

(No Model.)

C. H. PETERS.
RAILWAY SIGNAL LANTERN.

No. 385,877.

Patented July 10, 1888.

Fig. 1.

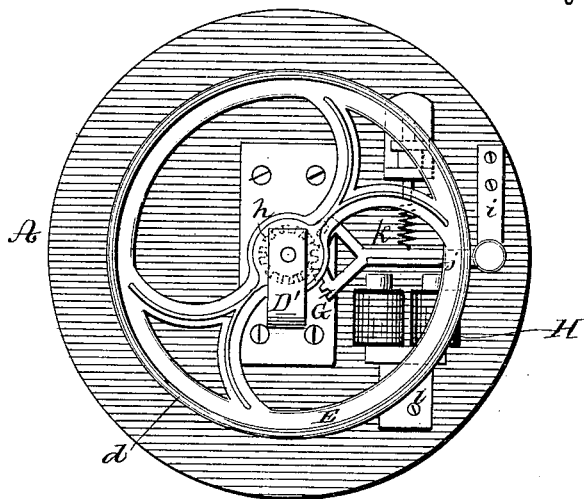


Fig. 2.

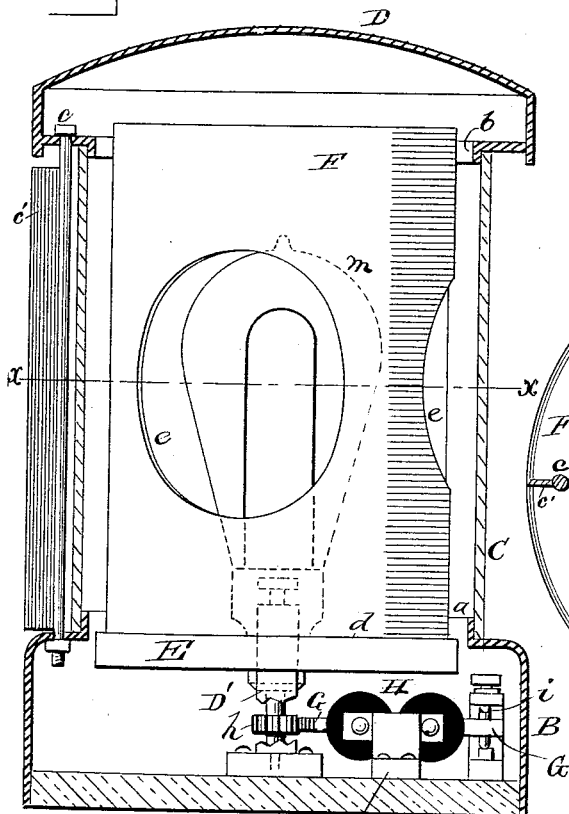
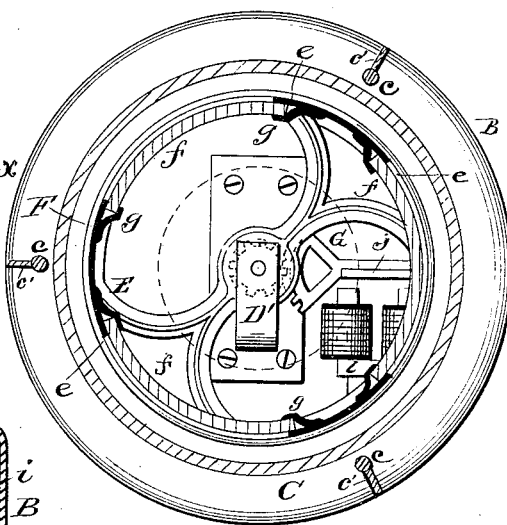


Fig. 3.



WITNESSES:

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CHRISTIAN H. PETERS, OF DANVILLE, ILLINOIS.

RAILWAY SIGNAL-LANTERN.

SPECIFICATION forming part of Letters Patent No. 385,877, dated July 10, 1888.

Application filed February 23, 1888. Serial No. 265,602. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN H. PETERS, of Danville, in the county of Vermilion and State of Illinois, have invented a new and Improved Railway-Signal, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a plan view of a portion of my improved railway-signal. Fig. 2 is a side elevation, partly in section; and Fig. 3 is a horizontal section taken on line *xx* in Fig. 2.

Similar letters of reference indicate corresponding parts in all the views.

The object of my invention is to construct a simple and effective block-signal for railways.

My invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

To the base *A* is attached a casing, *B*, which extends upward and is curved inwardly and provided with a collar, *a*, for receiving the hollow glass cylinder *C*. To the top of the cylinder is fitted a hollow cap, *D*, provided with a collar, *b*, fitted to the glass cylinder *C*. The cap *D* and casing *B* are connected by bolts *e*, which draw them into close contact with the ends of the glass cylinder *C*. To each bolt is attached a plate, *e'*, for screening the bull's-eyes which are not to be displayed.

To the center of the base *A* is secured a frame, *D'*, in which is pivoted a wheel, *E*, having a flange, *d*, upon its upper surface for receiving the metallic cylinder *F*, which is secured to the wheel *E* in any convenient way. The metallic cylinder *F* is provided with several openings, *e*, behind which are placed the windows *f*, of different-colored glass, and the sides of the cylinder *F* are colored to correspond with the color of the bull's-eye inserted in it. In the present case there are three openings and three windows, the glass of each window being held in place by a flange, *g*, extending around the openings *e*. The glass windows *f* are bent to conform to the curvature of the metallic cylinder *F*. The wheel *E* carries a pinion, *h*, which is engaged by a toothed sector-lever, *G*, pivoted in the frame *i*, attached to the base *A*.

The sector-lever *G* carries an armature, *j*, and is drawn backward by the adjustable retractile spring *k*. The electro-magnet *H* is supported by the bracket *l*, attached to the base *A*, the said magnet being held in position to act upon the armature *j*. The magnet *H* is placed in the block-signal line, and when the circuit is closed by any of the well-known instruments used for that purpose the armature *j* is drawn toward the magnet, thereby turning the wheel *E* and cylinder *F* about one-third of a revolution. The cylinder *F* contains an incandescent electric lamp, *m*, the light of which is colored by the colored-glass windows *f*.

The lantern may be used for block-signals to indicate when a section of the road is occupied, or it may be used with advantage at the crossings of the road.

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

1. The combination, with the signal-lamp carrying a gear-wheel, of a lever having a segment engaging said gear and an armature, an electro-magnet for throwing the lever, and means for returning the lever to its normal position.

2. The combination, with the bottom casing, *B*, a cylinder resting thereon, the cap *D* on top of the said cylinder, and the bolts connecting the cap and casing outside of the cylinder and provided with longitudinally-extending plates on their outer sides, of the rotary signal-lantern within the cylinder and an operating mechanism in the bottom casing, substantially as set forth.

3. In a railway-signal, the combination of the casing *B*, the glass cylinder *C*, the cap *D*, the wheel *E*, and hollow metallic cylinder *F*, provided with the windows *f*, the sector-wheel *G*, carrying the armature *j*, the retractile spring *k*, and the electro-magnet *H*, substantially as described.

CHRISTIAN H. PETERS.

Witnesses:

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