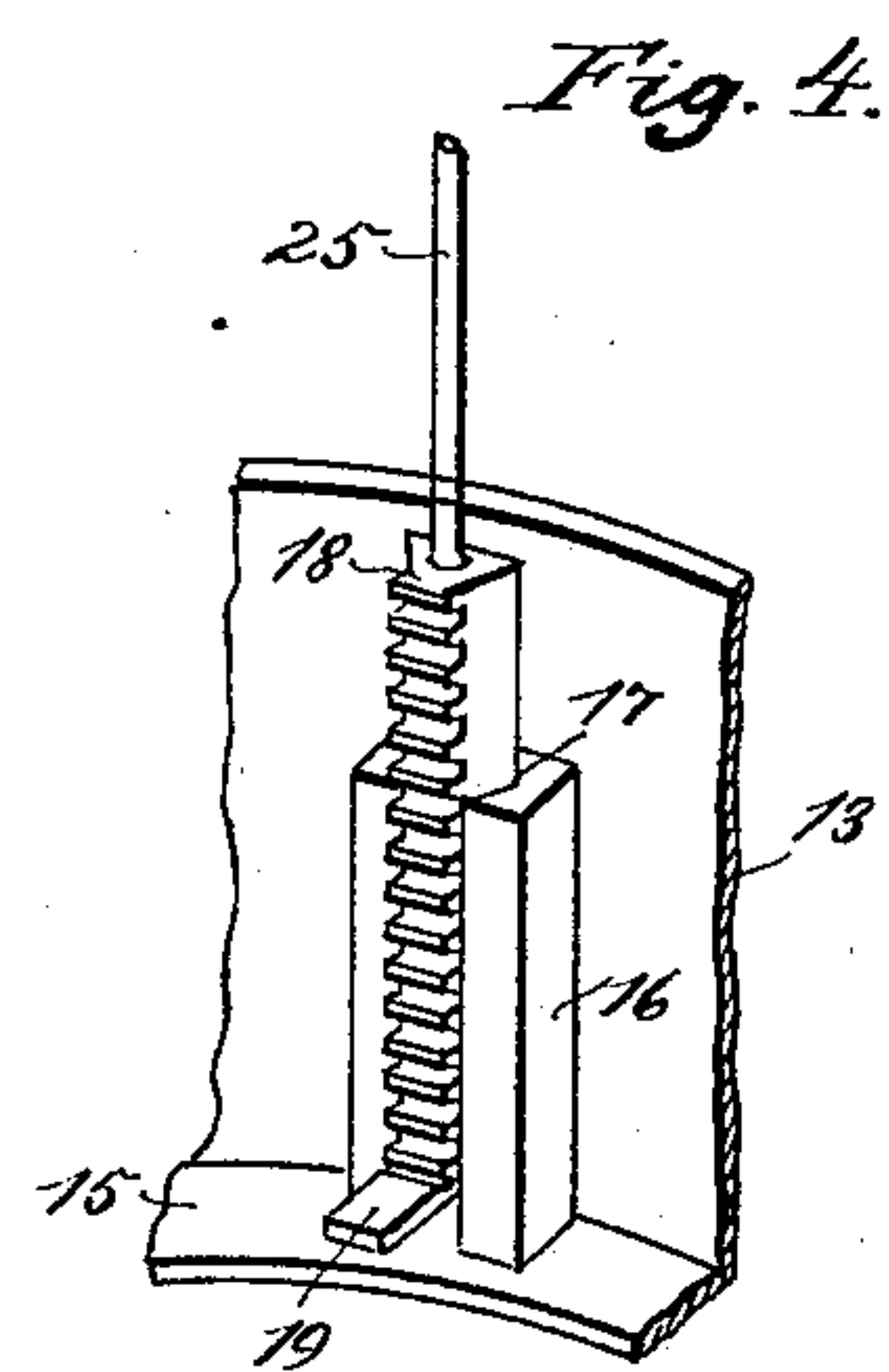
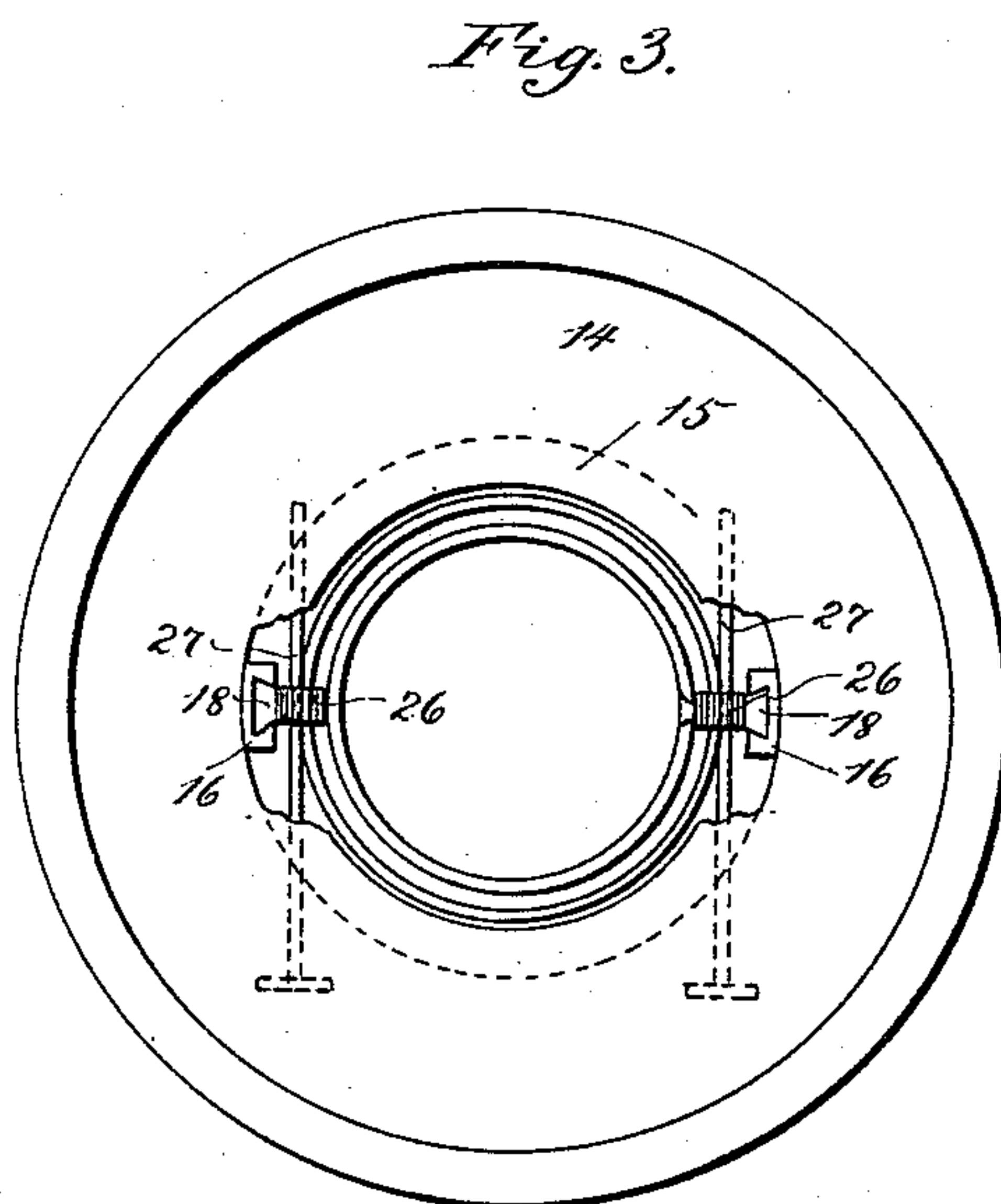
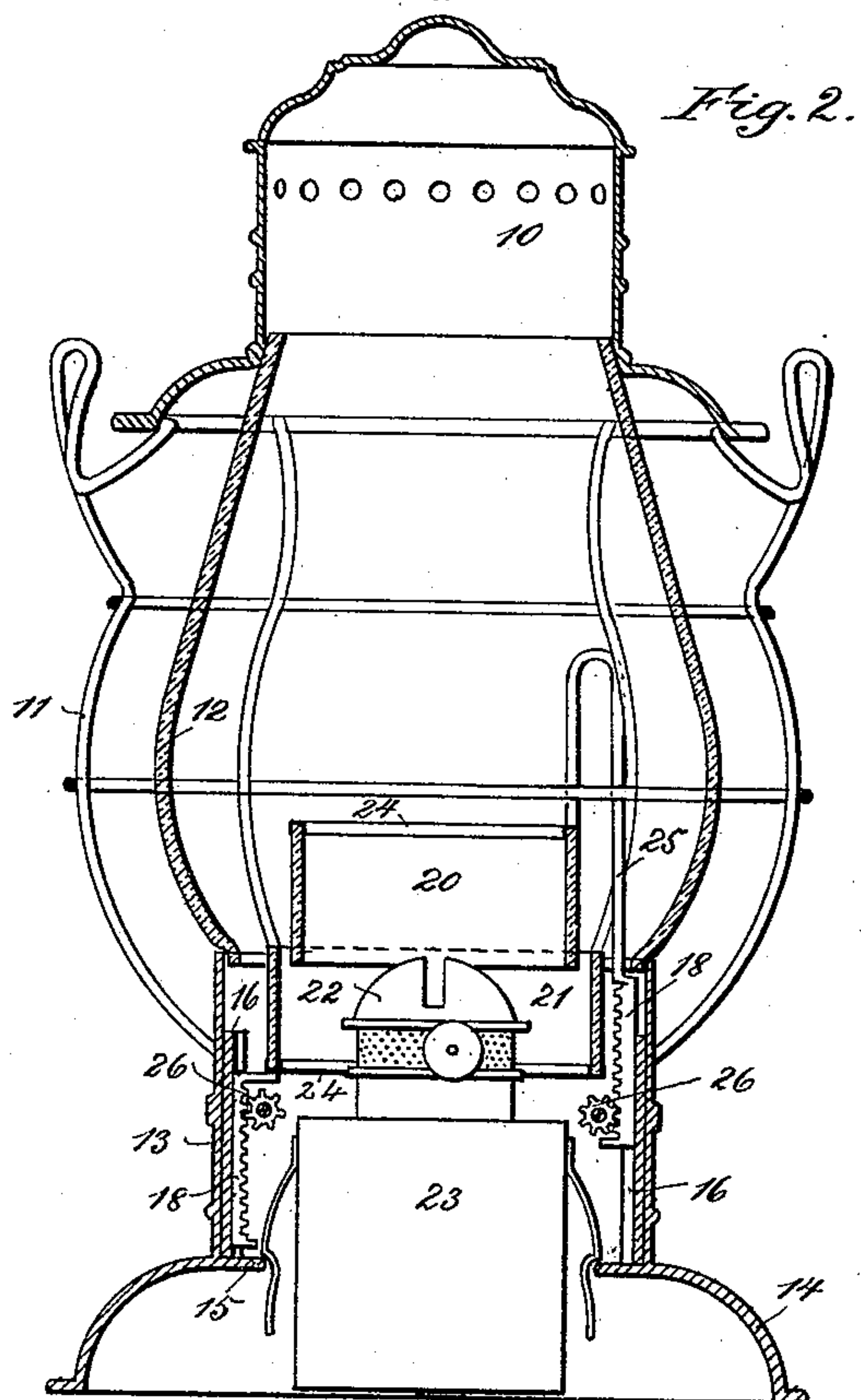
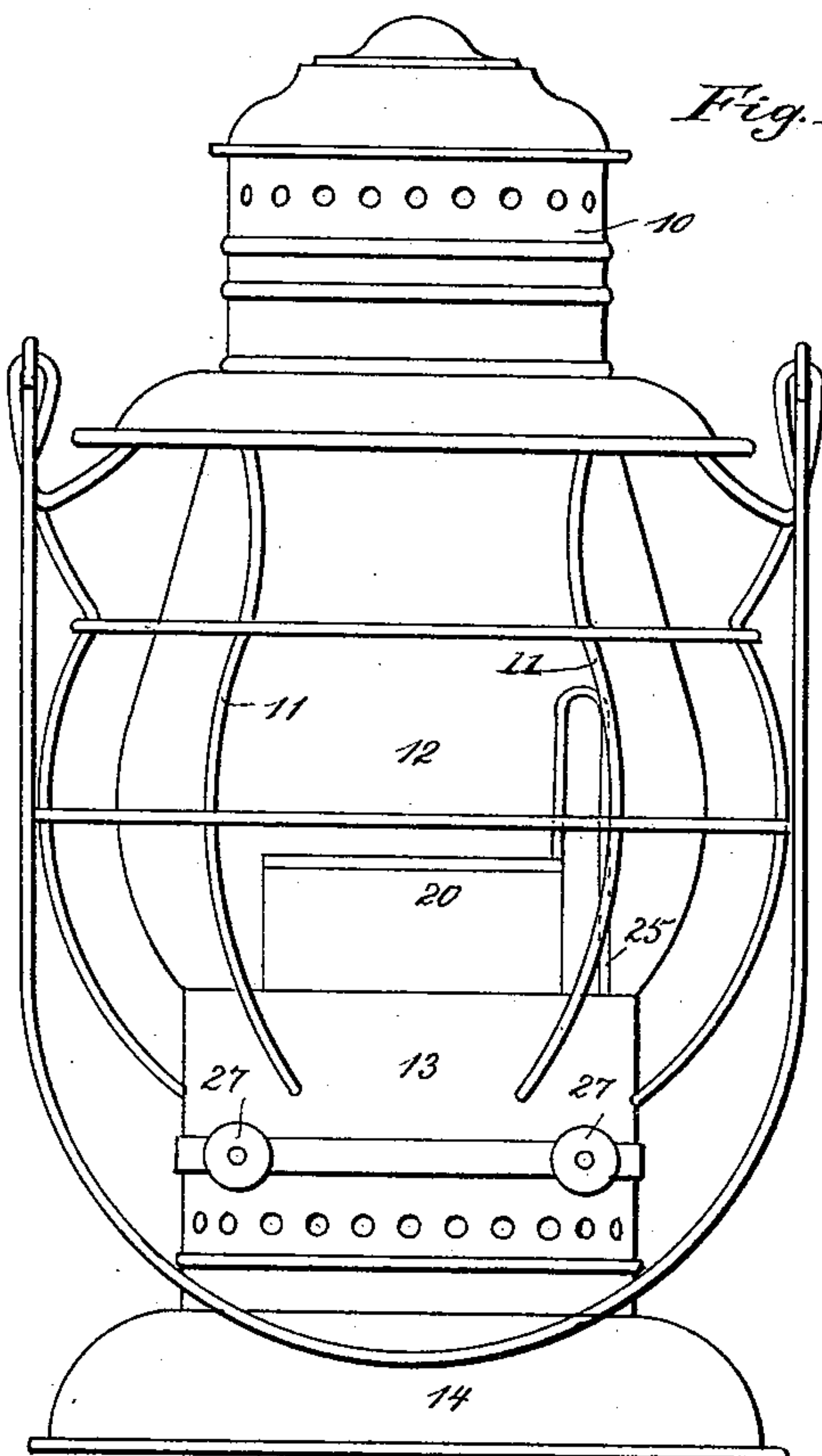


(No Model.)

S. B. FIELD.
LANTERN.

No. 437,587.

Patented Sept. 30, 1890.



WITNESSES:
D. C. Reusch.
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INVENTOR:
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UNITED STATES PATENT OFFICE.

SAMUEL B. FIELD, OF PLAINFIELD, NEW JERSEY.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 437,587, dated September 30, 1890.

Application filed November 25, 1889. Serial No. 331,448. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL B. FIELD, of Plainfield, in the county of Union and State of New Jersey, have invented a new and useful Improvement in Lanterns, of which the following is a full, clear, and exact description.

My invention relates to an improvement in lanterns, and has for its object to provide a lantern especially adapted for signaling purposes so constructed that the bearer may expeditiously and at will display a white or green or other colored light, thereby obviating the necessity of a track-walker, railroad-yard man, or station-master being supplied with three lanterns, as at present—namely, a white, a green, and a red lantern.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a side elevation of the lantern, illustrating the parts of the same in position to display a colored light. Fig. 2 is a central vertical section through the lantern. Fig. 3 is a bottom plan view partially broken away; and Fig. 4 is a partial perspective view of the inner portion of the lantern-body, illustrating the construction of a rack and its guide.

The upper portion of the lantern is of the usual construction, consisting of a cap 10, cage 11, and a globe 12. The cage is attached in any suitable or approved manner at its lower end to a body 13, preferably of cylindrical contour, which body is provided with a suitable base 14, and in the upper portion of the body the globe 12 is seated in the usual manner. The base 14 is usually carried inward beneath the body to form an inner annular flange 15; or the said flange may be attached to the body at its junction with the base.

Upon the inner wall of the body 13, at opposite sides, a vertical guide-block 16 is secured, each guide-block being provided with a longitudinal essentially dovetail slideway or groove 17, and in each slideway of each guide-block a dovetail rack 18 is inserted, which

racks are preferably provided at their lower ends with a foot 19.

In conjunction with the globe 12 and the body I employ ordinarily two circular glass shades 20 and 21, open at the top and bottom, one shade being of less diameter than the other, whereby the smaller may fit loosely within the larger. The smaller shade 20, however, is of sufficient diameter to completely surround the burner 22 of the oil-fount 23 without contacting with the same.

Each inner circular or ring-like shade 20 and 21 is provided at one edge with an attached metal band 24, the band of the innermost or smaller shade being located at its top, and the band of the outer or larger shade being located at its bottom, as best illustrated in Fig. 2. The rack 18 upon one side of the body has attached to its upper end a rod 25, which is curved upward and carried downward at its upper extremity and firmly secured at the upper end to the upper edge of the inner shade 20 through the medium of the band 24, or its equivalent, the rack upon the opposite side being secured to the lower edge of the outer shade in any approved manner, as best illustrated in Fig. 2.

Each rack is elevated or lowered through the medium of a pinion 26, and each pinion is mounted upon a spindle 27, which spindles are journaled in the body at opposite sides of the same, as best shown in dotted lines in Fig. 3, the foot 19 upon the racks effectually preventing the said racks from being carried far enough upward to leave the pinions.

In operation to display a white light both racks and pinions are manipulated to draw both of the colored-glass shades 20 and 21 downward, so that the smaller will telescope within the larger and both be below the top of the burner 22, or essentially so.

Ordinarily two shades are employed in connection with the lantern, the inner one being colored green and the outer red, or vice versa. If, for instance, it is necessary to display a red light, it may be expeditiously done by manipulating the spindle 27, operating the rack attached to the outer shade 21, so that the said shade will be carried upward and made to surround the flame. If a green light is desired immediately afterward, the red shade

may be carried downward to its normal position and the green shade elevated, as shown in Figs. 1 and 2. The oil-fount 23 may be secured to the body in any of the well-known ways.

5 It is obvious from the foregoing description that when a track-walker, for instance, is supplied with a lantern constructed in accordance with my invention and a point of danger is reached in the track by elevating the red
10 shade the danger may be made known immediately to an approaching train, and the track-walker be thereby saved the necessity of carrying lanterns of different colors or running back to the nearest station to obtain a proper
15 lantern.

I am aware that it is not new to provide in connection with a burner a vertically-adjustable colored auxiliary chimney or shade, as the said construction is disclosed in the patent granted February 27, 1872, to H. White
20 for improvements in signal-lights, and I do not, therefore, claim the same. The feature of my invention consists in the manner of manipulating two or more colored auxiliary
25 shades or chimneys, whereby any one may

be brought into the path of the rays of light without disturbing the others.

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

In a lantern, the combination, with the body and the burner thereof, the said body being provided with slideways upon diametrically-opposite inner faces, of telescopic
30 transparent colored shades surrounding the burner, a ring supporting the outer shade, a
35 U-shaped rod having one member longer than the other attached to the inner shade, racks capable of vertical movement in the slide-
ways of the body, a connection between one
40 rack and the supporting-ring and a connection between the U-shaped rod and the opposite rack, and pinion-carrying spindles adapted for the manipulation of the racks,
45 substantially as and for the purpose specified.

SAMUEL B. FIELD.

Witnesses:

WILLIAM R. STANBERY,
EDWARD Q. FIELD.