2 Sheets—Sheet 1.

J. ALLEN.
Wagon-Jack.

No. 221,714. Patented Nov. 18, 1879.

Fig. 1.

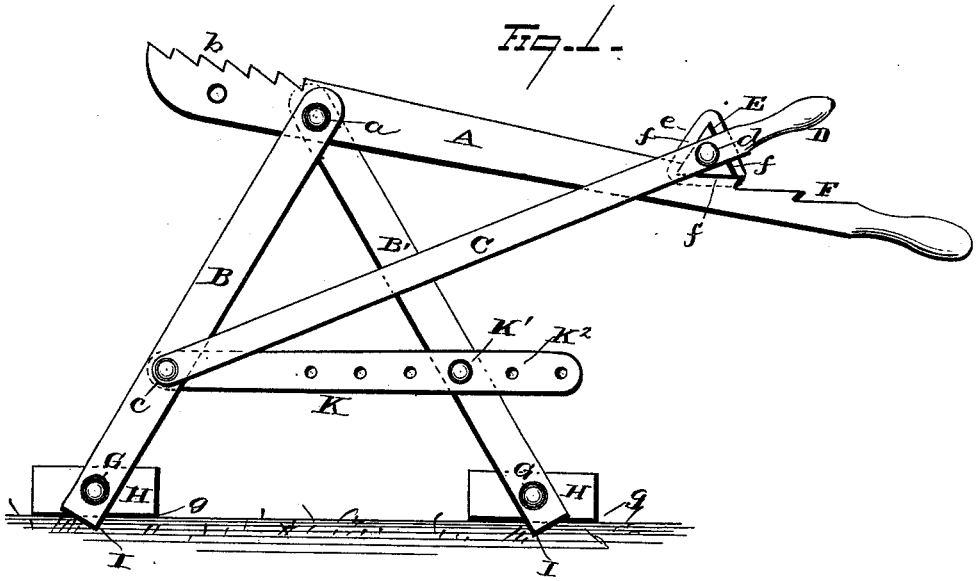
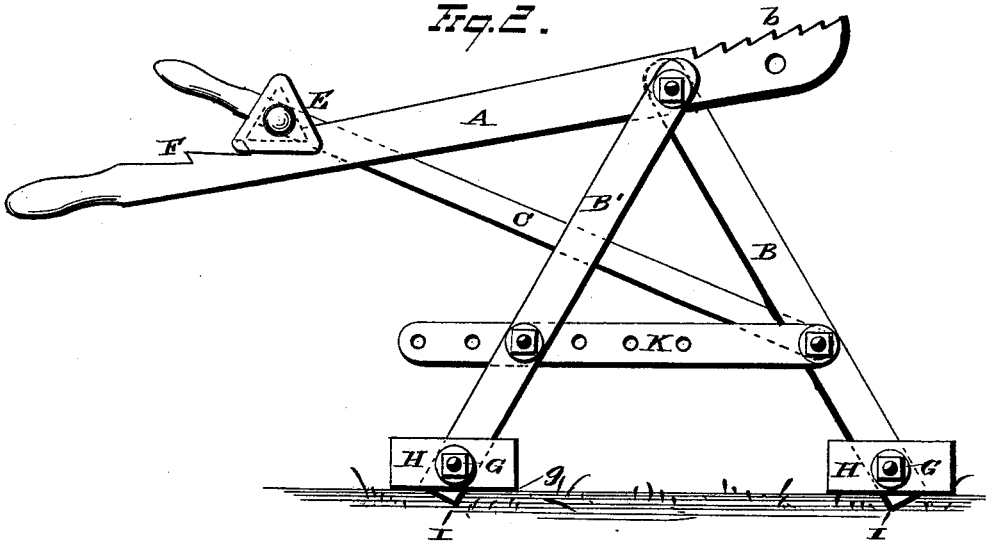


Fig. 2.



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2 Sheets—Sheet 2.

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Fig. 3.

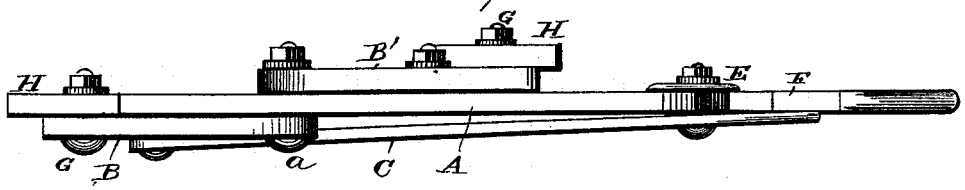


Fig. 4.

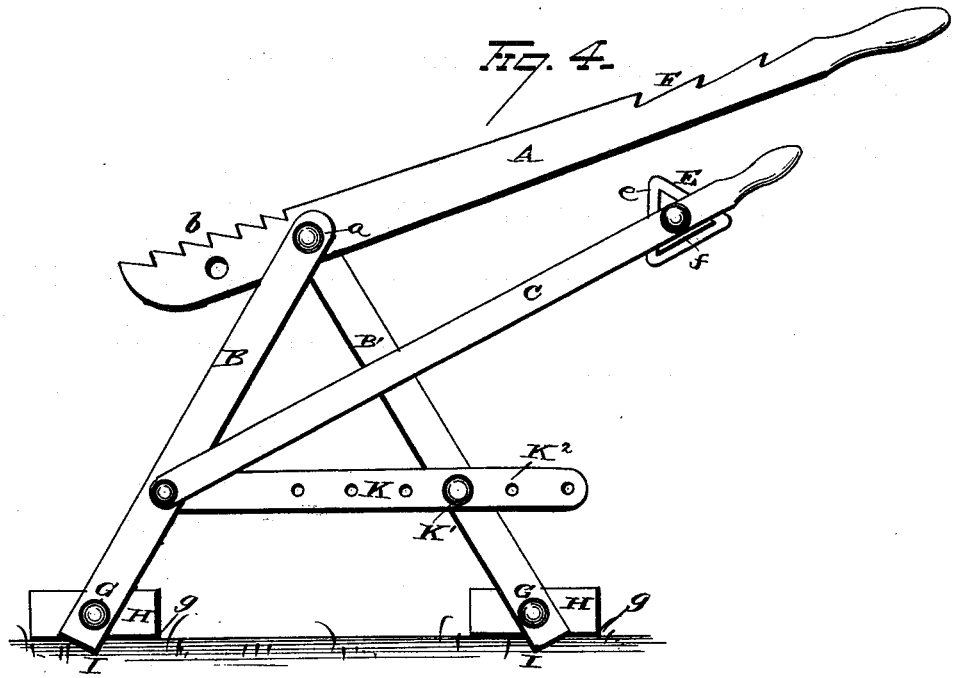
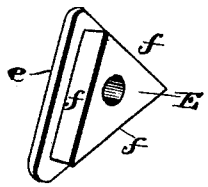


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOSEPH ALLEN, OF PALMYRA, NEW YORK.

IMPROVEMENT IN WAGON-JACKS.

Specification forming part of Letters Patent No. **221,714**, dated November 18, 1879; application filed September 30, 1879.

To all whom it may concern:

Be it known that I, JOSEPH ALLEN, of Palmyra, in the county of Wayne and State of New York, have invented certain new and useful Improvements in Wagon-Jacks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in wagon-jacks; the object being to provide a wagon-jack that shall be constructed of few parts, and of great durability and strength, and adapted to be supplied to the trade at a small cost; and to this end my invention consists, first, in a wagon-jack, the combination, with the lifting-lever, provided with notches on its handle end, of pivoted standards and an adjustable locking-brace, one end of which is pivoted to one of the pivoted standards, and its free end having a triangular self-adjustable pawl pivoted thereto, whereby the pawl will always adjust itself when applied to the lifting-lever, and one of the pawl-faces engage with the proper notch on the lifting-lever for holding the weight in a raised position.

My invention further consists in several other details of construction and combinations of parts, as will hereinafter be described, and pointed out in the claims.

In the accompanying drawings, Figures 1 and 2 are views, in side elevation, of the opposite sides of my improved wagon-jack. Fig. 3 is a plan view of the same. Fig. 4 shows the jack when about to be placed beneath an axle or other object to be raised. Fig. 5 is a view, in perspective, of the triangular flanged pawl.

A represents the lifting-lever pivoted at one end between the upper ends of the standards B B′, by means of the bolt *a*. The short end of lever A may be provided with notches or grooves *b*, to prevent the axle from slipping on the lifting-lever when the latter is operated to raise the axle.

C is a locking-brace, one end of which is pivoted to the lower portion of standard B by means of a bolt, *c*, and the opposite or free end of the brace is provided with a handle, D. To the outer and free end of the locking-brace, and in close proximity to handle D, is pivoted by bolt *d* the triangular-faced pawl E, which is provided on its outer side with a triangular flange, *e*. Either of the edges of the triangular-faced pawl E are adapted to engage with the notches F formed in the upper edge of the lifting-lever. To the lower ends of each one of the standards B B′ is pivoted by bolt G an adjustable foot, H. As the lower ends of standards B B′ are cut off at right angles to their length, each standard will be provided with a triangular projection, I, which extends below the lower edge, *g*, of the adjustable foot H. Hence the jack being placed on soft ground the projections I will enter the ground and prevent the standards from sliding forward or backward, and thus enable the standards to be adjusted and retained squarely beneath the load to be raised, and thereby prevent any tendency of the jack to tip over, while the adjustable feet constitute an extended bearing for the standards and prevent them from sinking into the ground. This is a very simple and most effective construction and arrangement of parts for effecting the important results above set forth. K is an adjusting-brace, which may be used if desired, though it is not absolutely necessary, and may be dispensed with. One end of brace K is pivoted to the forward standard, B, and the opposite end adjustably secured to the other standard, B′, by means of a bolt, K′, passing through one of the series of holes K^2. When a person has use for the jack only in connection with a single vehicle, or of a number in which the axles are of the same height, the brace K is convenient, as it enables the standards to be permanently secured at the proper distance apart to regulate the height of the lifting-lever to correspond with the height of the axle.

My improved construction of locking-brace and triangular-faced pawl is of great practical value, for the following reasons: When it is desired to insert the jack beneath the axle of the vehicle the operator can grasp the handle of the lifting-lever with one hand and with the other hand disengage the pawl from the lifting-lever and push the standard by means of the locking-brace into the desired position for use, as illustrated in Fig. 4 of the draw-

ings. After the standard has been placed in proper position the outer end of the locking-brace is raised and the triangular-faced pawl placed upon the upper edge of its lifting-lever. In this position the locking-lever is not liable to become displaced as the flange on the triangular-faced pawl bears against the side of the lifting-lever, and thus prevents any lateral movement of the pawl and displacement thereof. The outer or long arm of the lifting-lever being depressed, the axle or other weight is raised, and the outer end of the locking-lever by its gravity moves outwardly on the lifting-lever, allowing the triangular-faced pawl to engage with the notches in the lifting-lever and hold it in a locked position. To disengage the pawl and allow the load to be lowered, it is simply necessary to depress the outer end of the lever slightly, and then raise the handle end of the locking-brace. This operation serves to turn the pawl over and release it from its notch and allow the load to descend to the ground or floor.

It will be observed that the upper face of the lifting-lever is entirely unobstructed, so that the weight may be raised in close proximity to the fulcrum of the jack, which is sometimes necessary when very heavy weights are to be raised.

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

1. In a wagon-jack, the combination, with a lifting-lever having notches formed in its long arm, of a locking-brace pivoted at one end to the standard, and having a triangular-faced pawl pivoted to its free end, substantially as set forth.

2. In a wagon-jack, the combination, with a lifting-lever having notches formed in its long arm, of a locking-brace pivoted at one end to the standard, and having a triangular-faced pawl pivoted to its free end, said pawl being formed with a triangular flange which engages with the side of the lifting-lever, substantially as set forth.

3. In a wagon-jack, the combination, with the inclined standards, of adjustable feet pivoted thereto, the pointed ends of the standards extending below the lower edges of said adjustable feet, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

JOSEPH ALLEN.

Witnesses:
B. C. TIFFANY,
C. Z. CULVER.