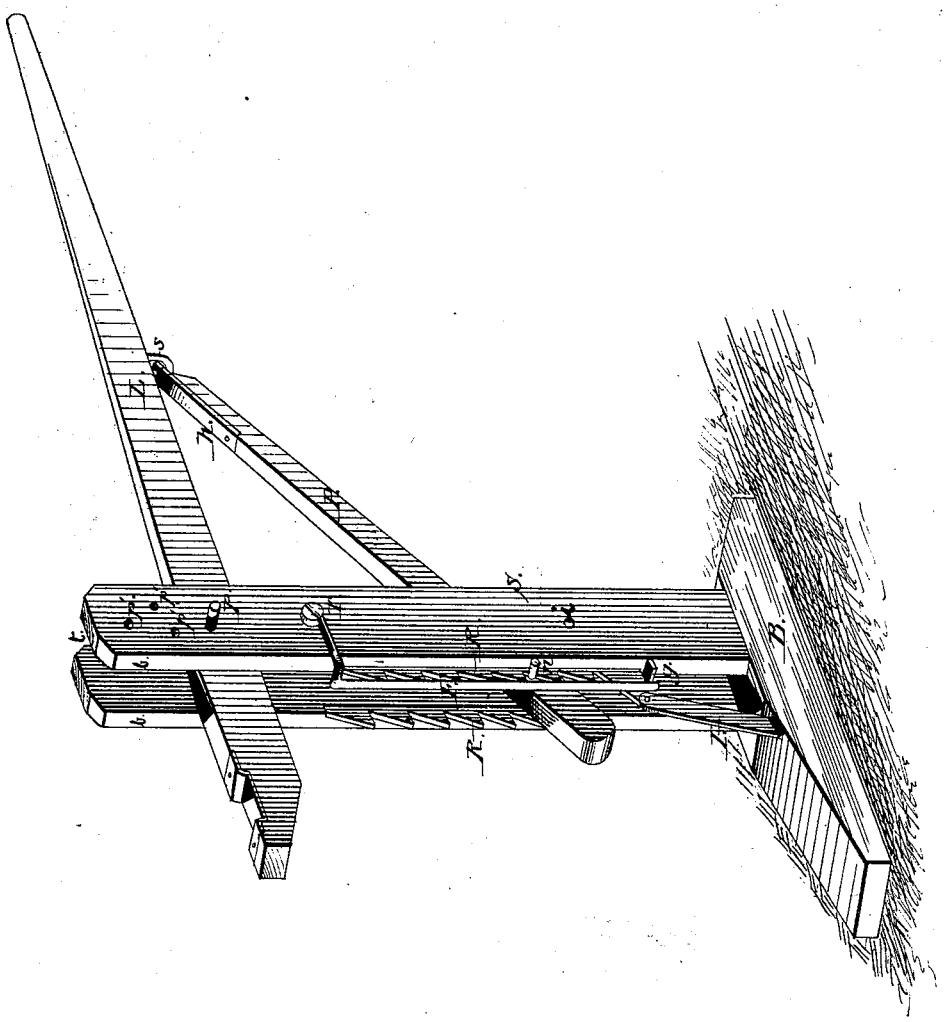
M. C. FLANDERS.
Wagon-Jack.

No. 200,044. Patented Feb. 5, 1878.



Witnesses:
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UNITED STATES PATENT OFFICE.

MARVIN C. FLANDERS, OF KENDALL, NEW YORK.

IMPROVEMENT IN WAGON-JACKS.

Specification forming part of Letters Patent No. **200,044**, dated February 5, 1878; application filed December 15, 1877.

To all whom it may concern:

Be it known that I, MARVIN C. FLANDERS, of the town of Kendall, in the county of Orleans and State of New York, have invented new and useful Improvements in Wagon-Jacks, which improvements are fully set forth in the following specification and accompanying drawing, which drawing is a perspective view of my improved wagon-jack.

This invention relates to that class of wagon-jacks whereof the lever and pawl-rod vibrate between two upright bars, which form the standard, and the pawl-pin catches teeth projecting from the front of the standard's edge, and then, in passing up the teeth, is warded off by a fender. Its object is to furnish a simple and cheap device, by which the pawl-pin, after descending below the ratchet, can, without catching in or being obstructed by it, be, by the lever, raised above the same.

It consists in a solid block-base, to which is bolted a standard composed of two vertical parallel bars, between which bars vibrate the lever and pawl-staff, said staff having a cross-pin catching into a ratchet, which is formed of metal plates planted on said bars, and projecting from the edge of the standard, and from which ratchet, as the pin passes up the standard, it is kept off by a vertical rod-fender. Outside of this fender is a double-incline slide, guiding the pin to and up the same, all of which is described as follows:

In the drawing, B represents the base of the invention, to which are bolted two opposite vertical bars, *b b*, forming the standard S, and leaving between the bars a full-length slot or aperture, *t*. In this slot vibrate the lever L and pawl-staff P—the lever on the fulcrum-pin *p*, the pawl-staff by a loose connection with the under side of the lever. The ratchet R is formed by planting toothed metal strips, about two by three-sixteenths inches in size, on the inner face of said bars, having the full depth of the teeth projecting in front. At the outward end of the pawl-staff is the cross-pin *n*, catching said teeth, and thereby sustaining the raised vehicle.

F is a rod-spring, rigidly attached to the standard at *r*, from which point it extends out horizontally to about one-fourth of an inch in front of a plane of the teeth-points; then at right angles inward to a point about in front of the left ratchet-plate; thence down to a little below the ratchet, bending at the same time, to give springing properties to the rod inward more than parallel to the standard.

One end of the sloped-edge plate I is attached, edge up, to the inner face of the left bar of the standard, at the lower end of the ratchet, and the other is fastened in a mortise in the base of the jack. On the lower edge of said plate, at a point where the rod, when in position, is parallel to the face of the standard, and far enough out from the face of the same to give room for the pawl-pin *n*, in passing up or down the ratchet, to move freely between the teeth and rod, is the lug *g*, and the lower end of the spring-rod is brought out to rest against and be supported by said lug, and against which also, after the pawl-pin, in its descent, passes out from the rear of the spring under the same, reacts and impinges. This brings the spring-rod parallel to and in front of the standard, and, when the pawl-pin passes up outside of the spring, the spring becomes a fender, barring off the pin from the teeth, while the sloped-edge plate prevents said pin from falling below the ratchet or spring, guiding the same out from its rear, then in its course up on its outside back to the same. The angle in the plate's edge is caused by shortening, to save its extension out on the base, as it otherwise would. The through-pin *i* receives the weight of the pawl-staff in its fall, and prevents a fracture of the same by the pin as it strikes on the plate.

The operation of the invention is as follows: By the fulcrum-pin *p* and perforations *p'* the lever is adjusted to the desired height. Then, in raising the outward end of the lever, the pin *n* is raised and carried over the top of the fender F, and dropped between the ratchet and fender, catching the teeth at the right point for sustaining the wagon, the same retaining the pawl-pin in position till released by again bearing down the lever.

To release the wagon from the jack the outward end of the lever is again borne down till the pawl-pin passes out from under the fender-spring onto the incline I, when, the weight being withdrawn, the vehicle rests on the ground, thereby completing the operation for which the device was intended.

Its advantages are the following: The ratchet-plates planted on the inside face of the bars composing the standard strengthen the said bars to such an extent that they can be made smaller than otherwise. The pawl-pin, in passing up outside of the said fender, enables the device to be operated by only one hand.

I claim as my invention and ask for Letters Patent upon—

The spring-rod fender F, angular incline guide I, and lug *g*, by which the pawl-pin is taken above the ratchet without catching in the teeth, in combination with the ratchet-plates R, standard S, lever L, and pawl P, staple *s*, hasp *h*, pin *i*, fulcrum-pin *p*, perforations *p'*, and base B, for the purposes substantially shown and described.

In testimony whereof I have hereto subscribed my name this 21st day of November, 1877.

MARVIN C. FLANDERS.

Witnesses:

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