(No Model.)

F. A. STEVENS.

LOCOMOTIVE HEADLIGHT COVER.

No. 504,949. Patented Sept. 12, 1893.

Fig. 1.

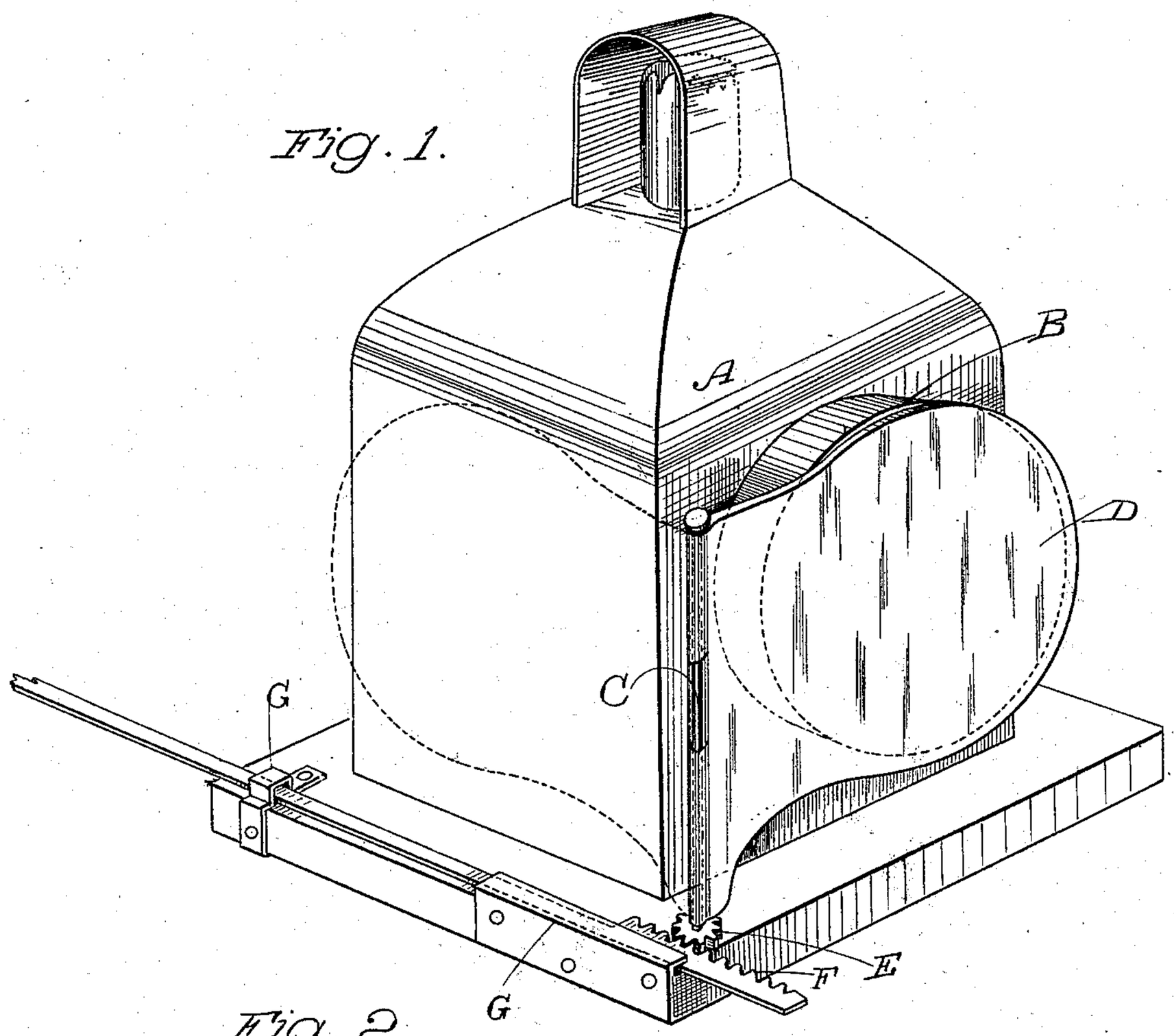
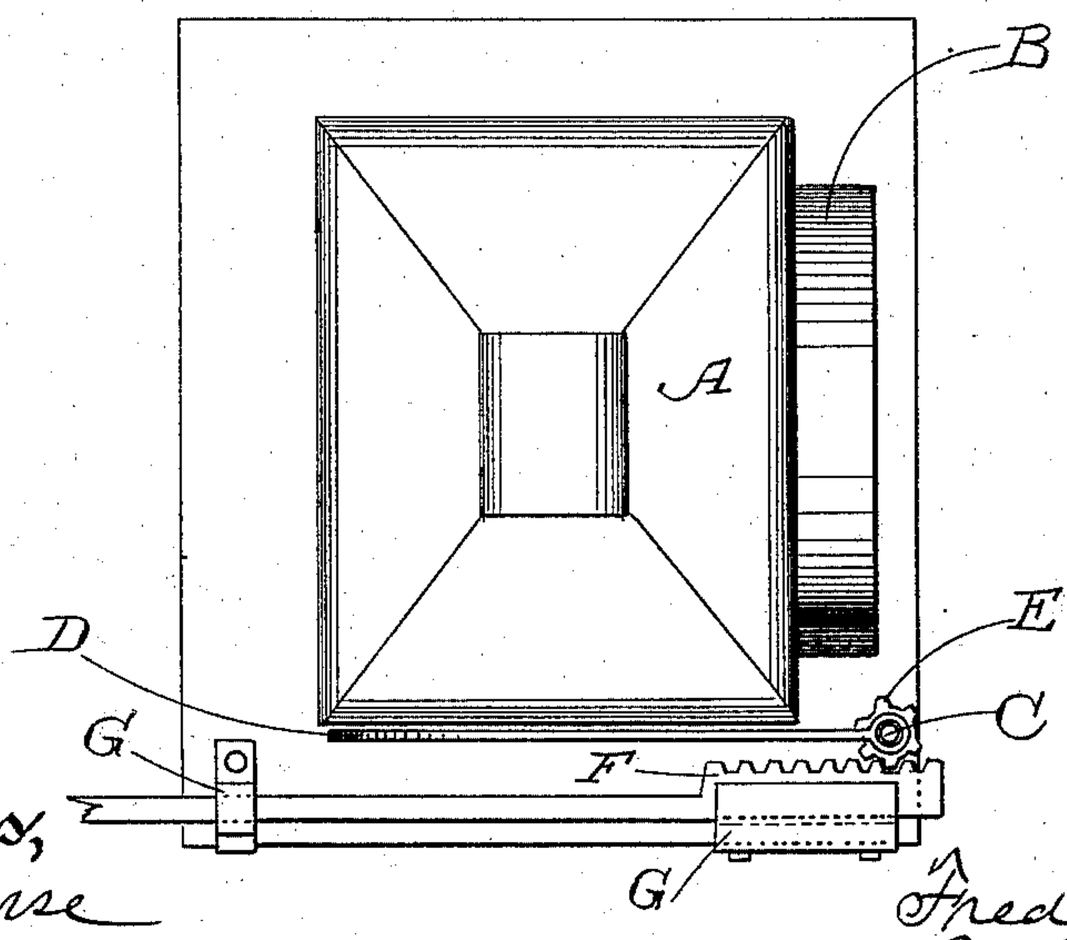


Fig. 2



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UNITED STATES PATENT OFFICE.

FRED A. STEVENS, OF SACRAMENTO, CALIFORNIA.

LOCOMOTIVE-HEADLIGHT COVER.

SPECIFICATION forming part of Letters Patent No. 504,949, dated September 12, 1893.

Application filed April 12, 1893. Serial No. 470,070. (No model.)

To all whom it may concern:

Be it known that I, FRED A. STEVENS, a citizen of the United States, residing at Sacramento, Sacramento county, State of California, have invented an Improvement in Locomotive-Headlight Covers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an attachment for locomotive head-lights whereby the front opening and glass may be covered or exposed at will by mechanism actuated from the cab by the engineer.

It consists of a cover fixed to a vertical rotatable shaft, and a pinion and rack bar by which it may be turned so as to swing the cover to either expose or cover the light at will.

Referring to the accompanying drawings for a more complete explanation of my invention,—Figure 1 is a view of a locomotive headlight showing the attachment of my device. Fig. 2 is a top view of the same with the cover in line with the direction of travel, so as to expose the light.

The object of my invention is to provide an easily operated device by which the engineer can cover or uncover the head-light at will.

When trains run in upon a side track, it is the rule to cover the head-light and remove the rear train light while the train is upon the siding, but as soon as the train again moves out these lights must be exposed.

A represents the lantern of a head-light, and B the glazed front through which the light is visible.

At one side of the lantern, and in the line of a plane extended through the glass front, is journaled a vertical shaft C having fixed to it a plate D of sufficient size to cover the glass and front of the head-light when turned so as to stand across it. Upon the shaft at any suitable point is fixed a pinion E.

F is a rack, the teeth of which engage the pinion E, and the rack bar travels in suitable guides G so that it may be reciprocated, and cause the rack to turn the pinion and with it the cover plate, so that the latter may be either turned to extend across the front of the lantern and cover the glass, or turned so as to stand in line with the direction of travel and expose the light. In the latter case it is turned entirely around so as to lie against the side of the lantern, which will be its usual position when not employed as a cover.

It will be manifest that a worm gear, or other mechanical equivalent of the rack and pinion, may be used with equal advantage. The rod by which the rack bar is actuated is carried back and into the cab of the engine so as to be within easy reach of either engineer or fireman, as may be desired, and the cover is thus operated without leaving the cab.

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

1. A cover attachment for locomotive headlights, consisting of a hinged swinging cover plate and a mechanism comprising a pinion on the axis of the cover plate and a rack connected therewith and with the cab, whereby said cover plate may be turned about its hinge to cover or uncover the light opening, substantially as herein described.

2. A cover attachment for locomotive headlights, consisting of the cover plate, a vertical shaft journaled at one side in the plane of the lantern front, to which shaft the cover is fixed, a pinion fixed to the shaft, a reciprocating rack, the teeth of which engage the teeth of the pinion, and a rod extending from the rack bar rearwardly to the engine cab whereby the cover plate is actuated, substantially as herein described.

In witness whereof I have hereunto set my hand.

FRED A. STEVENS.

Witnesses:
S. H. NOURSE,
J. A. BAYLESS.