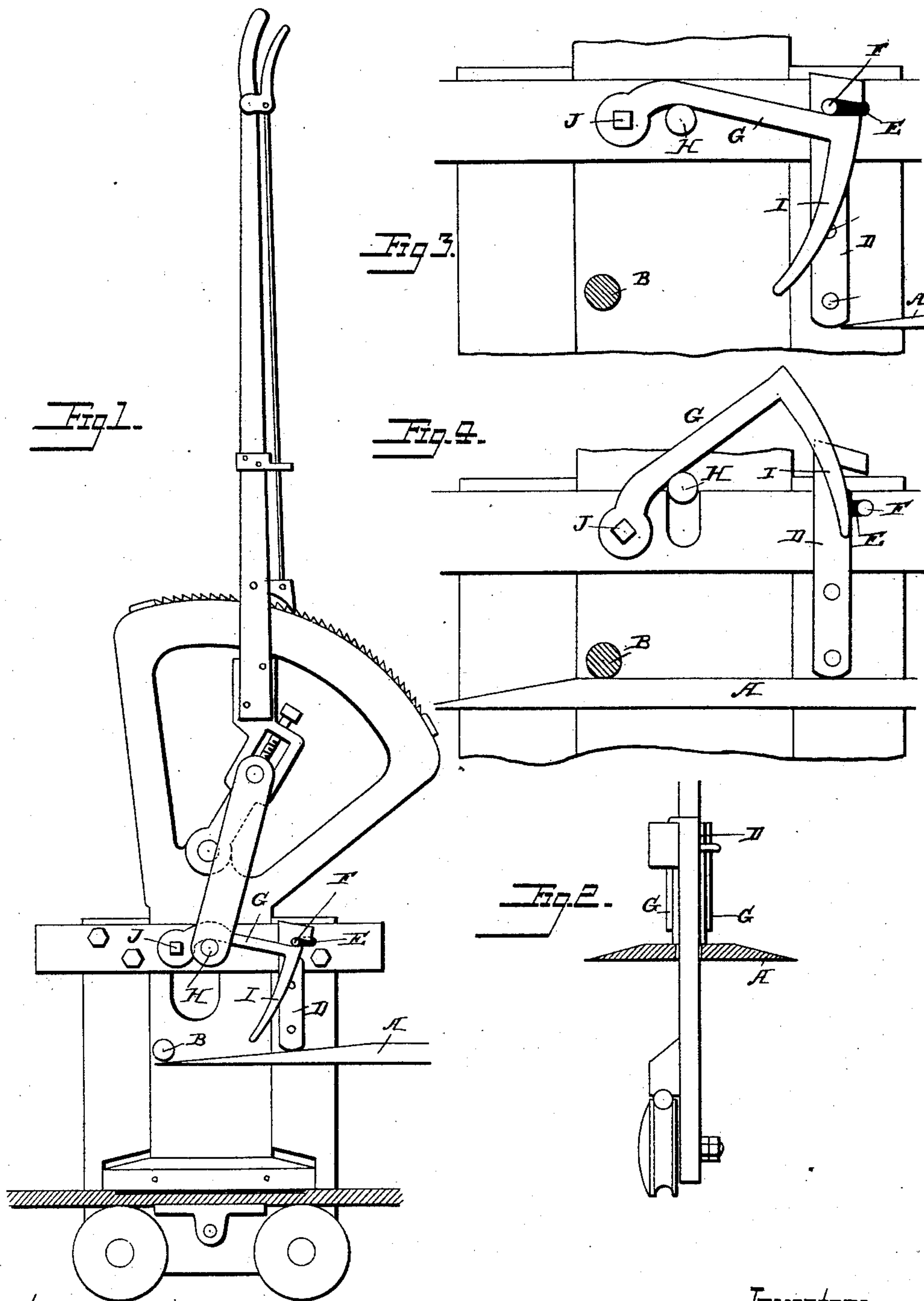


(No Model.)

W. J. THOMAS.
CABLE RAILWAY GRIP.

No. 367,467.

Patented Aug. 2, 1887.



Attest:
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Inventor:
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Attys

UNITED STATES PATENT OFFICE.

WILLIAM JAMES THOMAS, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR
TO HENRY ROOT, OF SAME PLACE.

CABLE-RAILWAY GRIP.

SPECIFICATION forming part of Letters Patent No. 367,467, dated August 2, 1887.

Application filed May 22, 1885. Serial No. 166,408. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JAMES THOMAS, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented a new and useful Automatic Cable-Railroad Grip, of which the following is a specification.

My invention relates to improvements in cable-railway grips in which a lever is placed over the bottom fulcrum-pin and is held down by a pin working in a slot, said pin being operated by a slide-bar that is raised up by a projection on the channel-rail. I attain the desired results by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is the side view of a grip with the automatic attachment. Fig. 2 is the end view of a grip, showing a sectional cut of the projection on the channel-rail, also showing the attachment on both sides of the grip. Fig. 3 is an enlarged side view of the attachment when locked, and Fig. 4 is a side view showing the attachment when it is in operation.

Similar letters refer to similar parts throughout the several views.

The regular fulcrum-pin, H, to which are secured the lower ends of the ordinary links connecting the usual hand operating-lever, with the fixed frame of the grip, works in a slot in said frame, and is held rigidly therein by a hook-shaped lever, G, pivoted on a pin, J, the said lever G being normally held down, as shown in Fig. 1, by a pin, F, adjustable in a slot, E, in the frame by the action of an angle-slot in a slide, D.

When the grip comes to a place where it is required to let go of the cable, the slide D is raised up by the projection on the channel A, when the pin F is forced forward in the slot E by the angle slot in the slide D, which leaves the lever G free to turn on the pin J. After the lever G is free, the lug B on the center portion of the grip comes in contact with the raised projection on the channel-rail A, which

lifts the center portion of the grip up, thus releasing the rope or cable. After the rope or cable is out of the grip, the grip is to close itself again to prevent the rope from getting in the grip again, and in order to do this the locking device locks itself again, the weight of the center portion of the grip bringing it down again, the lever G falls down again, the pin F being held back by the arm of the lever G, (marked I,) and when the lever G is down again the pin F is brought back again by the angular slot in the slide D. This device will also open the grip and pick up the rope at any given point and close with the weight of the center portion of the grip on the rope, which is sufficient to hold it until the grip is tightened by the gripman.

What I claim as my invention, broadly, and desire to secure by Letters Patent, is—

1. In a grip for a cable railway, a movable fulcrum-pin in the fixed frame of the grip, in combination with holding and releasing devices, and a swell or stop upon the track, whereby the grip may be automatically released without movement of the operating-lever, substantially as set forth.

2. The combination, with the fixed frame of the grip, of a movable fulcrum-pin, a swell or stop upon the track, a lug upon the movable part, and automatic latching and unlatching devices to automatically release the grip without movement of the operating-lever, substantially as set forth.

3. The combination, with the fixed and movable frames of the grip, of the movable fulcrum, the slide D, the latch or lever G, the pin F, and devices to lift the movable part by engagement with the track, substantially as described.

WILLIAM JAMES THOMAS.

Witnesses:

ERNEST RIESE,
J. E. KIPP.