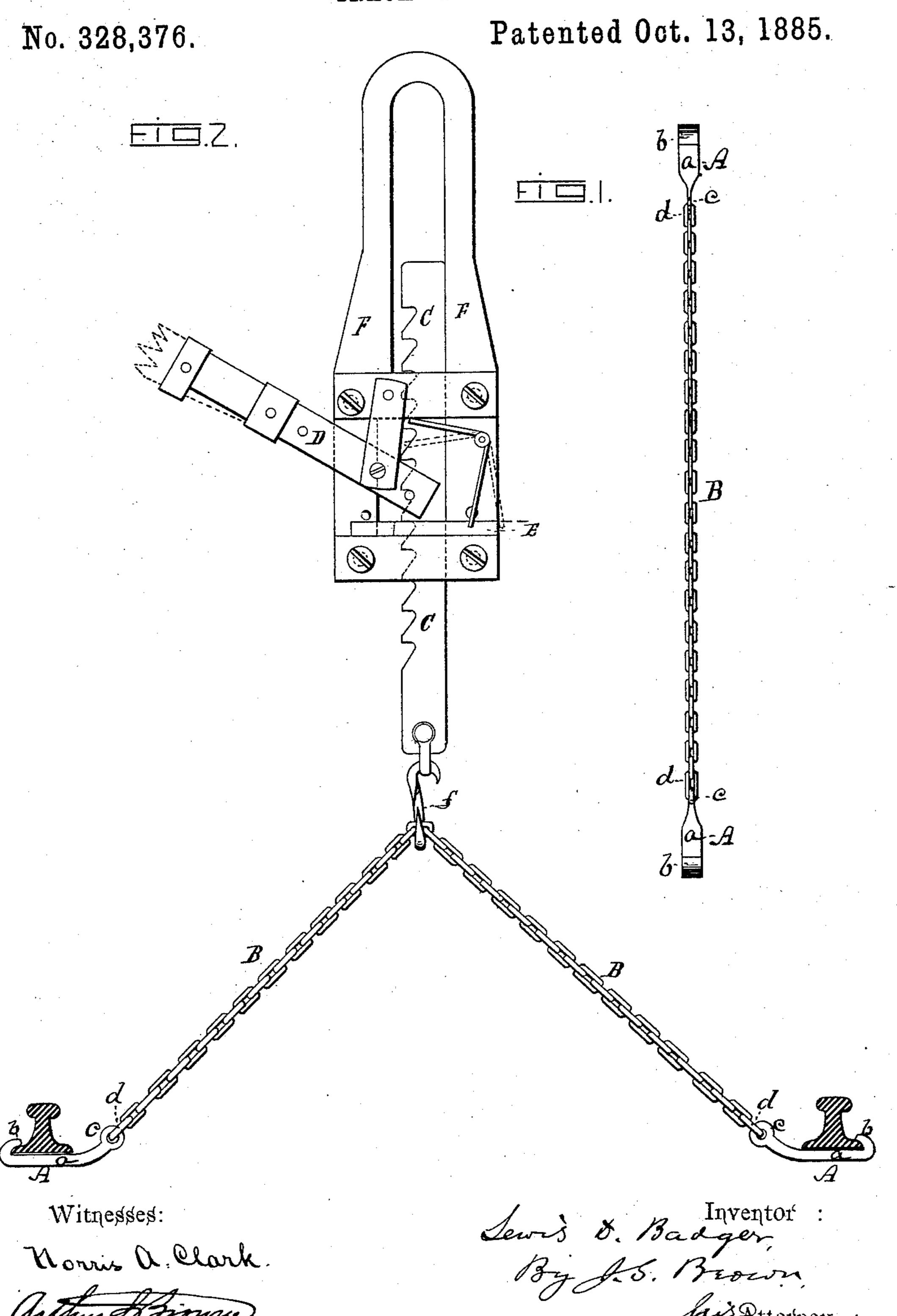
L. D. BADGER.

TRACK LIFTER.



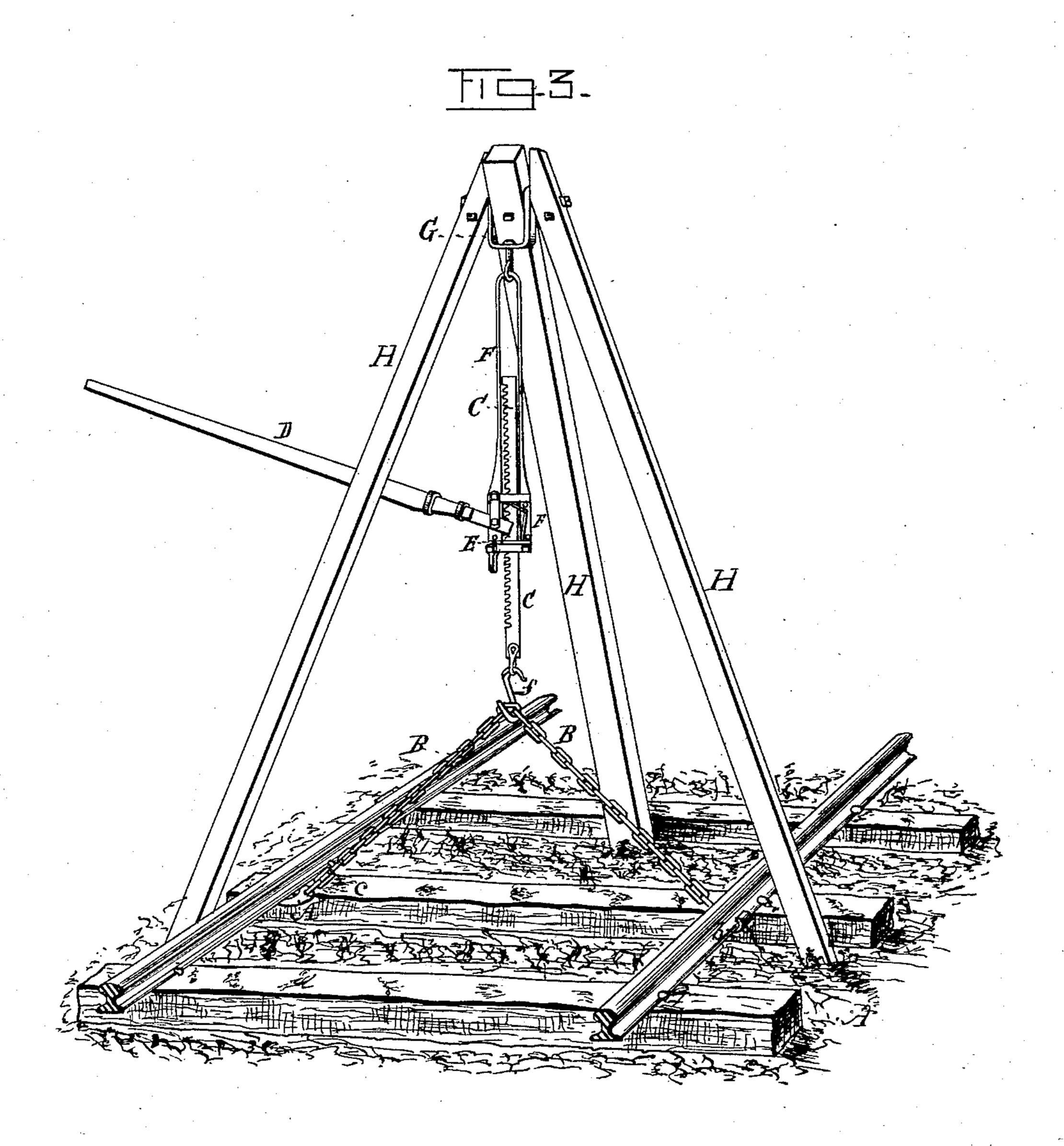
(No Model.)

L. D. BADGER.

TRACK LIFTER.

No. 328,376.

Patented Oct. 13, 1885.



Witnesses:

Morris a. Clark.

athur Browne

Inventor
Lewis D. Badger
By S. B. Brown,
his Attorney

## United States Patent Office.

LEWIS D. BADGER, OF LAKE VILLAGE, ASSIGNOR TO THE AMERICAN ROCK AND TRACK LIFTER COMPANY, OF GILFORD, NEW HAMPSHIRE.

## TRACK-LIFTER.

SPECIFICATION forming part of Letters Patent No. 328,376, dated October 13, 1885.

Application filed September 7, 1885. Serial No. 176,322. (No model.)

To all whom it may concern:

Be it known that I, Lewis D. Badger, of Lake Village, in the county of Belknap and State of New Hampshire, have invented an Improved Track-Lifter; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

pling device separate; Fig. 2, a side view of the grappling device connected with a power-lifter for raising the track; Fig. 3, a view, in perspective, of the whole lifter suspended from a tripod and applied to a section of rail-way-track.

Like letters designate corresponding parts

in all of the figures.

My improved track grappling device consists of two grappling-hooks, A A, the bodies a a of which are flat and broad, on which the lower surfaces of the rails rest, leaving flat hooks b b, turned upward and then inward, to closely grasp the outer flanges of the rails, and having eyes c c on their inner ends slightly turned upward inside of the rails, and a connecting chain, B, the terminal links or hooks d d of which are held, respectively, in the eyes c c of the grappling hooks. Instead of the connecting chain a connecting rope or band may be employed; but I prefer the chain.

The o rappling hooks are applied under the

The grappling-hooks are applied under the rails of a section of a railway-track to be lifted, in the manner shown in Figs. 2 and 3, and the connecting chain is to be of sufficient length to bend upward somewhat in the middle, as

shown in the same figures.

This grappling device holds the track firmly and securely, and may be used in connection with any suitable portable power-lifting apparatus which will lift on the middle of the connecting-chain of the grappling device; but I prefer to employ the lifter patented as a

stump extractor by William H. Wright, April 27, 1880, No. 227,087, since not only is that 45 well suited to the present purpose, but is very simple, light, portable, and readily applied. I have represented this apparatus in the accompanying drawings. The middle of the connecting chain B is placed in a hook, f, of 50 the lifting ratchet-bar C of the lifting apparatus.

The other parts of the lifting apparatus need no description here, reference being had to the said Letters Patent for a description of 55 the construction and operation of the same.

The operating-lever D of the apparatus has a powerful leverage on the ratchet-bar, so that one man can readily lift a section of a railway-track one notch or tooth of the ratchet-bar, 60 and repeat the action as many times as necessary, the latch E holding the track up as far as raised.

The U-shaped frame F of the apparatus is suspended from a hook or trammel, G, sup- 65 ported by a tripod, H, or equivalent support.

The whole apparatus is simple, cheap, portable, and easily applied and operated.

I claim as my invention—

1. The combination of the grappling-hooks 70 A A, constructed substantially as described, and the connecting-chain B, constituting a grappling device for a railroad-track, as herein set forth.

2. The combination of the grappling-hooks 75 A A and connecting-chain B with a lifting apparatus, substantially as and for the pur-

pose herein specified.

3. The combination of the grappling-hooks A A, connecting-chain B, ratchet-bar C, lever 80 D, latch E, and U-shaped frame F, substantially as and for the purpose herein specified.

LEWIS D. BADGER.

Witnesses:

J. S. Brown, A. S. Brown.