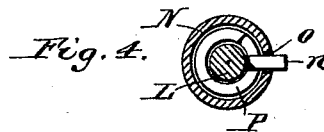
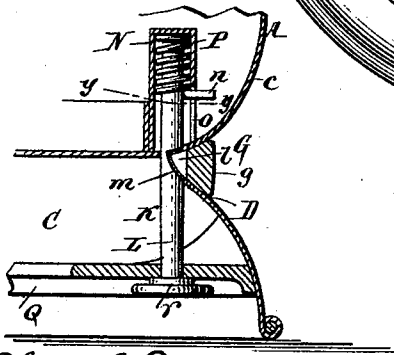
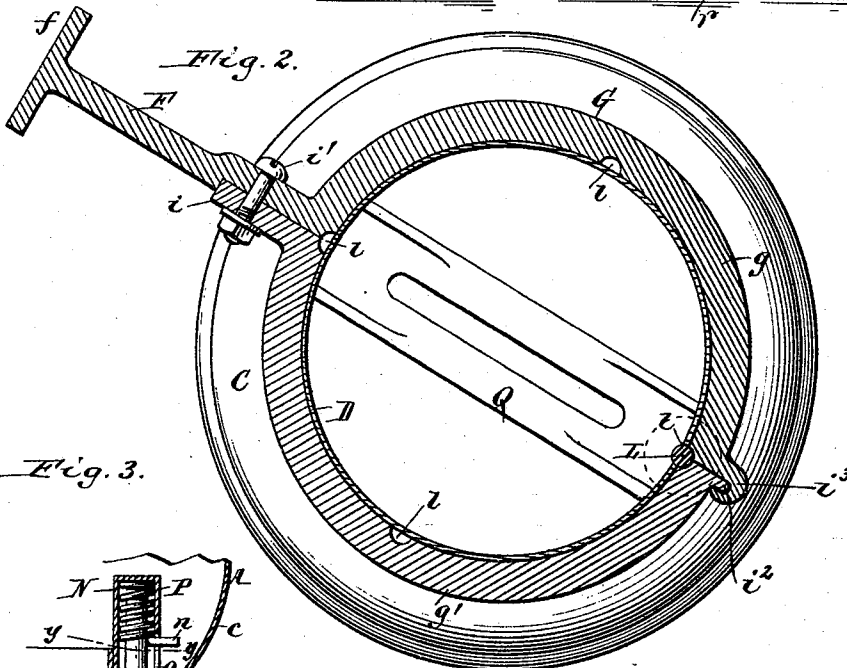
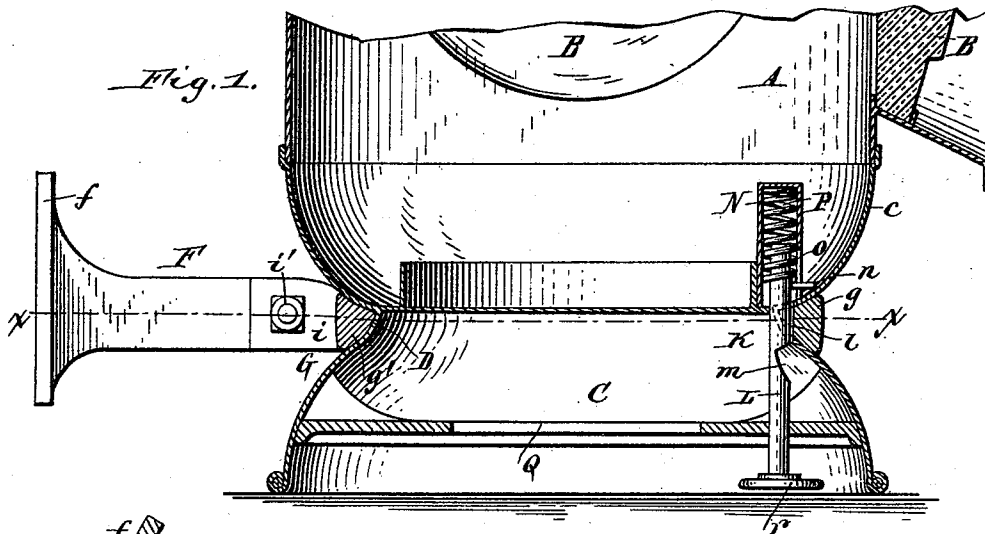


(No Model.)

F. K. WRIGHT.
SIGNAL LANTERN HOLDER.

No. 496,470.

Patented May 2, 1893.



Theo. L. Popp.
Daniel F. Salmon. } Witnesses.

Frederick K. Wright, Inventor.
By Wilhelm & Bonner.
Attorneys.

UNITED STATES PATENT OFFICE.

FREDERICK K. WRIGHT, OF SYRACUSE, NEW YORK, ASSIGNOR TO THE
STEAM GAUGE AND LANTERN COMPANY, OF SAME PLACE.

SIGNAL-LANTERN HOLDER.

SPECIFICATION forming part of Letters Patent No. 496,470, dated May 2, 1893.

Application filed August 10, 1891. Serial No. 402,181. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK K. WRIGHT, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Signal-Lantern Holders, of which the following is a specification.

This invention relates to the signal lanterns which are attached to the rear car of a rail-way train and are capable of being rotated in their supports for the purpose of changing the position of the lenses and have locking devices for locking the lantern in the desired position.

The object of my invention is to produce a locking device for lanterns of this character which is simple and durable in construction, easy to manipulate and which will hold the lantern securely in position.

In the accompanying drawings: Figure 1 is a sectional elevation of the lower part of a signal lantern and its support provided with my improvements, the lantern being shown locked to its support. Fig. 2 is a horizontal section in line $x-x$ Fig. 1. Fig. 3 is a fragmentary sectional elevation of the locking device of the lantern, showing the lantern unlocked for shifting it in its support. Fig. 4 is a horizontal section in line $y-y$ Fig. 3.

Like letters of reference refer to like parts in the several figures.

A represents the body or case of the lantern provided with several signal lenses B in its sides, such as are commonly employed for signaling purposes on rail-way trains.

C represents the base of the lantern which converges upwardly and is secured to the downwardly converging bottom c of the case, thereby forming an external channel or contracted neck D of V-form between the contiguous portions of the case and base.

F represents the horizontal bracket which supports the lantern and which is provided at one end with a vertical plate f which is adapted to enter a socket secured to the side of the car. The opposite end of the bracket is provided with a supporting ring G which embraces the contracted neck D of the lantern and in which the latter can be revolved. This supporting ring is preferably composed of two semi-circular parts g g' one of which g is

formed integral with the bracket while the other g' is removably secured thereto to permit the lantern to be inserted or removed from the bracket. The removable section of the supporting ring is provided at its inner end with a lug i which is secured to the bracket by a bolt i' , while its outer end is provided with a laterally projecting nose i'' which engages with an overhanging lip or hook i''' formed on the fixed section of the supporting ring, thereby securing the sections of the supporting ring together in an extremely simple manner. The inner faces of the supporting ring form a V-shaped ridge conforming to the channel or neck formed by the contracted portions of the base and case.

K represents a vertically sliding bolt which is attached to the lantern and interlocks with the supporting ring. This bolt intersects the inner or ridge portion of the supporting ring and engages in one of a series of notches l formed in the ridge of the supporting ring when the lantern is locked to the ring. The outer side of the sliding bolt, facing the supporting ring, is provided with a recess m which is adapted to register with the ridge of the supporting ring, so that the sliding bolt can be made to clear the inner portion of the supporting ring and permit the lantern to be revolved therein. The upper portion of the sliding bolt passes through the bottom of the case and is arranged in a cylindrical cap N secured to the upper side of the bottom. The sliding bolt is provided with a laterally projecting pin n which extends through a vertical slot o formed in the side of the cap, whereby the sliding bolt is held against turning. Any other suitable device for holding the bolt against turning may be employed, if preferred.

P represents a spiral spring whereby the sliding bolt is normally held in a depressed position. This spring surrounds the upper portion of the sliding bolt and bears with its ends against the top of the cap N and the pin n of the sliding bolt. The pin n limits the downward movement of the sliding bolt by striking the bottom of the case.

Q represents a cross bar or handle secured in the open base of the lantern, and which is grasped for turning the lantern in the sup-

porting ring. The lower portion of the sliding bolt passes loosely through this handle and is guided therein in its vertical movement. The lower end of the sliding bolt is preferably provided with a thumb piece *r* for pressing the bolt upwardly.

In the position of the parts represented in Fig. 1, the upper or unreduced portion of the sliding bolt rests in one of the notches of the supporting ring whereby the lantern is interlocked with the supporting ring and is securely held in position against turning. For the purpose of unlocking the lantern, the sliding bolt is raised so that its recess *m* stands opposite the inner portion of the supporting ring. In this position of the bolt, the ring is cleared by the notch of the bolt and the lantern can be turned to shift its lenses. When the lantern is now turned, the recess of the sliding bolt registers with the ridge of the supporting ring and the ridge engages in the recess of the bolt and retains the latter in its raised position until the lantern has been

turned sufficient to bring the sliding bolt in line with the next notch in the ring when the spring *P* forces the sliding bolt down and causes the bolt to lock the lantern in position.

I claim as my invention—

The combination with the lantern case, of a supporting ring surrounding the neck of the case and provided on its inner side with locking notches, and a locking spring bolt attached to the lantern case and capable of sliding vertically therein, said bolt intersecting the locking ring on the inner side thereof and being provided in its outer side with a recess, which enables the bolt to clear the ring when the bolt is adjusted to bring its recess opposite the inner side of the ring, substantially as set forth.

Witness my hand this 4th day of August, 1891.

FREDERICK K. WRIGHT.

Witnesses:

O. L. SALMON,
F. H. ALLEN.