(No Model.)

R. H. JOLLY.

LAMP LIGHTER.

No. 492,685. Patented Feb. 28, 1893.

Fig. 1.

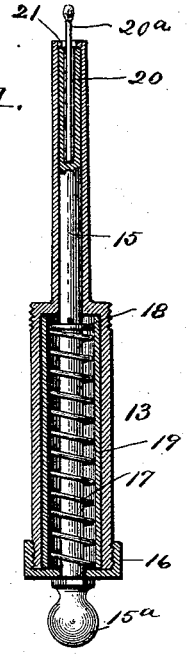


Fig. 2.

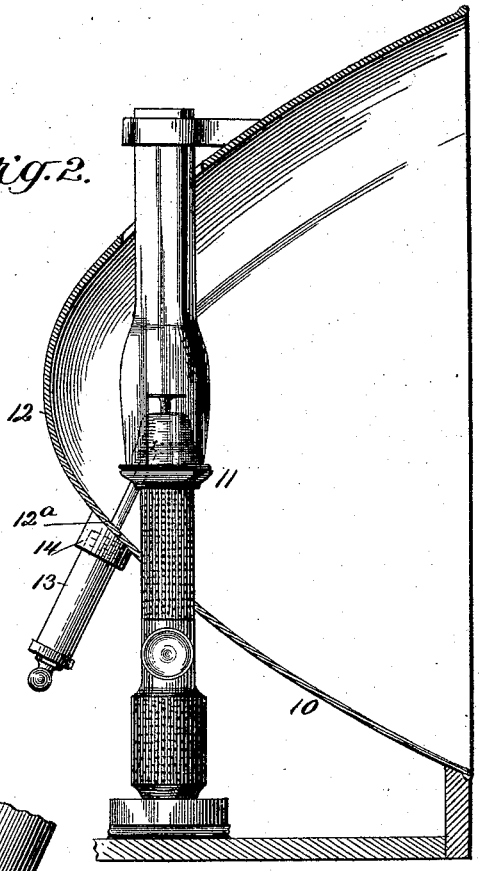
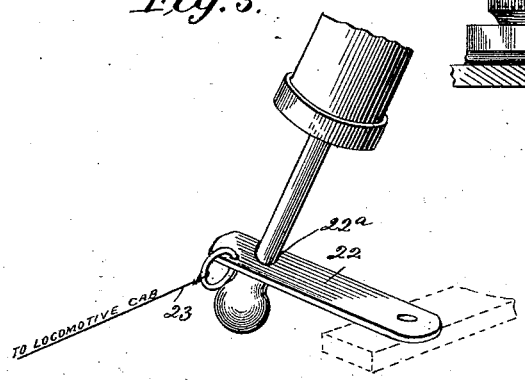


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

RICHARD H. JOLLY, OF BUCYRUS, OHIO, ASSIGNOR OF ONE-HALF TO EDWARD CLARK, OF SAME PLACE.

LAMP-LIGHTER.

SPECIFICATION forming part of Letters Patent No. 492,685, dated February 28, 1893.

Application filed June 17, 1892. Serial No. 437,089. (No model.)

To all whom it may concern:

Be it known that I, RICHARD H. JOLLY, of Bucyrus, in the county of Crawford and State of Ohio, have invented a new and useful Improvement in Lamp-Lighters, of which the following is a specification.

This invention relates generally to lamp lighters and particularly to an improved lighter for locomotive head lights.

The object of my invention is to provide a simple device that shall light the lamp without raising the chimney, one that can be operated while the locomotive is moving rapidly and one which can be operated from the cab when so desired.

With these objects in view my invention consists in the peculiar construction and arrangement of the various parts as will be more fully hereinafter described and claimed.

In the drawings forming a part of this specification Figure 1 is a longitudinal section of my improved device. Fig. 2 is an elevation showing it applied, and Fig. 3 is a modification.

In carrying out my invention I employ a locomotive head light case 10, which opens at the back or side and within said case is arranged the lamp 11, any reflector 12, which are of the usual or an approved pattern. An aperture 12^a is produced in the rear portion of the reflector, and in said aperture is secured a tube 13, an internally threaded sleeve 14, being attached to the back of the reflector, by means of which the tube 13 is secured in position. The forward or upper end of the tube 13 is contracted and passes through the chimney holder below the chimney, and extends to a point level with the top of wick tube. A plunger 15 is arranged within the tube 13, said plunger extending nearly to the forward or upper end of the tube and the rear or lower end projects through a cap 16, secured upon the rear end of the tube, and is provided with a knob 15^a. Within the rear portion of the tube 13 is arranged a spiral spring 17 coiled around the plunger 15, and the collar 18 is secured upon said plunger against which the forward end of spring 17 bears, the cap 16 serving to confine said spring to the tube, and produce a pressure upon the collar 18. If desired a confining barrel 19 may be arranged within the tube 13, but this is not at all necessary and may be dispensed with. The forward end of the plunger 15 is formed with a socket 20 which is adapted to receive the stick of a match 20^a, the head of said match projecting beyond the forward end of the plunger. A flat steel friction ring 21 is secured in the forward or upper end of the tube 13, the opening in said ring being of such diameter as to permit a match head being passed carefully through the same without ignition, but when the match head is passed forcibly through said ring the friction of the head against the ring is sufficient to cause ignition.

In practice the plunger and operating springs are arranged within the tube 13, and the device as a whole secured to the reflector by screwing the tube 13 into the sleeve 14, and it will be noticed that when the parts are properly assembled the forward or upper end of the tube will pass through the chimney holder below the chimney, thus avoiding raising the chimney. The forward end of plunger rests adjacent to the steel ring and carries a match within its socket. Now when it is desired to light the lamp, it is only necessary to open the head light case at the back, grasp the knob on the end of the plunger carefully draw it back a short distance, and then release the same. The coiled spring will immediately project the plunger forward, and cause the match to pass through the steel ring thus igniting the match and lighting the lamp. It will thus be seen that I provide a device that will light the lamp without raising the chimney, and one which can be operated while the locomotive is running at full speed.

In order to operate the device from the locomotive cab, I provide a latch plate 22, which is pivoted within the head light case to the rear of the reflector and provided with a notch 22^a near one end. A cord 23 is attached to said end and extends to the cab. Now to operate the device from the cab, the plunger carrying a match is first retracted and held in such position by means of the latch plate 22, the plunger entering the notch 22^a and by pulling upon the cord 23 the plate 22 is thrown out of engagement with the plunger, and the

spring forces the same forward as above described lighting the lamp. It will also be understood that the plunger and tube can be carried in the pocket and quickly and easily attached when desired.

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

1. The combination with the reflector and lamp, said reflector having an opening in its rear portion, of a threaded collar arranged upon the rear side of the reflector and surrounding the opening, a tube passed through the opening and screwed into the collar, the inner end of said tube being reduced and provided with a thin friction ring, a match carrying plunger arranged within the tube, a spring surrounding the same, and a detachable cap arranged upon the lower end of the tube to confine the spring and plunger substantially as shown and described.

2. The combination with a locomotive cab and head light case, of the lamp and reflector, said reflector having an opening in the rear portion of the same, a tube secured therein, a spring match carrying plunger arranged in the tube and provided with a knob at its lower end, a detachable cap upon the end of tube, a latch plate pivoted to one side of head light case and provided with a notch to receive and hold the plunger and a cord attached to said plate and extending into the locomotive cab substantially as described.

RICHARD H. JOLLY.

Witnesses:
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