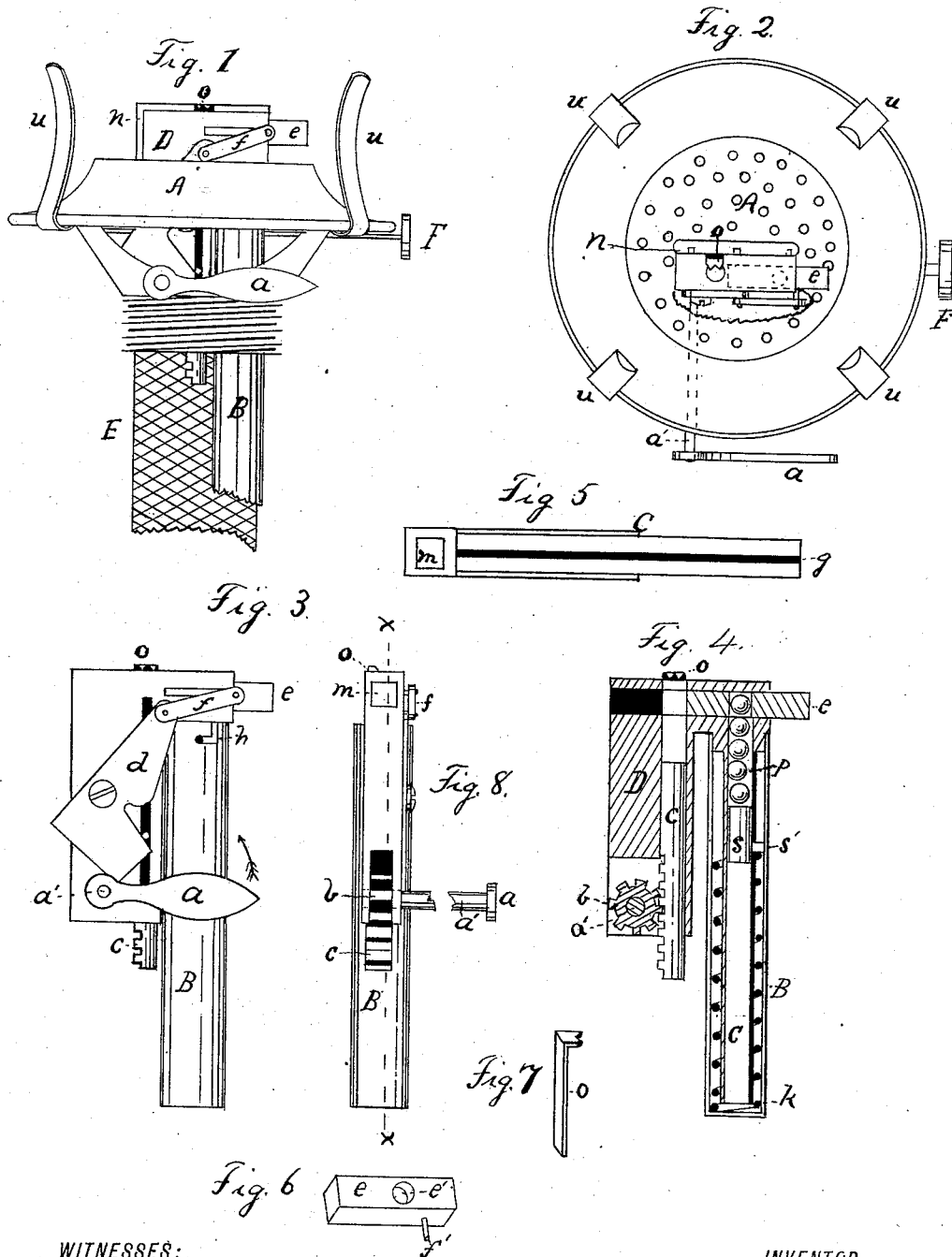
(No Model.)

A. K. STANDISH.

LIGHTING DEVICE.

No. 347,529.

Patented Aug. 17, 1886.



WITNESSES:

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ARTHUR K. STANDISH, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF TO RICHARD M. RUSSELL, OF SAME PLACE.

LIGHTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 347,529, dated August 17, 1886.

Application filed March 4, 1886. Serial No. 193,986. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR K. STANDISH, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in a Lighting Device, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents a lamp-burner having one of my improved lighting devices attached thereto, the cone being removed to facilitate showing parts of the device. Fig. 2 is a top view or plan of Fig. 1. Fig. 3 is a front elevation of the lighting device as detached from the burner. Fig. 4 is a sectional view of the device on line *x x* of Fig. 8. Figs. 5, 6, and 7 are views of detached parts, which are fully described hereinafter. Fig. 8 is an end elevation of the device.

My invention relates to improvements in a device for igniting the wicks or gas of illuminating-burners.

The object of the invention is to provide a receptacle for holding the ignitable material and means for igniting the wick of a lamp-burner or gas-jet without having to remove the lamp chimney or shade; and to this end it consists in the new and novel arrangement of the several parts hereinafter described, and specified in the claims.

In the accompanying drawings, A represents the base or draft plate of a lamp-burner. *n* is the wick-tube. E is the wick, and F is the shaft by which the wick is regulated. *u u u u* are springs by which the chimney is held—all of which are devices well known and form no part of my invention.

The frame D is provided with a movable piston, *c*, adapted to move vertically in the same, and is operated by means of the rack cut upon one end of the piston *c* and the pinion *b*, secured to the shaft *a'*. The said shaft *a'* is rotated by the handle *a*. At the top of the frame D is a rectangular opening, *m*, which forms a right angle with the line of travel of the piston *c*. Into this rectangular opening the slide *e* is fitted, and is made to reciprocate in the said opening *m* by means of the cam *d*, link F, and pin *r* in the piston *c*.

C is a magazine, which is secured to a projecting part of the frame D; or it may be integral therewith. It consists of a hollow cylindrical tube, having both ends open and provided with a slot, *g*, which extends nearly the entire length of the magazine C. The said magazine C is arranged in a position that its axis is parallel with that of the piston *c*, and is surrounded by a helical spring, *k*, which operates the follower *s* in the magazine C. The helical spring *k* is incased in a tubular sheath, B, which is secured in position indicated in the drawings by the bayonet-clasp *h*, and forms a support for the end of the spring *k*. The follower *s* is adapted to slide in the magazine C, and is forced through the same by the spring *k* coming in contact with the pin *s'*.

The device as shown in Fig. 3 is attached to the side of the wick-tube *n*, as seen in Figs. 1 and 2, in which case the magazine C will project into the lamp along the side of the wick E.

To operate the lighting device, the burner is removed from the lamp, when the tubular sheath B is removed by unlocking the same at *h*, which in turn will permit the spring *k* and the follower *s* being removed from the magazine C. The magazine is then filled from the bottom nearly full of the phosphoric pellets *p*; or the heads of ordinary parlor matches cut from the sticks can be used in lieu of the pellets *p*. Having filled the magazine C, the follower *s* is inserted, and one end of the spring *k* resting on the bottom of the sheath B, while the other impinges upon the pin *s'*, the sheath B is locked in the position shown in Fig. 3. The compressed spring *k* forces the pellets *p* upward through the magazine into the aperture *e'* in the slide *e*, placing the burner in the lamp and adjusting the wick E, that it may be lighted, and with the handle *a* in the position indicated in the drawings, the uppermost pellet in the magazine C enters the slide *e*. Rotating the shaft *a'* by moving the handle *a* in the direction of the arrow in Fig. 3, moves the piston *c* upward, and the pin *r*, coming in contact with the cam *d*, causes the slide *e* to pass along the aperture *m* until the aperture *e'* is in alignment with the piston *c*, at which point the slide *e* remains stationary until the piston *c* passes upward through the aperture

5 *e'*, whereby the pellet therein contained is pressed against the sharp points upon the resilient piece *o*, which is shown in detail in Fig. 7. The resiliency of the piece *o* permits the pellet to pass out of the aperture at the top, and as it passes the points *o* it is ignited by them, when the flame thus created is communicated to the wick *E*.

10 A better idea of the construction of the magazine *C* can be had by reference to Fig. 5.

As will be seen in the detail, Fig. 6, the slide *e* is provided with an aperture, *e'*, which is adapted to receive one of the pellets *p*.

15 Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

20 1. The combination, with the bracket *D*, having slides *c e*, of the magazine *C*, spring *k*, follower *s*, and the igniting-points *o*, substantially as shown and described.

2. The combination, with the bracket *D*, having slides *c e*, of the magazine *C*, spring *k*, follower *s*, igniting-points *o*, the lever *a*, with its pinion and slide *e*, having the lug *r* attached thereto, the lever *d*, pivoted as shown, 25 and the connecting-arm *f*, substantially as shown and described.

3. The combination, with a lamp-burner, of the bracket *D*, having slides *c e*, the magazine *C*, spring *k*, follower *s*, igniting-points *o*, the 30 lever *a*, with its pinion and slide *e*, having the lug *r* attached thereto, the lever *d*, pivoted as shown, and the connecting-arm *f*, substantially as shown and described.

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

ARTHUR K. STANDISH.

Witnesses:

RICHARD M. RUSSELL,
CHAS. A. BRANCH.