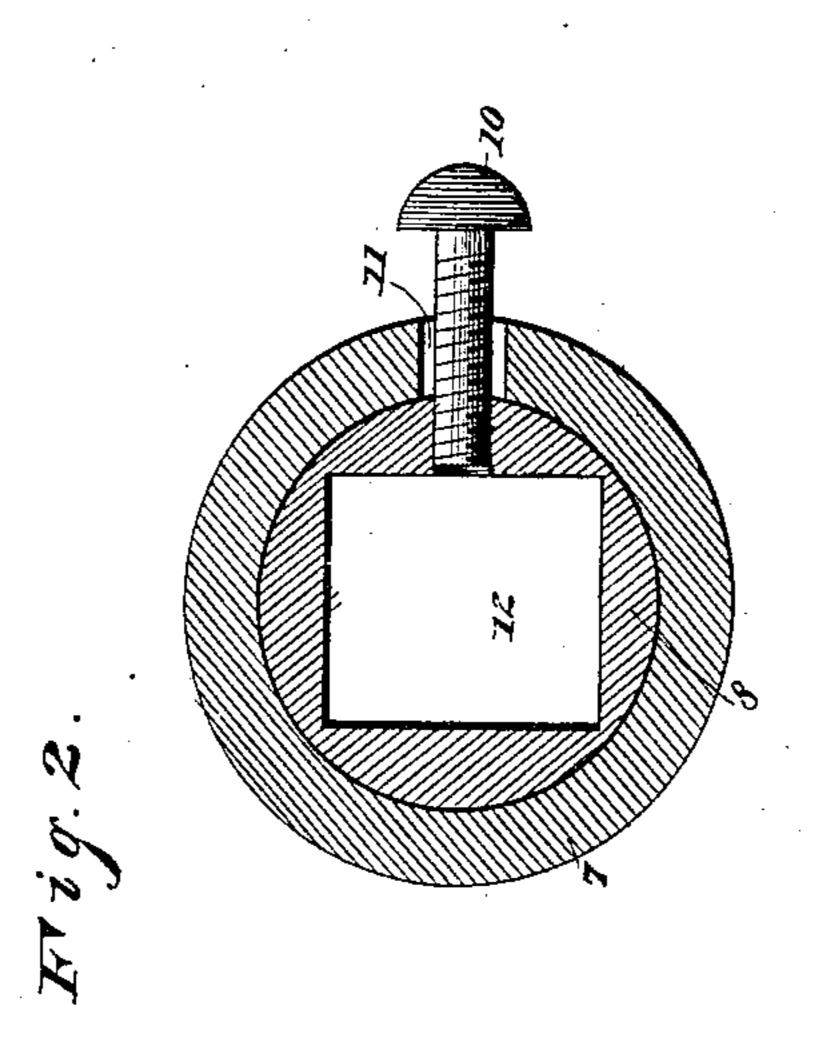
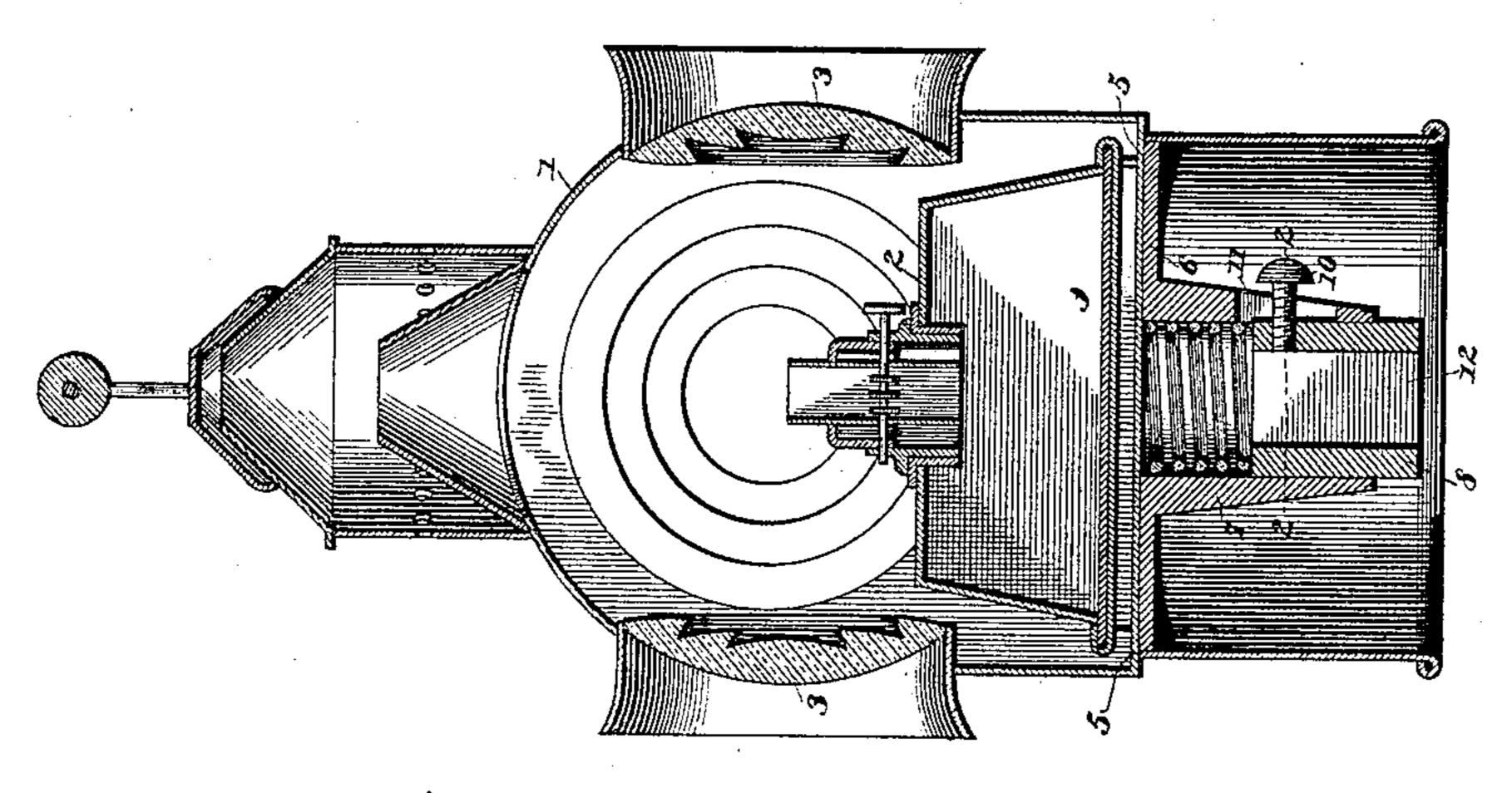
(No Model.)

G. L. ESTES.
SWITCH LANTERN.

No. 461,824.

Patented Oct. 27, 1891.





Higg. Z.

Hitnesses:

Inventor George L. Estes,

By Zis Afforneys,

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## United States Patent Office.

GEORGE LINCOLN ESTES, OF ROCHESTER, NEW YORK.

## SWITCH-LANTERN.

SPECIFICATION forming part of Letters Patent No. 461,824, dated October 27, 1891.

Application filed September 8, 1890. Serial No. 364,299. (No model.)

To all whom it may concern:

Be it known that I, GEORGE LINCOLN ESTES, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Switch-Lantern, of which the following is a specification.

This invention relates to switch-lanterns such as are commonly used upon switch10 stands; and it has for its object to construct a lantern which may be securely mounted upon the switch-stand and which shall be cushioned by means of a suitable spring, so as to obviate the danger of the lamp being broken or injured when exposed to the sudden and severe jarring caused by rapidly-passing trains.

With this end in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, Figure 1 is a vertical sectional view of a lamp equipped with my improvements. Fig. 2 is a horizontal sectional view taken on the line 2 2 in Fig. 1.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the lamp body or easing, within which is arranged the lamp 2. The casing is provided in the usual manner with lenses 3. Directly under the botton 5 of the lantern-casing is arranged a plate 6, having a down-struction of the latter is mounted a vertically-movable bushing 8, between the upper end of which and the under side of the lamp-bottom is arranged a spring-cushion 9, which may consist of an ordinary coiled spring, a rubber spring, or a compound spring of any desired construction. The sliding bushing 8 is con-

nected with the collar 7 by means of a setscrew 10, extended through a vertical slot 11 in the said collar, which said slot is of sufficient length to admit of a vertical movement of any desired extent. The bushing 8 has a rectangular central opening 12, whereby it is adapted to be mounted upon the switch-stand, and it will be seen that by simply tightening 50 the set-screw 10 the point of the latter will engage the supporting-arm of the switchstand, and thus secure the lamp in position upon the latter.

The operation of my invention and its advantages will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The lamp, it will be observed, is practically supported upon the spring-cushion 9. Hence in the 60 event of any sudden jar the said spring will yield and the lamp will be subjected to no injury nor to the danger of being extinguished, as frequently happens with switch-lamps of ordinary construction.

Having described my invention, what I claim is—

The combination of the collar having a vertical slot, the bushing mounted slidingly in said collar and having a rectangular central 70 opening, a set-screw extending transversely through the side of said bushing, working in the slot in the collar, and adapted to secure the bushing to its support, and a spring arranged in the collar between the bushing and the bottom of the lamp-casing, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE LINCOLN ESTES.

Witnesses:

JOSEPH GIBSON, LYMAN F. WILDER.