

No. 706,043.

Patented Aug. 5, 1902.

O. E. FIELDS.  
LIFTING JACK.

(Application filed Nov. 26, 1901.)

(No Model.)

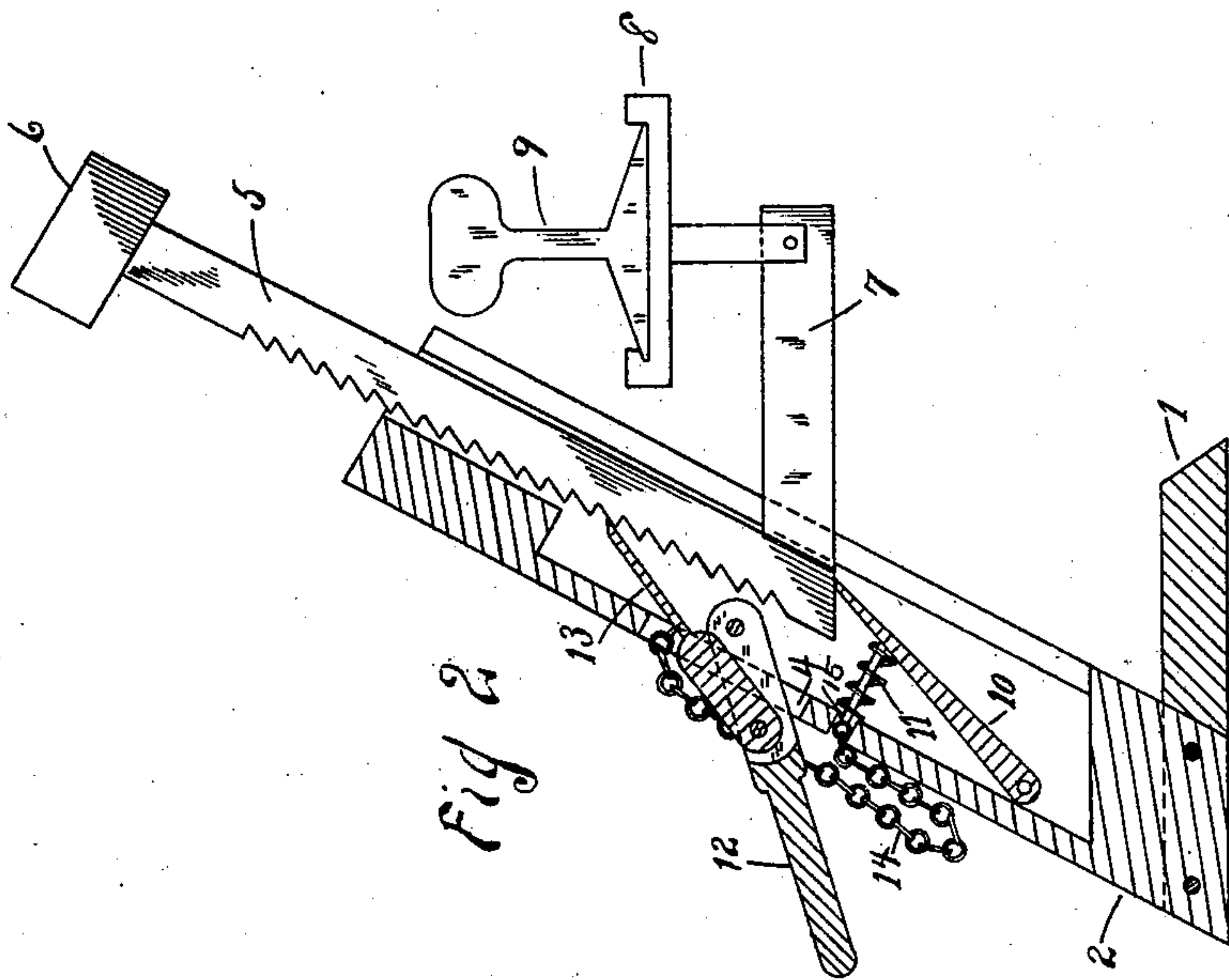


Fig 2

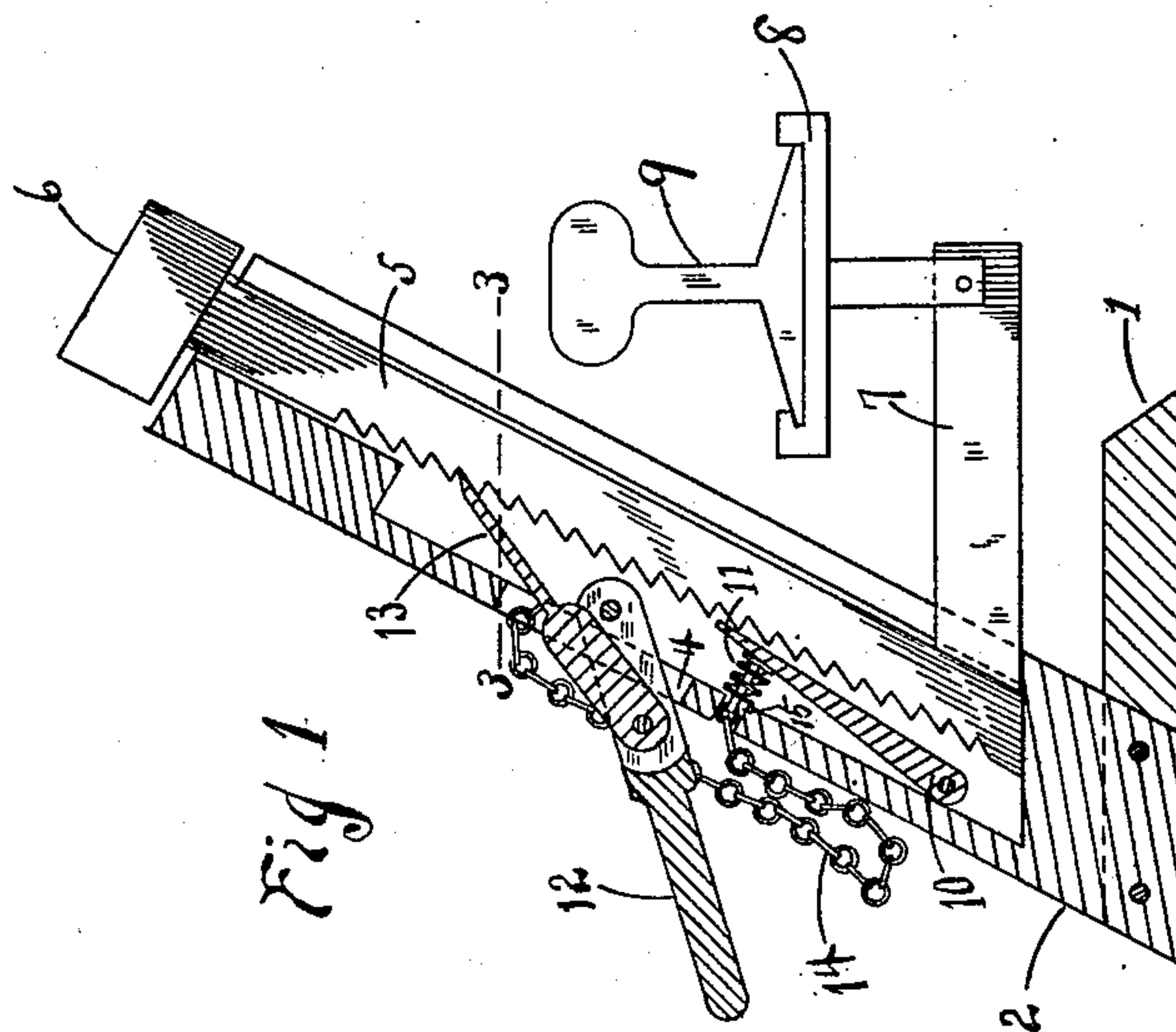


Fig 1

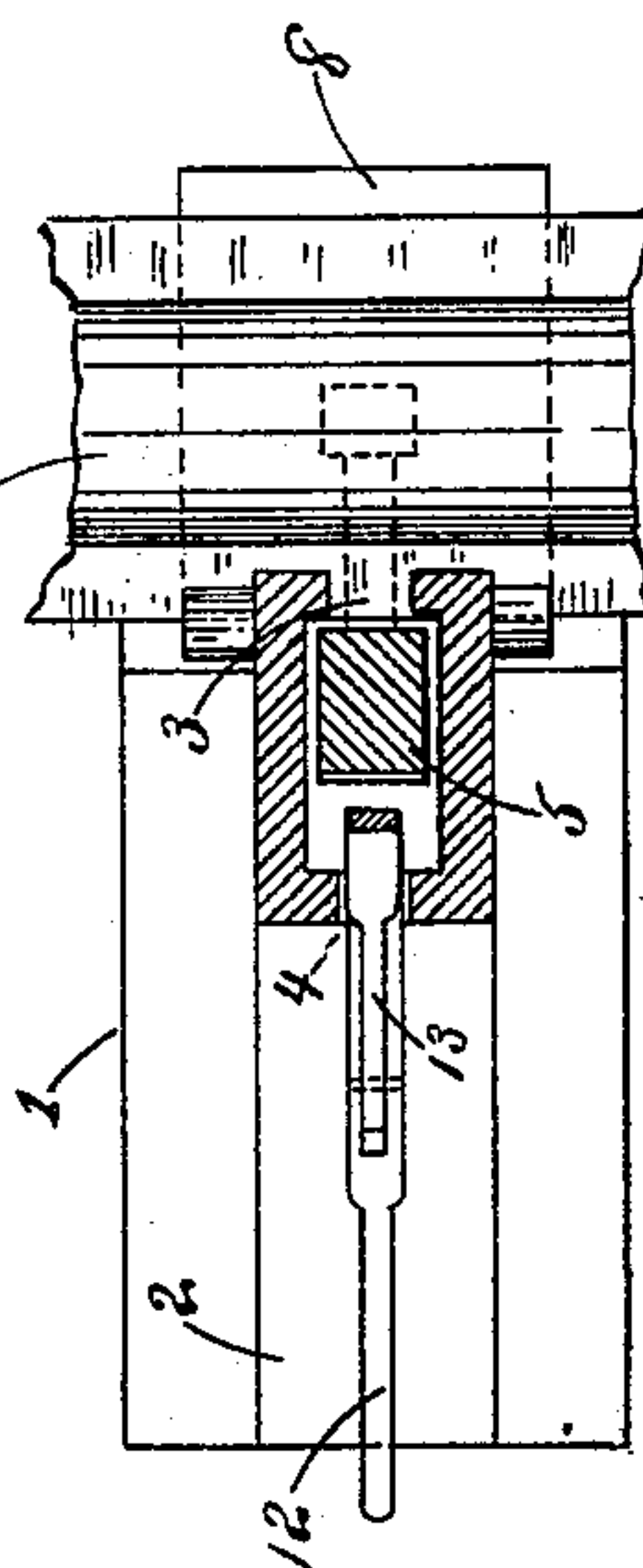


Fig 3

WITNESSES  
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# UNITED STATES PATENT OFFICE.

OLIVER E. FIELDS, OF DUNCANNON, PENNSYLVANIA.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 706,043, dated August 5, 1902.

Application filed November 26, 1901. Serial No. 83,807. (No model.)

*To all whom it may concern:*

Be it known that I, OLIVER E. FIELDS, a citizen of the United States, residing at Duncannon, in the county of Perry and State of Pennsylvania, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in railroad-jacks; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claim.

In the drawings, Figure 1 is a middle vertical longitudinal section of the hollow post with the supporting rack-bar in elevation, said view showing the lowest position of the latter. Fig. 2 is a similar view showing highest position of the latter, and Fig. 3 is a cross-section on line 3 3 of Fig. 1.

The object of my invention is to construct a lifting-jack adapted specially for railroad work with a view of raising a rail at different points to permit the tamping of the road-bed beneath the tie supporting such rail.

In detail the invention may be described as follows:

Referring to the drawings, 1 represents a suitable supporting-base, from which projects the inclined hollow post 2, provided with a continuous open way or slot 3 in the rear and a closed slot 4 in the front thereof. Within the post 2 operates a sliding rack-bar 5, having a terminal limiting-head 6, the base of the rack-bar being provided with a rearwardly-extending arm or bracket 7, passing through the slot 3 and terminating in a shoe 8, upon which the rail 9 is adapted to rest.

Pivoted between the side walls of the hollow post 2, near the base thereof, is a pawl 10, normally forced outwardly toward the slot 3 by a spring 11, which pawl is adapted upon a sufficient elevation of the rack-bar to pass under it and support the same and the load carried thereby. Pivoted above the pawl 10 and projecting forward through the slot 4 is an operating-lever 12, provided with a pivoted gravity-pawl 13, adapted to engage the

teeth of the rack-bar and force the same upwardly with a corresponding upward tilting of the lever, the gravity-pawl riding freely over the teeth upon a depression of the operating-lever. When the rack-bar, with its rail, has been elevated or raised sufficiently—that is, to the full limit—the spring-pawl 10 under the action of the spring 11 is automatically forced under the bar, thus holding it up permanently or until such time as the tamping under the rail can be completed. To permit the rack-bar to return to its lowest position, the pawls 10 and 13 are retracted by a chain 14, whose opposite ends respectively pass through opening 15 and slot 4 and are secured to the respective pawls. The shoe 8, which supports the rail, is so mounted as to present a substantially horizontal surface to the flange of the rail which it supports.

It is apparent that the device is susceptible of modifications without departing from the spirit of my invention.

Having described my invention, what I claim is—

A lifting-jack comprising a suitable base, a hollow post extending therefrom, the post having a longitudinal rear open slot, and a front closed slot, a sliding rack-bar in the post, a bracket projecting from the rack-bar through the open slot of the post, a shoe at the outer end of the bracket, an operating-lever pivoted in the post and projecting from the same in a direction opposite from the bracket, a gravity-pawl pivotally mounted on the lever and engaging the teeth of the rack-bar, a spring-actuated pawl pivoted below the lever and adapted to be automatically forced to an open position for the support of the rack-bar when the latter has become sufficiently elevated, and a chain for retracting the pawls, the parts operating substantially as, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

OLIVER E. FIELDS.

Witnesses:

R. M. HOLLAND,

WM. A. HOLLAND.