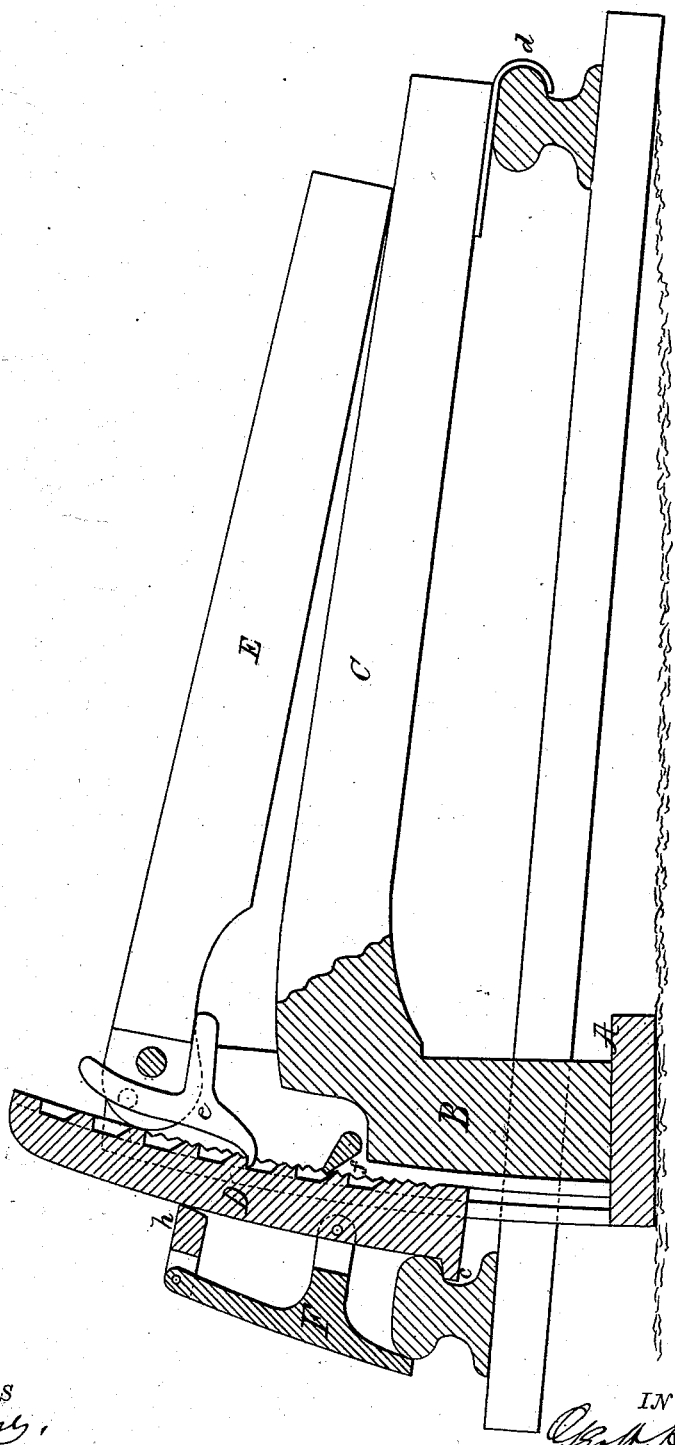
G. W. HUNTER.

Track-Lifter.

No. 168,255. Patented Sept. 28, 1875.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE W. HUNTER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM F. STONE, OF SAME PLACE.

IMPROVEMENT IN TRACK-LIFTERS.

Specification forming part of Letters Patent No. **168,255**, dated September 28, 1875; application filed September 13, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. HUNTER, of the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Lifting-Jacks, particularly adapted to the lifting of railroad-tracks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which the figure is a section, showing all of the parts, and their relative position as attached to and used in raising the tracks of a railroad.

Like letters indicate like parts throughout the drawing.

The object of my invention is to provide a jack suitable for lifting the tracks of railroads, in such a manner that there shall be no tendency whatever to a lateral displacement of the same in the act of elevating such track—that is to say, it is desired to elevate the track one side at a time, and drop it into exactly the same vertical plane from which it was taken; and to this end my invention consists in a pedestal having an arm extending in length about the width of the track, adapted to and provided with means for connection with one rail of the track, the foot being placed near the other, the front face of the support being curved, the curve being in the arc of a circle whose radius is the length of the arm, or about the width of the track; secondly, in the combination, with such pedestal, of a movable hook, adapted to take under the T of the rail, moving in grooves in the pedestal, in the arc of a circle corresponding with the face of the base or pedestal; also, in the combination, with such movable hook, of an adjustable clamp or holder, as hereinafter more particularly described.

In the drawing, A represents the pedestal; B, the upright, and C an extension-arm connected therewith. *d* is a hook attached to the arm C, and adapted to grasp the top of a rail. This hook operates to steady or hold the arm in a proper position, and gages the position of the pedestal with reference to the opposite rail, thus not only facilitating the adjustment of the jack to its work, but holding it steady, and obviating any tendency whatever to a displacement of the rails with relation to each other.

It is obvious that a hook may be arranged to project beneath the inside T of the rail, and thereby some of these results be attained; but the way illustrated is the preferred means of connection.

The front face of the upright B is made on a curve, of which the arm C is the radius. This upright B is provided with grooves or ways, or their equivalent, in or on which a movable plate or rack-bar, provided with a hook, *c*, works. This rack-bar is operated through the medium of a suitable lever, E, and pawl *e*, the same being held in its raised position by any suitable stop or pawl, as shown at *f*. The pivot of the pawl *f* projects through the side of the upright B, and is provided with a suitable knob or crank, so as to be turned out of contact with the rack in order to let it drop or let it down, as may be desired.

It is obvious, however, that any other suitable or well-known means may be adopted for operating the pawl with its hook.

F represents a T-lever, pivoted, as shown, to the rack D, and to which is pivoted a strut, *h*, which, upon the attachment of the hook *c* to the rail, serves to force the extremity of said T-lever into clamping contact with the outside of the rail, thus securing the same in a manner to obviate any twist or undue strain, except that due to an upward movement.

It is obvious that this lever F may be provided with a hook to grasp the outside of the T of the rail, if in practice it is found desirable.

By this construction and combination of parts the track of a railroad may be raised and lowered without any tendency whatever to a lateral displacement of the track, or either rail thereof—a difficulty hitherto experienced in the use of elevating-machines for this purpose.

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

1. In a lifting-jack, a standard whose front face is made on the arc of a circle, having com-

bined therewith a hook adapted to move in the curve of such arc, substantially as described.

2. In a lifting-jack, the combination of an upright, an extending lateral arm, and a hook or means of connection with the rail farthest from the pedestal, substantially as described.

3. In a lifting-jack, the combination, with the movable hook or elevating device, of an adjustable clamp or stay, substantially as and for the purposes set forth.

4. In a lifting-jack, a clamp or stay consisting of the combination of the lever F and movable strut *h*, substantially as shown.

GEO. W. HUNTER.

Witnesses:

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