

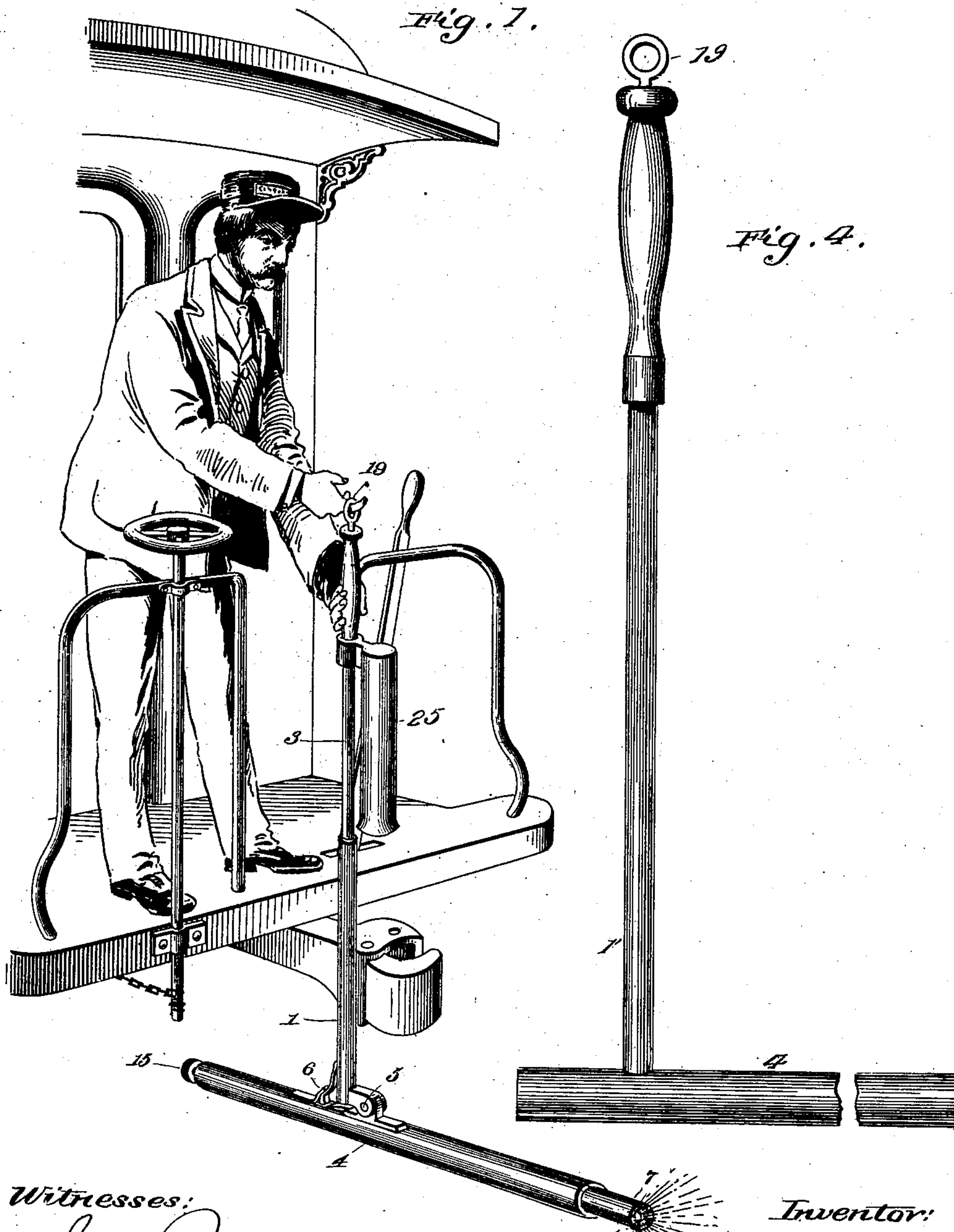
No. 720,397.

PATENTED FEB. 10, 1903.

W. C. BECKWITH.  
RAILWAY FUSEE PROJECTOR.  
APPLICATION FILED DEC. 9, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

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A. S. Pattison  
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No. 720,397.

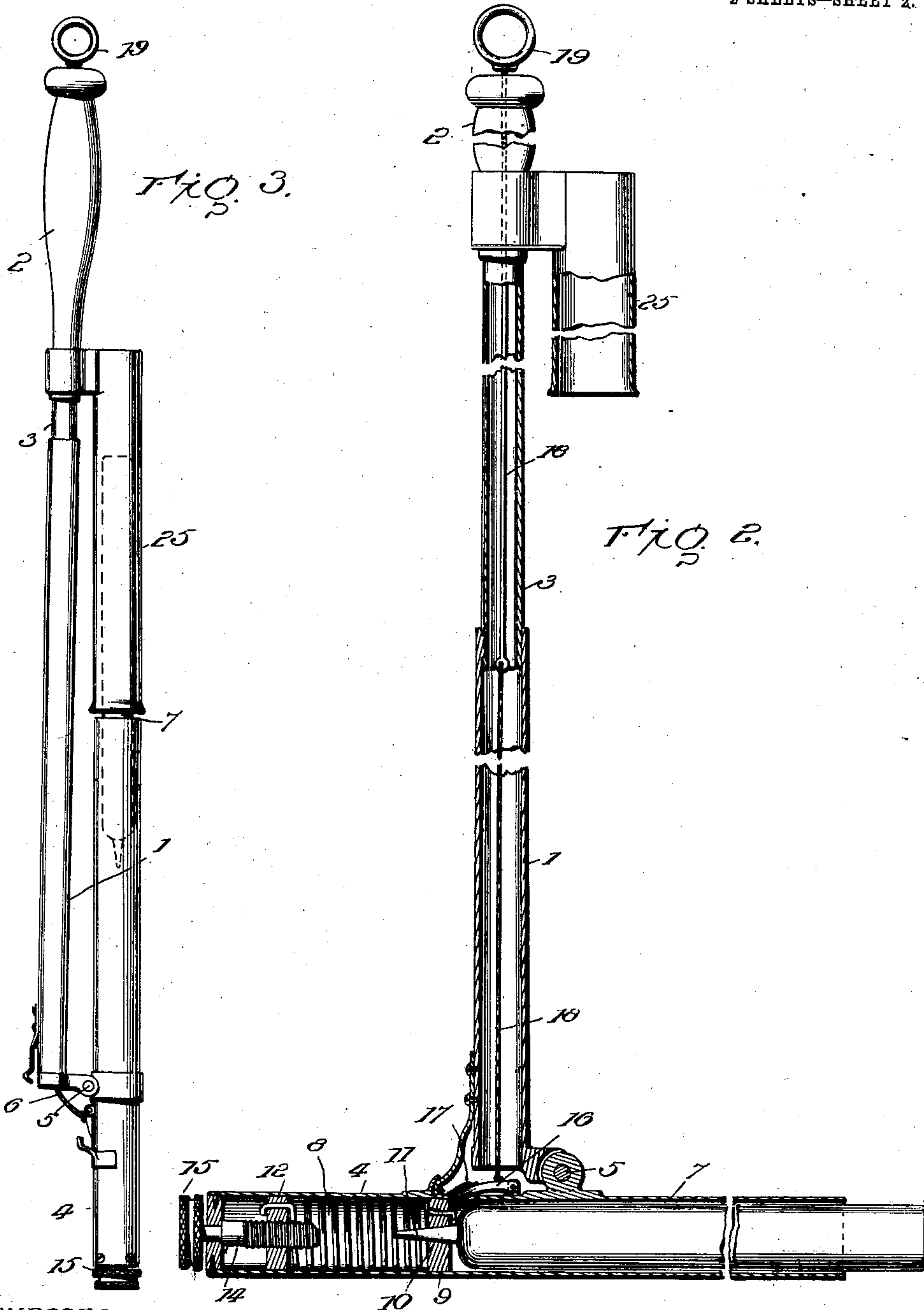
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WITNESSES:

*Chas. P. Wright Jr.*

BY

INVENTOR  
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# UNITED STATES PATENT OFFICE.

WALTER C. BECKWITH, OF FOSTORIA, OHIO.

## RAILWAY-FUSEE PROJECTOR.

SPECIFICATION forming part of Letters Patent No. 720,397, dated February 10, 1903.

Application filed December 9, 1902. Serial No. 134,558. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER C. BECKWITH, a citizen of the United States, residing at Fostoria, in the county of Seneca and State of Ohio, have invented new and useful Improvements in Railway-Fusee Projectors, of which the following is a specification.

My invention relates to improvements in railway-fusee projectors, and has for its object the production of a device whereby a brakeman or other person can project a fusee from a train—preferably the rear end thereof—practically at the same speed as the train is moving, whereby the fusee will simply drop upon the track without receiving the momentum of the train, and thus prevent injury to the fusee and also prevent extinguishing the same.

Heretofore when fusees are thrown from a moving train they receive the momentum of the train and strike the track or the road-bed with an enormous impact, which is found in practice to mutilate and destroy a large number of the fusees or else to extinguish the fusees, necessitating the throwing of other fusees, and consequently a needless waste thereof, which in the aggregate amounts to a large sum to the railway company.

In the accompanying drawings, Figure 1 is a view showing a person in the act of projecting a fusee from a device constructed according to my invention from a moving train. Fig. 2 is a view showing the implement in position to be used and is a sectional view thereof, the same being broken away at several points throughout its length. Fig. 3 is a side elevation of my implement, showing it closed up into a compact form and showing the fusee therein and protected from injury. Fig. 4 is a view showing a modification of my invention.

By reference to Fig. 1 it will be observed that my invention is intended to be used and is preferably used from the rear end of the train. The person using the implement will stand at the rear end of the train and hold it in such a position as to place the fusee-projecting barrel in close proximity to the road-bed, whereby when the fusee passes from the implement it will have practically no dis-

tance to fall, and being projected from the implement at practically the speed of the train it is not subject to any impact, owing to the momentum thereof, and therefore is neither injured or extinguished by contact with the road-bed.

By reference to Fig. 2 it will be seen that a tube 2 or handle 1 is provided having a handhold 2 at its upper end. In Figs. 2 and 3 I show this handle portion collapsible, though I desire it to be understood that it may be a non-collapsible or rigid handle portion without departing from the spirit and scope of my invention. For the purpose of compactness, however, I prefer to use the collapsible tube made of sections 1 and 3, as shown in Fig. 2. The lower end of this handle is connected to the fusee-projecting tube 4. As here shown, this handle is hinged to the projecting-tube 4 at a point 5, though, if desired, the handle may be made rigid with the projecting-tube, as illustrated in Fig. 4. By means of hinging the handle portion 1 to the projecting tube 4 the implement is adapted to be folded, as shown in Fig. 3. Any desired form of catch—as, for instance, that shown at 6—may be provided for holding the handle portion 1 and the projecting-tube 4 into their proper right-angular positions when open for the purpose of using.

The projecting-tube 4 has at one end a suitable means for projecting or throwing the fusee 7 therefrom. This means may be of any desired form or construction, and the one here shown consists of a coiled spring 8, which has one end to bear upon a follower 9. This follower is perforated, as shown at 10, to receive the usual spike 11, which is upon one end of the fusee 7. The opposite end of the spring 8 rests upon or is connected with an adjustable follower 12. This follower 12 is adapted to be moved longitudinally of the tube in any desired manner for the purpose of regulating the tension of the spring 8, and hence regulating the force or speed at which the fusee 7 is delivered therefrom and which will be gaged approximately to the speed of the train. The means here shown for moving the follower 12 within the tube consists of a screw 14, having connected therewith an



external thumb-screw 15, by means of which the operator can readily control the tension of the spring as desired.

The follower 10 is held in its set position by any desired means that can be tripped by the operator from the upper end of the handle 1. There is here shown one means by which this may be accomplished, and it consists of a suitable latch or catch 16, which may or not be provided with a spring 17 for normally holding it in its locking position. When the follower 10 is moved inward by pushing the fusee 7 therein, the catch or latch 16 will engage the follower, as shown, and hold it in its locked position.

One form of means for releasing the follower by moving the locking member or catch 16 out of engagement with the follower is here shown and consists of a ligament of any desired material 18, which extends up through the handle portion and has a suitable operating member 19 connected therewith.

From this description it will be readily understood that after the fusee has been forced therein and the follower locked by the catch 16 and the implement held in the position shown in Fig. 1 an upward pull upon the operating member 19 will release the follower and the fusee will be projected from the tube.

Instead of having a collapsible handle 1, as shown in Fig. 2, a non-collapsible handle, as one, 1', (shown in Fig. 4,) may be provided, and this handle may be rigidly secured to the projecting tube, as also shown in said Fig. 4, in cases where it is desired to cheapen the construction of the device and in cases where it is found not necessary to make a folding implement.

When the implement is folded, the fusee is placed in one end of the projecting-tube 1, and a suitable tubular cap or cover 25 is provided which covers the projecting portion of the fusee and protects the same, as is clearly illustrated in Figs. 3 and 4. Where a rigid handle is provided, as in Fig. 4, the tubular cover 25' will have its inner side cut away, as shown at 26, whereby it may be folded over the fusee, and the upper end of the tubular cap will be connected to the handle—as, for instance, at 27.

It will be readily understood that the details of construction of a device according to the essentials of my invention may be readily varied from those herein shown and described without departing from the spirit and scope of my invention, and I do not, therefore, desire to limit myself to the details herein shown so long as the essentials of the invention are retained.

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

1. A railway-fusee projector comprising a tube carrying means for projecting or throwing the fusee therefrom, means for locking

the same, a laterally-projecting handle, and means for releasing the lock, substantially as described.

2. A railway-fusee projector comprising a projecting-tube provided with a power-actuated projecting member, means for locking the projecting member, a laterally-projecting handle, and means for releasing the locking means, substantially as described.

3. A railway-fusee projector comprising a projecting-tube, a power-actuated member adapted to throw the fusee therefrom, a locking member for the power-actuated member, a laterally-projecting handle, and means connected with the locking member and extending to the upper end of the laterally-projecting handle, whereby the lock can be released from the upper end of the handle, substantially as described.

4. A railway-fusee projector comprising a projecting-tube carrying a power-actuated member adapted to throw the fusee therefrom, means for regulating the power applied to the said power-actuated member, a locking member for the power-actuated member, a laterally-projecting handle, and means for releasing the said lock, substantially as described.

5. A railway-fusee projector comprising a projecting-tube, a coil-spring located therein adapted to throw the fusee therefrom, a regulating member carried by the tube and adapted to regulate the tension of the said spring, a locking member for the spring, a laterally-projecting handle, and means for releasing the locking member, substantially as described.

6. A railway-fusee projector comprising a projecting-tube, a power-actuated member carried by the tube and adapted to throw the fusee therefrom, a laterally-projecting handle, the handle being hinged to the said projecting-tube, and a fusee-protector carried by the handle, substantially as described.

7. A railway-fusee projector comprising a projecting-tube carrying means for throwing the fusee therefrom, a laterally-projecting collapsible handle pivoted to the said projecting-tube, a locking member controlling the means for throwing the fusee from the projecting-tube, and means carried by the handle for releasing the said lock, substantially as described.

8. A railway-fusee projector comprising a fusee-holder provided with means for throwing the fusee therefrom, a laterally-projecting support, a locking member controlling the said throwing means, and means for releasing the said lock, substantially as described.

9. A railway-fusee projector comprising a holder for the fusee, a laterally-projecting handle connected with the said holder, the holder provided with means for throwing the fusee therefrom, a lock for the said throwing means, and a controlling member for the

lock extending in the direction of the said support, substantially as described.

10. A railway-fusee projector comprising a holder for the fusee, a holder provided with  
5 means for throwing the fusee therefrom, a laterally-projecting handle connected with the said holder, a locking member controlling the said throwing means, and a member connected with the lock and extending to

the end of the handle, whereby the lock can be released, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WALTER C. BECKWITH.

Witnesses:

J. M. BECKWITH,  
L. D. MUSSETTER.