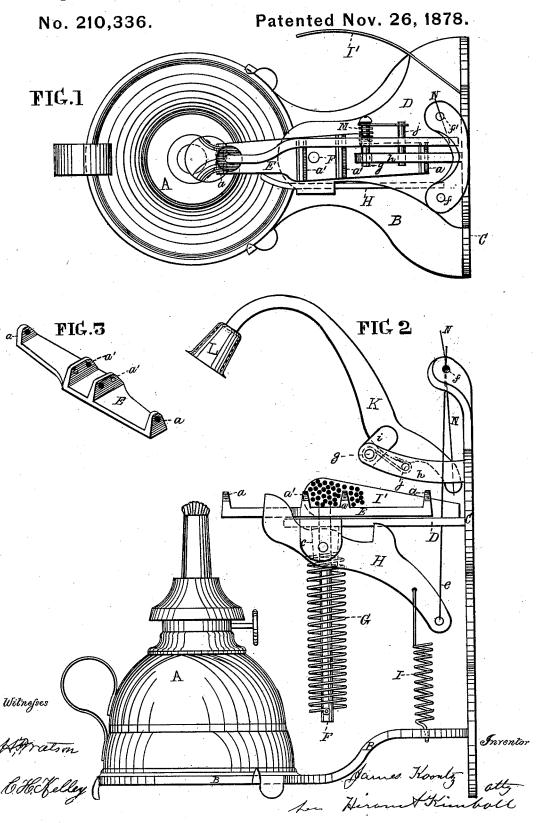
J. KOONTZ.

Lighting and Extinguishing Device for Lamps.



UNITED STATES PATENT OFFICE.

JAMES KOONTZ, OF BASIL, OHIO.

IMPROVEMENT IN LIGHTING AND EXTINGUISHING DEVICES FOR LAMPS.

Specification forming part of Letters Patent No. 210,336, dated November 26, 1878; application filed August 3, 1878.

To all whom it may concern:

Be it known that I, JAMES KOONTZ, of Basil, in the county of Fairfield and State of Ohio, have invented a new and useful Improvement in Night-Lamp Lighter and Extinguisher, of which the following is a specification:

My invention is designed as an improvement upon the devices covered by Letters Patent No. 189,499; and consists in the combination of an extinguisher with the lamp-lighter and the lamp, the extinguisher being on one end of a lever, which is hung on a fulcrum-pin that projects from an arm of a bracket that holds the lamp and the devices for lighting it, there being a spring attached at one end to the arm and at the other end to the lever, for throwing its carrying end upward for the purpose of removing the extinguisher from the wick after it has performed its function. A cord is attached to the handle of the lever and extended to the part of the room in which the person is who uses the lamp, so that when he pulls the cord the carrying end of the lever is forced downward to lower the extinguisher to put out the light, as hereinafter described.

In the accompanying drawings, Figure 1 is a plan view of the combined lamp lighter and extinguisher, with the lamp in position. Fig. 2 is a side elevation of the same. Fig. 3 is an isometrical view of the match holder and carrier E.

Like letters of reference in all the figures indicate the same parts.

A is a lamp, which is supported by the bracket, consisting of the shelf B, on which the lamp is seated, and the upright plate C, which is provided with screw-holes for confining it to a wall or other permanent object. Dis a horizontal plate, that is secured at one end to the plate C, and is provided at its opposite end with the rotating match holder and carrier E, which has lugs \ddot{a} a at its ends, and lugs a' a'at its middle, which are provided with holes for the reception of matches, so that a match may be connected at either end of the holder by pushing it through a hole in the end lug and the first middle lug, and then into an opening in the next lug, which does not go quite through the lug, and thereby acts as a stop for the end of the match. The holder and rod F, which has a bearing for its upper end in the stem c of the plate $\bar{\mathbf{D}}$.

G is a wire spring around said stem and that part of the rod which projects below the stem, having its upper end confined to the stem and its lower end to the rod. The object of the spring is to force the outer end of the carrier against the escapement-lever H when the match is brought into range with the lamp-wick.

The handle of the lever is held down by the wire spring I to hold the end of the lever up, as seen in Fig. 2, when it is intended to act as a stop for the carrier. To the handle of the lever is attached one end of the cord e, which is passed upward through a hole in the plate D and a hole, f, in the upper end of the bracketplate C.

I' is a spring friction-plate, the heel end of which is fastened to the plate C. The other end is of suitable curve, and is the proper distance from the pivot of the carrier for a match to strike it when the carrier is revolved. If the power of the wire spring G has been spent, the escapement-lever is released from the carrier to admit of the latter being turned around sufficiently to give it the proper strength; then the lever is brought into its former position to hold the carrier, as seen in the drawings.

. When it is desired to light the lamp, the cord e is pulled to disengage the escapementlever H from the carrier E, and the force of the spring G rotates it, bringing the phosphorized end of the match against the friction-plate to ignite it, and thence to the lamp to ignite the

The description so far relates to the devices contained in the patent referred to, with the exception of a modification of the frame-work. A fuller description is therefore deemed unnecessary.

The following constitutes my invention: K is a lever, provided at one end with the cupshaped extinguisher L. It is hung on the fulcrum-pin g, which projects from one side of the arm h of the upright plate C. M is a coiled spring, which surrounds the fulcrum-pin between its head and the projection i of the lever K, one end of the wire being connected with the pin j, that projects from the arm h, and the other end bearing against the under carrier is riveted fast to the upper end of the side of the lever, to force its carrying end up.

ward, as seen in Fig. 2, so as to remove the extinguisher from the lamp after the flame of the wick has been put out. To the handle of the lever is attached the cord N, which is passed through the hole f' in the upper end of the plate C to any convenient place for the person using the lamp, who pulls it for carrying the extinguisher down at the proper time for putting out the flame.

for putting out the flame.

Ido not claim, broadly, an extinguisher oper-

ated by a lever, as that is not new.

What I claim as my invention is—

The lever K, having an extinguisher, L, at one end, and provided with a cord, N, at its other end, in combination with the fulcrum-pin j, arm h, spring M, carrier E, and lamp A, substantially in the manner and for the purpose set forth.

JAMES KOONTZ.

Witnesses:

JACOB F. CAMPBELL, J. W. CHAPMAN.