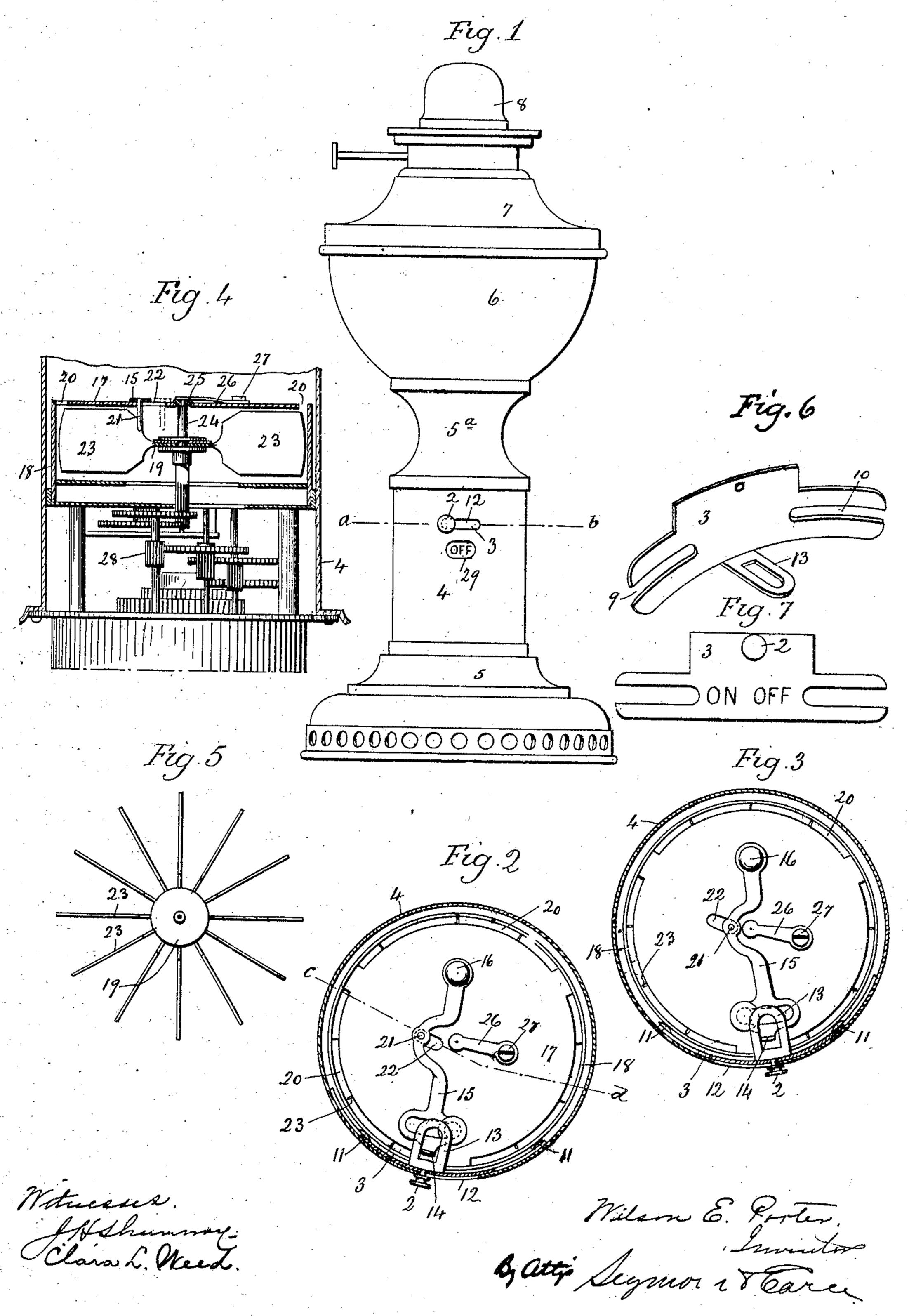
W. E. PORTER. LAMP.

APPLICATION FILED JUNE 6, 1904.

NO MODEL



United States Patent Office.

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LAMP.

SPECIFICATION forming part of Letters Patent No. 768,401, dated August 23, 1904.

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To all whom it may concern:

Be it known that I, Wilson E. Porter, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Lamps; and I do hereby declare the following, when taken in connection with the accompanying drawings and the numerals of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in elevation of a no-chimney lamp provided with a shut-off attachment constructed in accordance with my invention; 15 Fig. 2, a view thereof in horizontal section on the line ab of Fig. 1, drawn to a larger scale than the same and showing the shut-off lever in its operating position, in which it holds the fan against rotation, and hence shuts off the cur-20 rent; Fig. 3, a corresponding view showing the shut-off lever in its retired position, in which it leaves the fan free to rotate and puts the current on; Fig. 4, a broken view, partly in elevation and partly in vertical section, on the 25 line c d of Fig. 2, showing the fan, fan-train, and shut-off attachment; Fig. 5, a plan view of the fan; Fig. 6, a detached perspective view in inside elevation of the display-plate; Fig. 7, a view thereof in front elevation.

My invention relates to an improvement in that class of lamps in which the draft required for supporting the flame is supplied by a fan driven by a spring-actuated fan-train of the clockwork type. Lamps of this kind do not require chimneys for assisting the draft and have therefore become known as "no-chimney" lamps.

The object of my present invention is to provide such lamps with a shut-off attachment whereby the fan may be stopped when the lamp is extinguished, so as to save any unnecessary wear of the train by which the fan is driven and so as to reduce the time and labor of winding up the fan-train to the minimum.

A further object of my invention is to visually indicate on the outside of the lamp structure whether the fan-train is running or not. With these ends in view my invention con-

sists in a no-chimney lamp furnished with a shut-off attachment adapted to visually indi- 50 cate whether the fan-train is running or not.

My invention further consists in certain de-

tails of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In carrying out my invention as herein shown I employ an operating-button 2, mounted in a curved display-plate 3, located within a cylindrical shell 4, forming a portion of the structure of the lamp, which also com- 60 prises a foot 5, a neck 5°, and a cup 6, the said cup receiving a removable oil-font 7, which is furnished with a burner 8 of any approved construction. The said plate 3 is conformed in curvature to the curvature of the inner 65 face of the shell 4 and has its ends formed with slots 9 and 10, receiving headed pins 11, mounted in the shell and supporting and guiding the plate as the same is horizontally shifted in one direction or the other within 70 the limits of a clearance-slot 12, formed in the shell and having the stem of the button 2 passed through it into the plate. Upon its lower edge and midway of its length the said plate 3 is furnished with a coupling-lug 13, 75 bent inward at a right angle and perforated for the reception of a coupling-finger 14, bent upward at a right angle from the outer end of a horizontally-arranged shut-off lever 15, turning upon a stud 16 in the horizontal top- 80 plate 17 of the casing 18, which incloses the fan 19, the plate 17 being cut away around its edges to form segmental openings 20, through which the draft produced by the fan passes upward to the burner 8. A stop in 85 the form of a stop-pin 21, carried by the lever 15, passes downward through a slot 22 in the plate 17 into position to engage with the inner portions of the blades 23 of the fan, which is mounted upon an arbor 24, turning at its up- 90 per end in a bushing 25, held in place by an end shake-spring 26, secured to the plate 17 by a screw 27. The lower end of the arbor is cut to form a cut-leaf pinion, which is engaged by one of the members of the fan-train 95 28, which may be of any approved construction and arrangement and does not need detailed description, as it forms no part on my

present invention.

The upper face of the display-plate 3 is fur-5 nished with the words "Off" and "On," which are separated from each other so as to be alternately displayed through a display-opening 29 in the shell 4, which incloses the fan 19 and the fan-train 28. The words "Off" and "On" are placed upon the plate 3 so that when the shut-off lever 15 is swung into position for stopping the fan, and hence cutting off the current, the word "Off" will be shown through the display-opening 29, while, on the 15 other hand, when the lever 15 is swung so as to clear the fan and permit it to revolve the word "On" will be shown through the opening 29 and indicate that the fan is free and that a current is on and being supplied to the 20 burner 8.

My improved shut-off attachment is extremely simple in construction and operation and, as already stated, not only saves the wear of the fan-train, but also the time and labor of winding the spring thereof oftener than necessary, and shows at a glance whether the

current is off or on.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made. I would therefore have it understood that I do not limit myself thereto, but hold myself at liberty to make such departures therefrom as fairly fall within the spirit and scope of my invention.

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

Patent, is—

1. In a no-chimney lamp, the combination with a fan, of a spring-actuated train therefor, a shell, a shut-off lever, a stop carried by the said lever and coacting with the said fan for stopping the same, and an operating device connected with the said lever and projecting outward through the said shell for the manual operation of the said lever.

2. In a no-chimney lamp, the combination with a fan, of a spring-actuated train therefor, a shell formed with a display-opening, a shut-off lever, a stop carried thereby and coacting with the said fan for stopping the same, a display-plate located within the said shell and having portions of its outer surface exposed through the said display-opening, means for connecting the said lever and the said plate,

and an operating device mounted in the said plate and projecting through the said shell for the manual operation of the said lever.

3. In a no-chimney lamp, the combination with the fan and fan-train thereof, of a shell 60 forming a part of the structure of the lamp, a curved display-plate applied to the inner face of the shell and carrying an inwardly-extending coupling-lug, an operating-button carried by the plate and projecting outward 65 through a clearance-opening in the said shell for the manual operation of the plate, a shut-off lever having an upwardly-projecting coupling-finger coacting with the coupling-lug of the cut-off plate, and a stop carried by the le-70 ver and moved thereby into and out of the path of the fan.

4. In a no-chimney lamp, the combination with a fan, of a spring-actuated train therefor, a shell having a display-opening, a shut-75 off lever, a stop carried by the said lever and coacting with the said fan to stop the same, a display-plate a portion of which is exposed through the said display-opening in the shell, connection between the said plate and lever, 80 and an operating device mounted in the said plate and projecting outwardly through the shell for its manual operation, whereby the lever is moved to stop and release the fan and the plate to indicate through the display-open-85

ing the position of the lever.

5. In a no-chimney lamp, the combination with the fan and fan-train thereof, of a shell inclosing the same and formed with a displayopening, and with a clearance-opening, a dis- 90 play-plate located within the shell and having portions of its outer surface exposed through the said display-opening, an operating-button passing through the clearance-opening in the shell into the said plate for operating the 95 same, and a shut-off lever coupled with the said plate for operation thereby and furnished with a stop moved by the lever into and out of the path of the fan, the said display-plate being adapted to visually indicate through the 100 said display-opening whether the current is off or on.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILSON E. PORTER.

Witnesses:

FREDERIC C. EARLE, CLARA L. WEED.