K. E. RUDD.

WAGON-JACKS.

No. 195,537. Patented Sept. 25, 1877.

Fig. 1.

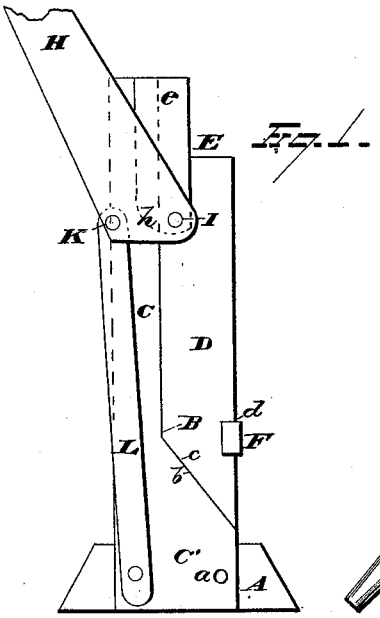


Fig. 2.

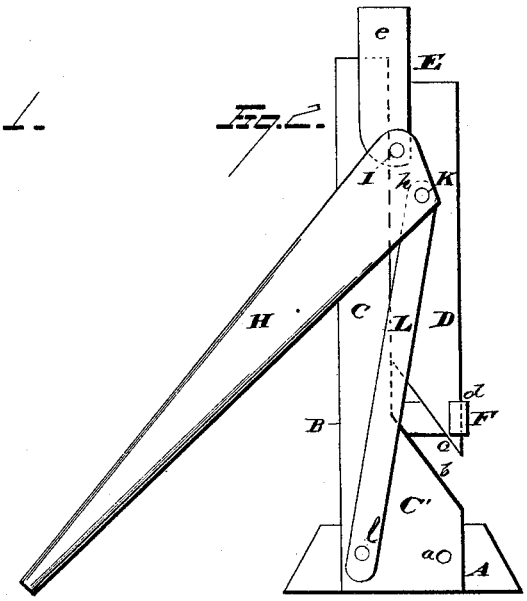


Fig. 3.

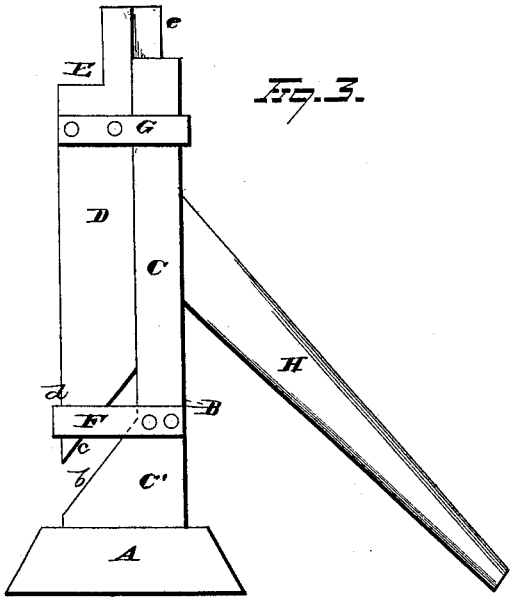
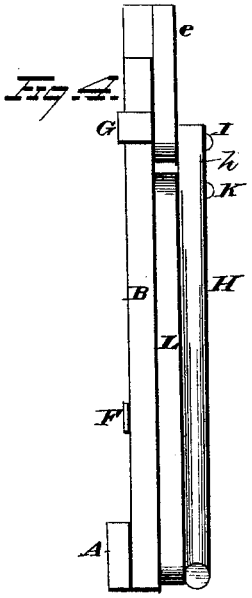


Fig. 4.



WITNESSES

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KARL E. RUDD, OF CASSOPOLIS, MICHIGAN.

IMPROVEMENT IN WAGON-JACKS.

Specification forming part of Letters Patent No. **195,537**, dated September 25, 1877; application filed August 1[illegible], 1877.

To all whom it may concern:

Be it known that I, KARL E. RUDD, of the village of Cassopolis, in the county of Cass and State of Michigan, 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 relates 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 of few parts, simple and economical in construction, and effective and durable in actual use.

In the accompanying drawings, Figure 1 is a side elevation of my improved wagon-jack, the several parts of which are in position for raising the axle of a wagon or other vehicle. Fig. 2 is a similar view, showing the position of the parts after the axle has been raised to the desired height. Fig. 3 is a rear elevation of the wagon-jack, and Fig. 4 is an edge view of the same.

A represents the base of the wagon-jack, to which the standard B is rigidly secured by bolts *a*, or in any other suitable manner. Standard B is cut away on an incline at *b*, leaving the upper portion C of the same of about one-half the width of the lower portion C′, which latter portion is secured to the base A. The sliding section or bar D has its lower end inclined at *c*, to correspond with the incline *b* on the fixed standard B. The upper end of section D is provided with one or more right-angular steps, E, for the reception and retention of the axle when the same is to be raised or lowered.

The sliding section D is movably secured to the fixed standard B as follows: F is a strap, one end of which is secured to the fixed standard B, while its outer or free end is bent around the sliding standard at *d*, and thereby serves to hold the lower portion of the sliding section in contact with the standard B. To the upper portion of standard B is secured one end of a strap, G, the other end of which is bent around the edge of the sliding section D, and serves to keep the edges of said standards in contact with each other.

To the upper end of section D is rigidly secured a guide-bar, *e*, which serves, in connection with strap G, to prevent any lateral movement of the sliding section D. Guide-bar *e* also serves another important function, as will hereinafter be described.

H is the hand-lever, the inner end *h* of which is made of considerable width, and said lever is pivoted at its extreme end to the lower end of guide-bar *e* by means of the pin or bolt I.

The lower edge of hand-lever H is pivoted, at K, to the upper end of a link, L, the lower end of said link being pivoted to the base or extreme lower end of standard B at *l*, preferably at the lower corner of the standard and on the side toward the handle.

When the sliding section is in its lowest position, as shown in Fig. 1, its lower inclined end has full bearing on the inclined edge of the fixed standard B. The handle will then be in a raised position, and the pivotal points I K will then be in the same horizontal plane.

When the handle is depressed it forms, in connection with the sliding section and the link L, a toggle-lever, and as the extreme end of the handle is downwardly forced until it touches the ground or floor upon which the base of the jack rests, the upper end of link L will be forced in a lateral direction until its pivotal point K passes beneath and to the opposite side of the pivotal point I, when the sliding section is securely locked in its raised position, and cannot be lowered until the handle is raised sufficiently to cause the upper end of link L to move to the opposite side of the pivotal point I.

It will be observed that the guide-bar *e* not only serves as a guide and bearing for the sliding section, but also serves as a raised fulcrum for the handle, and hence brings the pivotal points I K in the same vertical plane, and thereby prevents the twisting or splitting of the handle or link.

Again, the link L, being pivoted to the lower end of the standard and at the corner thereof adjacent to the handle, secures the

greatest possible leverage, and enables the weight to be raised by the least possible outlay of power.

Another important feature connected with this particular construction consists in the fact that the point of resistance is located at the base of the jack and beneath the handle, and hence all danger and liability of tipping or overturning the wagon-jack are obviated.

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

The combination, with the fixed and sliding sections of a wagon-jack, of the hand-lever H, guide-bar *e*, and link L, the lower end of the latter being pivoted to the extreme lower end of the fixed standard, substantially as described.

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