J. B. GILLASPIE.
Wagon-Jack.

No. 212,796. Patented Mar. 4, 1879.

Fig. 1.

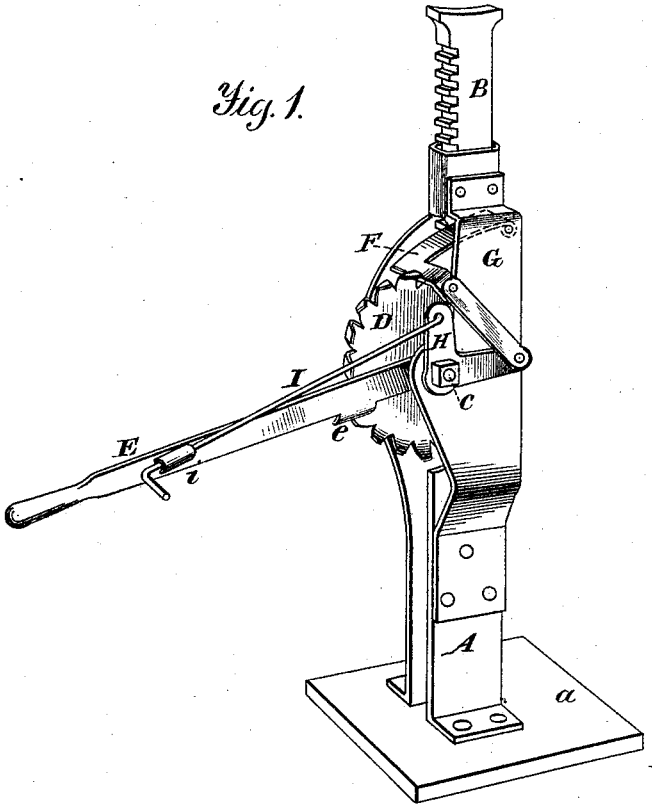
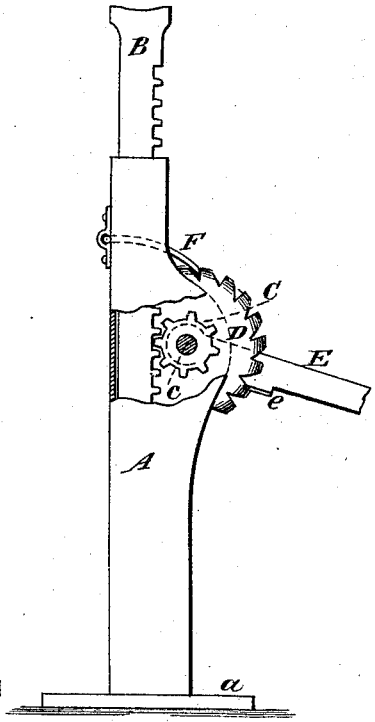


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN B. GILLASPIE, OF MOUNT PISGAH, OHIO.

IMPROVEMENT IN WAGON-JACKS.

Specification forming part of Letters Patent No. **212,796**, dated March 4, 1879; application filed January 24, 1879.

To all whom it may concern:

Be it known that I, JOHN B. GILLASPIE, of Mount Pisgah, in the county of Clermont and State of Ohio, have invented certain new and useful Improvements in Wagon-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved lifting-jack; and Fig. 2 is a side elevation, with a portion of the same broken away and in section.

The same part in the two figures is denoted by the same letter.

This invention relates to certain improvements in lifting-jacks; and it consists in the employment, in connection with the ratchet-wheel, by which and a lever and intermediate gearing the lifting rack-bar is raised and lowered, of a pawl acted upon by a bell-crank or triangular lever, arranged so as to be conveniently operated, substantially as hereinafter more fully set forth.

In the annexed drawings, A refers to an upright case, with one, or rather its rear, side left open, and fastened to a base or board, *a*, to hold it in an upright position.

B is the lifting rack-bar, with a series of teeth in its rear side, and arranged or disposed within the case A so as to permit of its being vertically adjusted, the upper end of the case A also being left open.

C is a pinion or gear-wheel, whose shaft *c* is hung in the case A, and which engages with the teeth of the rack-bar B. Upon the same shaft is a ratchet, D, with its teeth bent at right angles to its body, as seen in Fig. 1.

E is a lever, fulcrumed upon the shaft *c*, and having a right-angled tooth, *e*, which engages with the right-angled portions of the ratchet-teeth, as clearly shown.

By imparting the requisite movement to the lever E, it will be seen that the ratchet D will be rotated, and it, in turn, will rotate the pinion C, gearing with the bar B, and thus effect the vertical adjustment of the latter.

F is a pawl, hung within a supplemental case, G, attached to the case A, and which pawl engages with the ratchet D, as seen in the two figures.

H is a bell-crank or triangular lever, pivoted at its elbow or angle to or upon the shaft *c*, one arm being connected to one side of the pawl F, and the other arm having attached thereto a rod, I, or its equivalent, passed through an eye or bracket, *i*, on one side of the lever E, as clearly seen in Fig. 1.

The operation is as follows: The bar B being placed under the weight or vehicle-axle, and the lever E grasped and moved after the manner of operating a pump-handle, the said bar will be raised, elevating the weight. The weight having been raised to the desired height and the lever E brought to rest, the pawl F will fall by gravity into the coincident notch of the teeth of the ratchet D, and thus secure the bar with its weight in an elevated position. To lower the bar B or free it from the superincumbent weight, the lever E is moved downward slightly, or sufficiently to free the pawl from forcible contact with the ratchet, or rather its teeth, when, by pulling upon the rod I, the bell-crank H will be acted upon, so as to elevate the pawl from contact entirely with the ratchet; and by moving the lever E out of a line with the path of the rotation of the ratchet and its teeth, the bar B will immediately descend, and thus effect the result above sought.

Having thus fully described my invention, I claim and desire to secure by Letters Patent—

1. In a lifting-jack, the combination, with its rack-bar, elevating-ratchet, and ratchet-operating lever, the pawl F, connected to the bell-crank H, having attached thereto a rod, I, or its equivalent, substantially as and for the purpose set forth.

2. The combination of the case A, rack-bar B, shaft *c*, pinion C, ratchet D, having right-angled teeth, lever E, having a right-angled tooth, pawl F, bell-crank H, and rod I, or its equivalent, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I hereunto affix my signature in presence of two witnesses.

JOHN B. GILLASPIE.

Witnesses:

JOHN W. SEMINE,

H. W. SCHUMACHER.