

*P. Gillett,
Lifting Jack.*

N^o 41,696.

Patented Feb. 23, 1864.

Fig. 2.

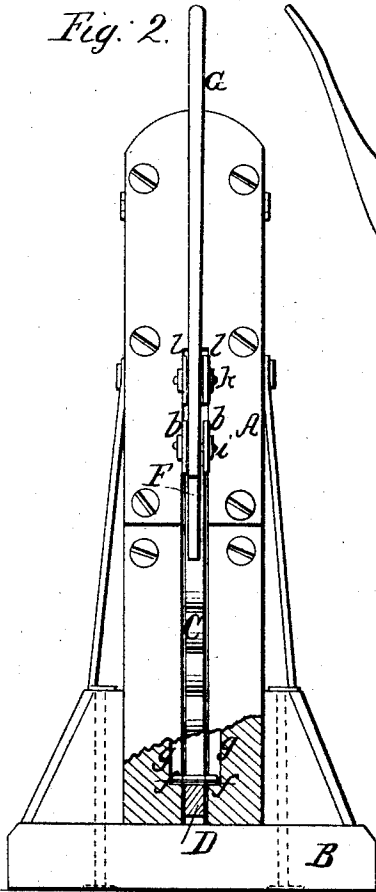
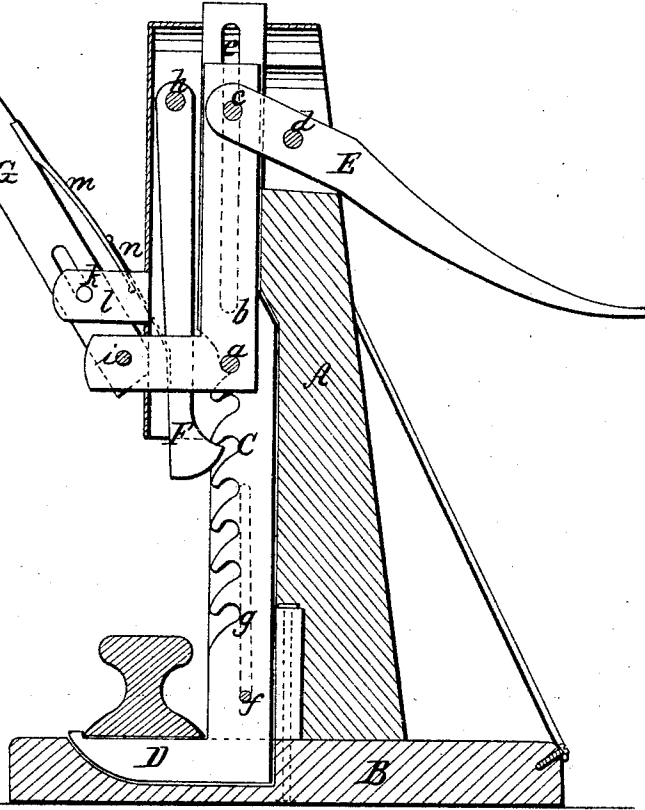


Fig. 1.



*Witnesses:
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UNITED STATES PATENT OFFICE.

PROSPER GILLETT, OF HANNIBAL, MISSOURI.

IMPROVEMENT IN RAILROAD-TRACK RAISERS.

Specification forming part of Letters Patent No. **41,696**, dated February 23, 1864.

To all whom it may concern:

Be it known that I, PROSPER GILLETT, of Hannibal, in the county of Marion and State of Missouri, have invented a new and Improved Railroad-Track Raiser; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention. Fig. 2 is a front elevation of the same.

Similar letters of reference in both views indicate corresponding parts.

The object of this invention is a combination of levers with a toothed rack provided with a suitable toe, whereby a considerable power can be exerted on the track to be raised, said levers being so arranged in relation to each other and to the toothed rack that by the action of one lever said toothed rack can be raised, and by the action of the other lever it can be released and dropped to its original position.

To enable those skilled in the art to make and use my invention, I will proceed to describe it.

A represents a standard, constructed of hard wood or any other suitable material, and this standard is supported by a platform, B, the whole being made sufficiently strong for the purpose and still light enough so that it can be readily and conveniently handled.

The standard A forms the guide for the toothed rack C. The lower end is provided with a toe, D, as clearly shown in Fig. 1 of the drawings. The teeth of the rack are inclined downward, and they engage with a pin, *a*, which is fastened between two plates, *b*, and these plates are suspended from a pin, *c*, that is secured in the forked end of hand-lever E. This lever has its fulcrum on a pivot, *d*, passing through the standard A, and it serves to raise the rack C. A slot, *e*, in the upper part of the rack-bar C, allows the pin *c* in the end of the lifting-lever E to pass freely, and in being raised said rack is guided by the pin *c*, moving in the slot *e* above, and by studs *f*, projecting from the sides of the rack-bar and moving in grooves *g* in the standard below.

F is a pawl, which is suspended from a pivot, *h*, and which serves to retain the rack after the same has been raised by action of the lever E until said lever is again raised ready for a new move. This pawl passes through between the plates *b* in front of the pin *a*, and said plates are bent at right angles projecting beyond the face of the standard, where they connect by means of a pin, *i*, with the lower end of a hand-lever, G. This lever has its fulcrum on a pivot, *k*, that is secured in brackets *l*, attached to the face of the standard, and it is subjected to the action of two springs, *m n*, one of which is secured to the lever G and the other to the pawl F. By the action of these springs the pin *a* and the point of the pawl F are held in contact with the teeth of the rack C.

In raising the lever E in the direction of the arrow marked near it in Fig. 1, the pin *a* slides over the inclined back of one of the teeth of the rack and catches into the next succeeding tooth, while the rack is prevented from descending by the pawl F. In depressing the lever E the rack with the toe are raised by the action of the pin *a*, and the point of the pawl slides over the back of one of the teeth. In this manner the rack can be raised up to its last tooth and a powerful strain can be exerted on it for the purpose of raising a railroad-track by means of the toe D. If it is desired to drop the rack C down to its original position, the lever G is forced in the direction of the arrow marked near it in Fig. 1. By these means the plates B with the pin *a* are forced in the direction of the arrow marked near it in the same figure, and as the pin strikes the pawl F the point of the latter is thrown out of gear with the teeth of the rack, and the rack is free to follow its own gravity and to resume its original position.

What I claim as new, and desire to secure by Letters Patent, is—

The lever G and pawl F, in combination with the plates *b* and pin *a*, and with the rack *c* and lever E, all constructed and operating in the manner and for the purpose substantially as shown and described.

PROSPER GILLETT.

Witnesses:

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