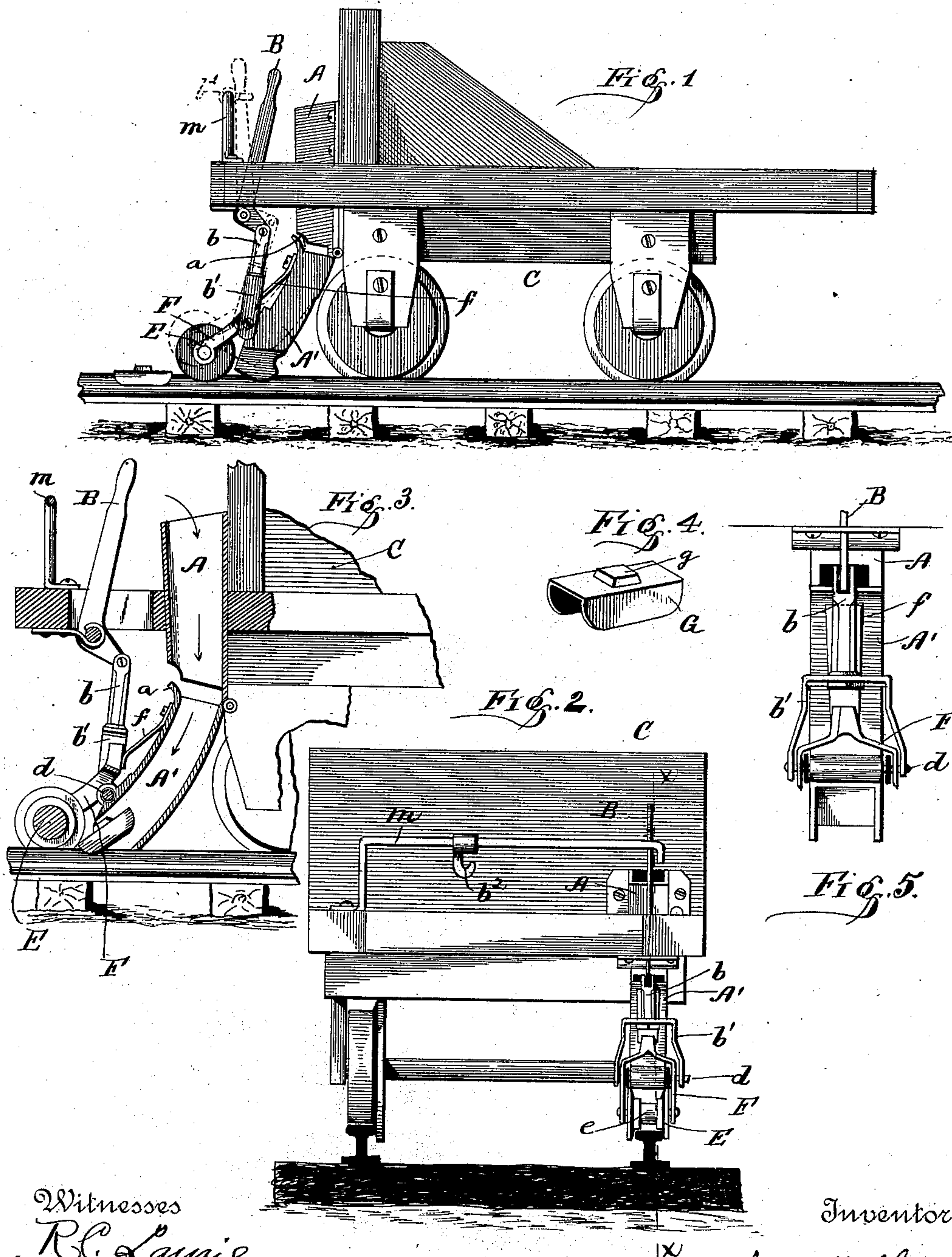


(No Model.)

J. WILHELM.  
TORPEDO PLACER.

No. 376,020

Patented Jan. 3, 1888.



Witnesses  
*R. C. Loring*  
*Van Buren Hillyard.*

Inventor  
*Jacob Wilhelm*  
By his Attorney's  
*R. S. & A. T. Lacey*



# UNITED STATES PATENT OFFICE.

JACOB WILHELM, OF NEW FREEDOM, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF PART TO ALFRED H. GROVE, OF SAME PLACE.

## TORPEDO-PLACER.

SPECIFICATION forming part of Letters Patent No. 376,020, dated January 3, 1888.

Application filed May 27, 1887. Serial No. 239,548. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB WILHELM, a citizen of the United States, residing at New Freedom, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Torpedo Placers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to devices for placing torpedoes or detonating signals upon the track while the car is in motion.

The object of the invention is to simplify and improve the construction of this class of devices, to devise a construction, in short, which will be simple and compact in arrangement, easy to manage, and reliable and efficient in operation.

The improvement consists in the peculiar construction and combination of parts, more fully hereinafter set forth, claimed, and shown in the annexed drawings, in which—

Figure 1 is a side view of a car or truck provided with my improvement, which is shown traveling upon the track by full lines and elevated from the track by dotted lines; Fig. 2, a front view of the organization shown in Fig. 1; Fig. 3, a sectional view about on the line X X of Fig. 2, on an enlarged scale, showing the torpedo about to be placed upon the track; Fig. 4, a perspective view of the torpedo or detonating signal; and Fig. 5, a front view, parts being broken away, of my improvement on an enlarged scale.

The device is composed of a chute, which is made in two parts, A and A'. The part A is secured to the car or truck C, and projects above and below the platform. The part A' curves slightly and is hinged to the lower rear side of the part A, and has its forward side projected upward and curved to form the curved lip *a*, which prevents the torpedo catching and hanging in the chute. The lower end of the part A is adjustable to and from the

track, and is controlled in its movements by the bell-crank lever B, pivoted at its elbow to the platform, the rod *b*, connected at its upper end to the lower end of lever B, and the stirrup *b'*, secured to the lower end of the rod *b* and connected with A' by the bolt *d*. The upper end of lever B extends above the platform and is retained in its forward position by the catch *b''*, which is adapted to slide on the guard-rail *m*. The sides of the chute embrace the sides of the rail, and the rear side is cut away at its lower end to give room for the egress of the torpedo. When the train is moving at a high rate of speed, the momentum of the torpedo causes it to leave the track. To prevent such mishaps and insure the seating of the torpedo upon the track, a catching and retaining device is provided composed of the flanged roller E, having a groove, *e*, between its flanges, and the frame F, mounted upon the bolt *d* and adapted to tilt about said bolt as a center. The roller is held down upon the track by a yielding pressure exerted by the spring *f*, interposed between the chute and the upper end of the frame. The torpedo is composed of the flanged plate G and the explosive *g*, centrally disposed thereon. The flanges embrace and hug the sides of the rail. Normally the lower end of the chute, or the part A' thereof, is held above the rail by throwing the lever B forward and engaging it by the catch, as shown by dotted lines in Fig. 1. To adjust a torpedo to the rail, the lever is freed, which allows the chute and roller to travel upon the rail. Now a torpedo is placed in the upper end of the chute and is directed by it to the rail. At the lower end of the chute, and an instant before leaving it, the torpedo is caught by the roller and pressed to the rail, as shown most clearly in Fig. 3. The groove in the roller gives clearance for the explosive *g*, so as not to explode the same.

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

1. The combination, with the car, of the chute composed of hinged parts, the upper part being fixed, and means, as the bell-crank lever and intermediate connections between



the lever and the lower part of the chute, for adjusting said lower part of the chute, substantially as and for the purpose described.

2. The combination, with the car and the hinged chute having its upper part fixed to the car and extending above and below the platform, of the bell-crank lever, means, as described, connecting the lever with the lower part of the chute, and the sliding catch for engaging the end of said lever and holding the end of the chute elevated.

3. The combination, with the car and the chute composed of two parts, one part being fixed to the car and the other part being hinged to the lower front side of the fixed part and having a curved lip on its upper rear end, of provisions, substantially as described, for raising and lowering the lower part of the chute, substantially as and for the purpose described.

4. The combination, with the chute and the frame F, pivotally connected therewith between its ends, of the grooved and flanged roller carried by the lower end of the frame, and the

spring interposed between the chute and the upper end of the frame, substantially as and for the purpose specified.

5. The combination, with the car, of the herein shown and described device for placing a torpedo on the rail, composed of the chute made of two parts, A and A', hinged together, the part A' having the curved lip *a*, the bell-crank lever B, the bar *b*, and the yoke *b'*, secured to the lower end of the lever B, the bolt *d*, pivotally connecting the part A' of the chute with the yoke *b'*, the frame F, mounted between its ends upon bolt *d*, the grooved and flanged roller E, carried by the lower end of the frame, and the spring *f*, interposed between the chute and the upper end of said frame, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB WILHELM.

Witnesses:

VAN BUREN HILLYARD,

JNO. M. NABLISTON, Jr.