

(No Model.)

G. RAINNIE.  
TRACK LIFTER.

No. 383,988.

Patented June 5, 1888.

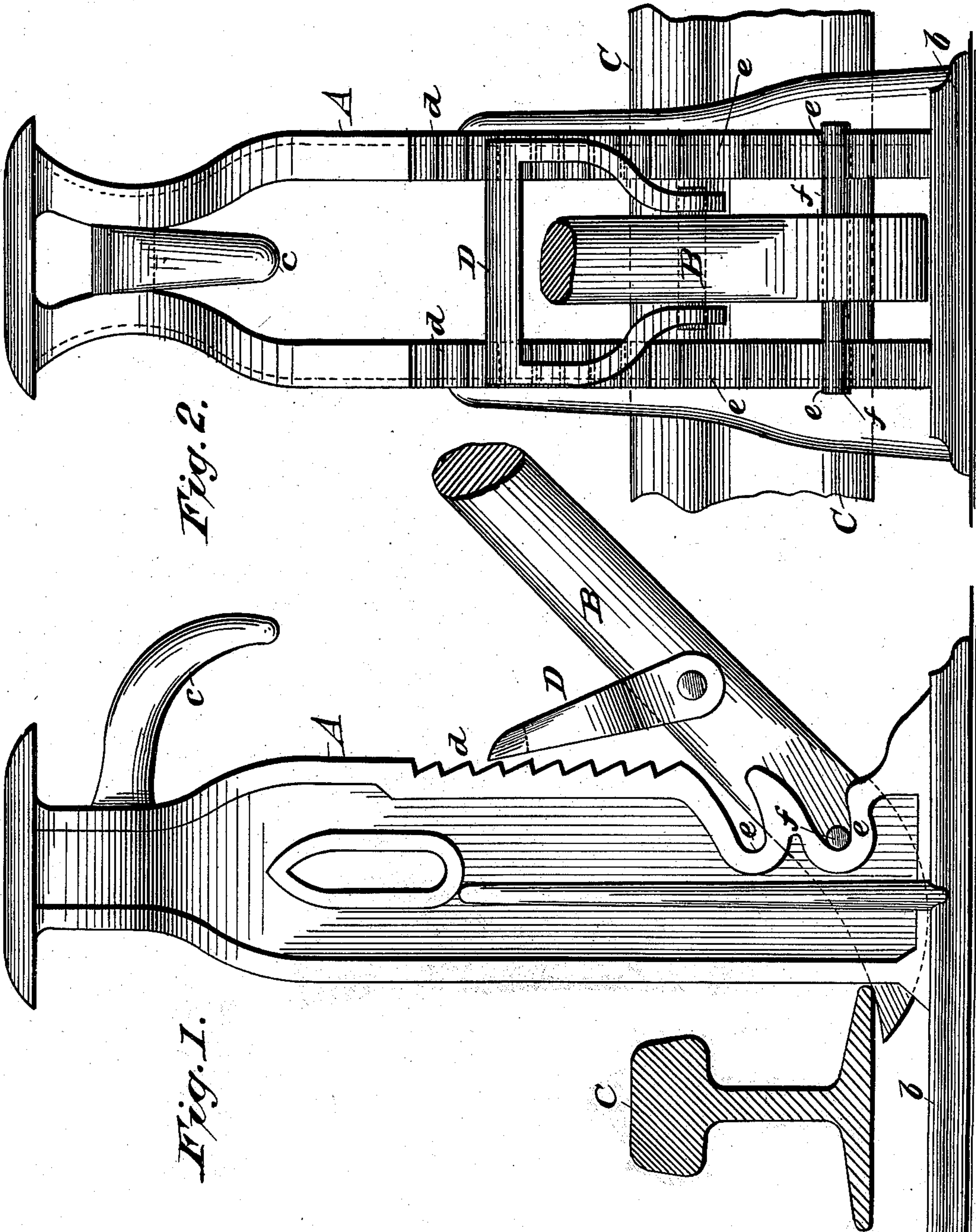


Fig. 2.

Fig. 1.

WITNESSES:

*Phil. C. Dietrich.*  
*L. Sedgwick.*

INVENTOR:

*G. Rainnie*  
BY *Munn & Co.*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

GAVIN RAINNIE, OF PORTLAND, NEW BRUNSWICK, CANADA.

## TRACK-LIFTER.

SPECIFICATION forming part of Letters Patent No. 383,988, dated June 5, 1888.

Application filed December 29, 1887. Serial No. 259,295. (No model.)

*To all whom it may concern:*

Be it known that I, GAVIN RAINNIE, of Portland, St. John county, New Brunswick, Canada, have invented an Improvement in Track-Lifters, of which the following is a full, clear, and exact description.

The invention consists in a lever and-ratchet track-lifter of novel construction, substantially as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figures 1 and 2 represent elevations, in planes at right angles with each other, of a track-lifting device or apparatus embodying my invention and as applied to the lifting of a rail of a railroad-track, the operating-lever of the device being shown as broken away.

A is the frame of the device, which may be of cast-iron and about sixteen inches high, (more or less.) Said frame is represented as of bifurcated construction in direction of its height, and has an extended base-plate, *b*, which is designed to rest upon the ground. It may also have an upper hook-shaped handle and suspension device, *c*.

Upon that side of the frame which, for convenience, I denominate the "back," on opposite sides thereof and intermediately of the height of the frame, are rows of ratchet-teeth *d*, and below these are a series (here shown as two) of slots or recesses, *e*, open at their one end and adapted to receive within them the opposite ends or portions of an extended fulcrum-pin, *f*, carried by the operating claw bar or lever B and arranged to extend from opposite sides of it. The recessed portions *e* of the frame form the fulcrum or bearing surfaces for the pin *f* of the claw-bar, which is removable at pleasure from the frame to facilitate transportation and economize space in packing away.

The claw-bar B, which may be of the usual

shape or construction to lift upon the rail C, is provided with a pawl, D, constructed to engage with the two rows of ratchet-teeth *d*.

The pawl-and-ratchet teeth serve to prevent back slip as the rail or rail and sleepers are being lifted by bearing down upon the rear portion of the claw-bar, the fulcrum-pin of which rests in either of the opposite recessed portions *e* of the frame. By using a series of these slots or recessed portions arranged one above the other facility is afforded for varying the height of the lift or for adapting the claw-bar to work at different depths or heights.

When the rails and sleepers are lifted, this track-lifter, constructed as described, holds itself in position without the aid of the track-men, thus leaving them at liberty to make necessary repairs to the track and saving the time of at least one man, as the rail is automatically held lifted.

The device, being of a suitable height, may also be used for "turning" hand-cars on the track, thereby doing away with the block of wood ordinarily carried for that purpose.

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

1. In a track-lifter, the frame A, having opposite rows of ratchet-teeth *d* on its back, and recessed fulcrum-bearings or open-ended slots *e*, arranged below said teeth, substantially as and for the purpose specified.

2. The combination of the frame A, having opposite rows of ratchet-teeth *d* on its back, and a series of recessed fulcrum-bearings or open-ended slots, *e*, arranged one below the other beneath the ratchet-teeth *d*, the claw bar or lever B, and its attached pawl D, essentially as shown and described.

GAVIN RAINNIE.

Witnesses:

J. G. FORBES,  
J. R. STONE.