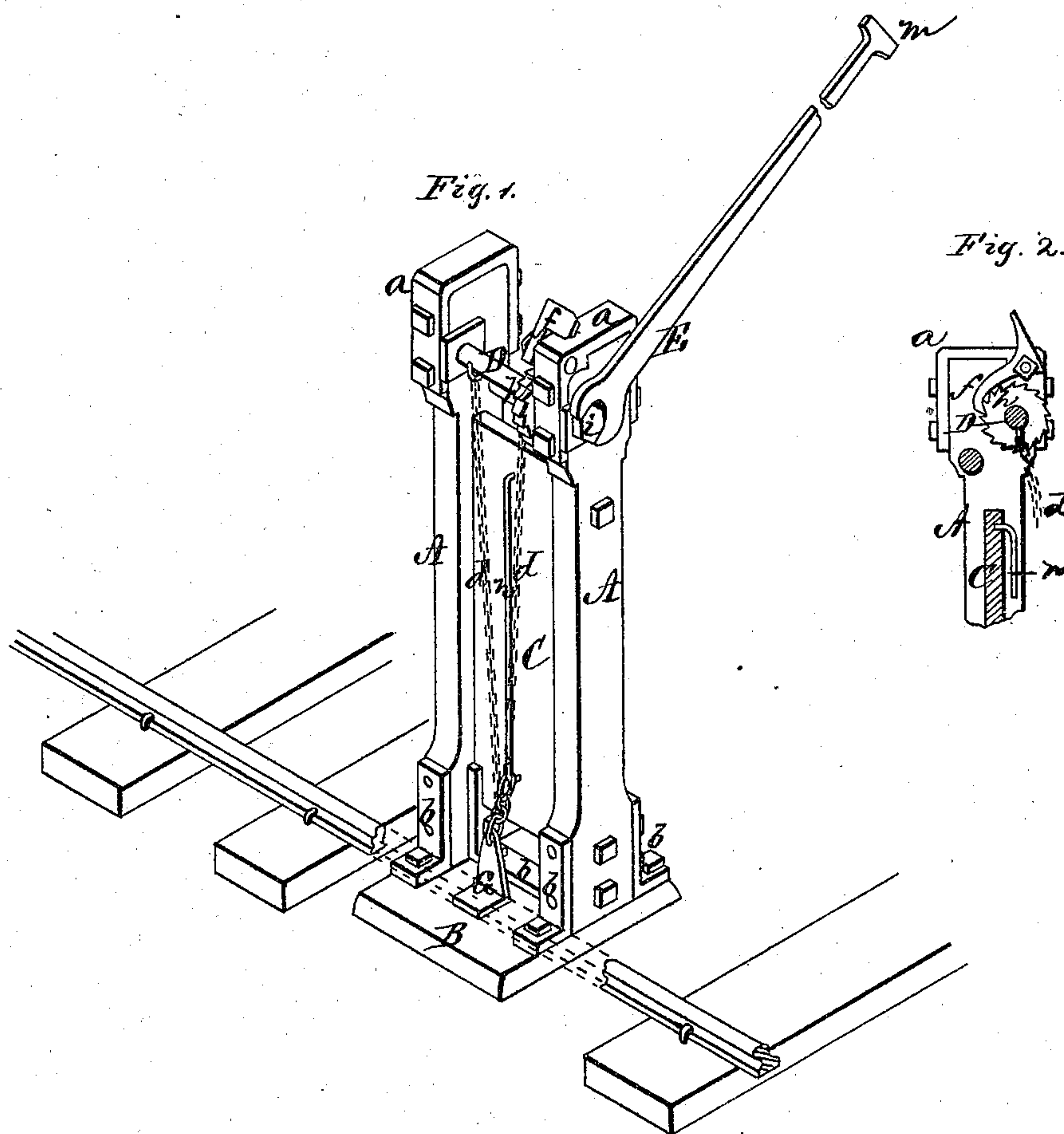


G. J. KINZEL.  
Track-Lifters.

No. 140,713.

Patented July 8, 1873.



Witnesses:

Henry N. Miller  
L. L. Ewert.

Inventor.

George J. Kinzel  
per Alexander Watson

Attorneys.

# UNITED STATES PATENT OFFICE.

GEORGE J. KINZEL, OF KNOXVILLE, TENNESSEE.

## IMPROVEMENT IN TRACK-LIFTERS.

Specification forming part of Letters Patent No. **140,713**, dated July 8, 1873; application filed June 14, 1873.

*To all whom it may concern:*

Be it known that I, GEORGE J. KINZEL, of Knoxville, in the county of Knox and in the State of Tennessee, have invented certain new and useful Improvements in Track-Lifter; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a track-lifter, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my entire machine, and Fig. 2 is a cross-section through the upper part thereof.

A A represent two upright posts, of any suitable dimensions, the top ends of which are bound with iron stirrups *a a* and bolted firmly together. The bottom or lower ends of the posts are made fast to a foot-piece, B, by angle-irons *b b* bolted to the upright posts and foot-board. Between the two posts A A is a board or back, C, extending for a suitable distance upward from near the foot-board. D represents an iron shaft or cylinder placed in suitable metal boxes in the upper ends of the posts A A, and to this shaft two chains, *d d*, are attached, said chains having a heavy hook,

G, attached to their lower ends. On the shaft or cylinder D is a ratchet-wheel, *h*, close to the inner side of one of the posts A, and on said post is pivoted a pawl, *f*, to engage with the ratchet-wheel. On the extreme end of the shaft or cylinder outside of the post A is a six-square nut, *i*, upon which is placed a wrench, E, for working the shaft to raise the hook G. On the other end of the wrench-lever is formed a tamping-bar, *m*. The chains *d d* and hook G are guided by a loose link made fast to the hook and sliding on a rod, *n*, attached to the back C.

This lifter may be used for raising a railroad track, or for any other purpose of the same character to which it may be applied.

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

1. The combination of the chains *d d* with hook G and guide-rod *n*, for the purposes set forth.

2. The combination of the frame A B C, shaft D, lever E, chains *d d*, hook G, guide-rod *n*, ratchet-wheel *h*, and pawl *f*, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of May, 1873.

G. J. KINZEL.

Witnesses:

A. N. MARR,  
JOHN W. MOSES.