A. W. FIELD.

Carriage-Jack.

No. 167,232. Patented Aug. 31, 1875.

FIG. 1.

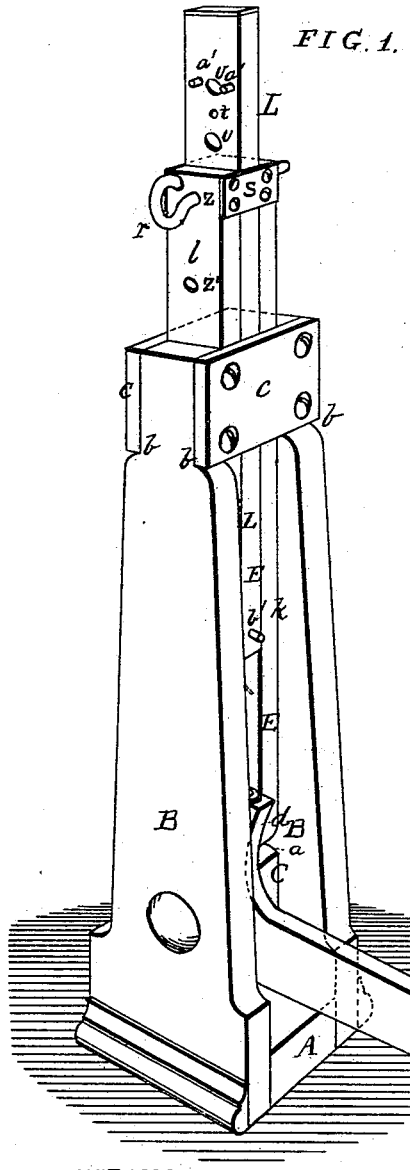
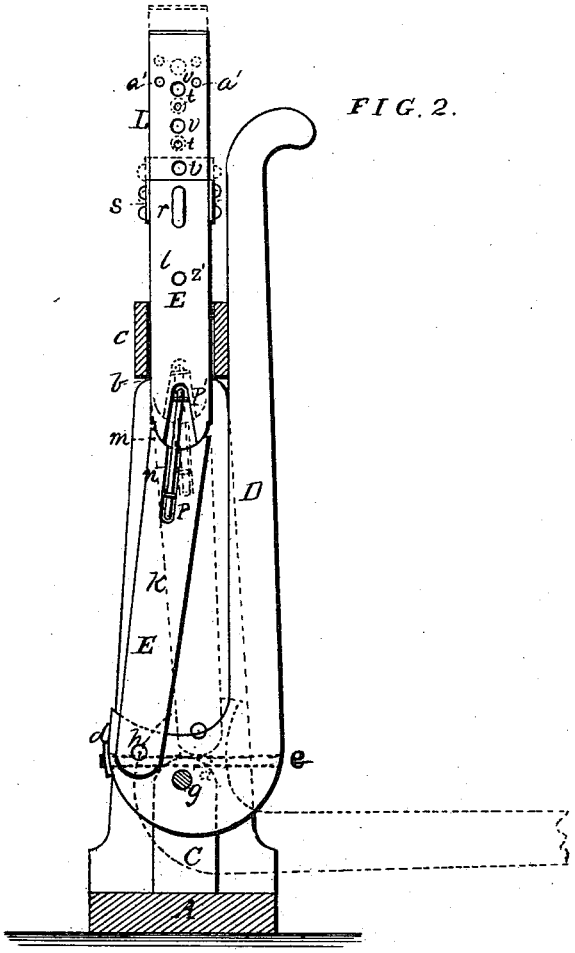


FIG. 2.



WITNESSES

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UNITED STATES PATENT OFFICE

AUSTIN W. FIELD, OF VERGENNES, VERMONT, ASSIGNOR OF ONE-HALF HIS RIGHT TO FREDERICK W. COE, OF SAME PLACE.

IMPROVEMENT IN CARRIAGE-JACKS.

Specification forming part of Letters Patent No. **167,232**, dated August 31, 1875; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, AUSTIN W. FIELD, of Vergennes, in the county of Addison and State of Vermont, have invented a new and valuable Improvement in Carriage-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of my carriage-jack, and Fig. 2 is a vertical sectional view of the same.

This invention has relation to carriage-jacks; and it consists in the construction and novel arrangement of the jointed arms which connect the lever with the sliding bar, and the adjusting-perforations at the upper ends of the jointed arms and sliding bar, as hereinafter fully shown and described.

In the accompanying drawings, the letter A designates the base; B, the side standards let into the base at the corners, or otherwise securely fastened thereto. C C are abutments secured to the inside of said standards at their lower ends, and provided with upper ends which are curved in circular form, as shown at *a*, the centers of these circles being in the fulcrum-bolt of the lever. The upper ends of the standards are usually shouldered, as indicated at *b*, and are provided with the transverse connecting-bars *c*. D represents the lever, the short arm *d* of which is curved upward, and strengthening by the transverse bolt *e* passing through said lever from edge to edge. By means of this bolt the lever is rendered strong enough for loaded wagons. The lever is pivoted to the side standards by means of the fulcrum-bolt *g*. E E represent the jointed connecting-arms. These are pivoted at their lower ends to the toe of the short curved arm of the lever, in such angular relation to the fulcrum-bolt that the pivot *h* will be on one side or the other of the fulcrum, according to the raised or depressed position of the lever; hence, when the lever is depressed, raising the jointed arms, their lower branches *k* will be thrown into an oblique position, securing the lever automatically by the pressure of the load. Each jointed arm consists of an upper vertical branch, *l*, which slides in the bearing between the upper ends of the standards and the transverse bars *c*, and a lower vibratory branch, *k*, which is pivoted to the operating-lever. These branches are arranged to engage by a semicircular socket-joint, *m*, or other strong pivotal connection. If the socket-joint is employed it is designed to connect the parts by a rod or brace, *n*, seated in recesses *p p'*, whereof the latter is widened in angular form to permit the necessary play. The upper branches *l* are each provided with two perforations, *z z'*, which are distant from each other once and a half the distance between two adjacent perforations, *v v*, of the sliding bar L, which is located between the jointed bars, and adjustable therein by means of said perforations and the pin *r*. The upper ends of the jointed arms are connected by means of strong transverse plates *s*, which form bearings for the edges of the sliding bar. In the middle of each interspace between the perforations *v* of the sliding bar, a countersink or mark is located, as shown at *t*, for convenience in the adjustment. The arrangement of the perforations *z z'*, with relation to those of the sliding bar, is designed to secure strength between the perforations, as they can be placed a greater distance apart in the sliding bar than could be done if a single bearing were made in the jointed arms for the adjusting-pin. In using this jack it is to be placed under the axle with the lever raised. The pin *r* being removed the sliding bar is raised by hand until it touches or nearly touches the axle. Then the pin is replaced and the lever depressed, raising the axle. When the lever is fully depressed the lower branches of the jointed arms will have vibrated from one side of the fulcrum to the other, and its position will be such that the raised position of the sliding bar will be maintained automatically by the weight of the load. Through the upper end of the sliding bar pins *a'* are arranged to prevent the bar from falling on the toe of the lever, and a pin, *b'*, is arranged in its lower end to prevent it from being drawn upward out of its bearings.

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

The combination, with the sliding bar, hav-

ing at its upper end the adjusting-perforations *v v*. of the bearing-arms between which said sliding bar is carried, having the perforations *z z'* spaced apart once and one-half the distance between two adjacent perforations of said sliding bar, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

AUSTIN WINSLOW FIELD.

Witnesses:
JAMES LELAND,
WILLIS BLANCHARD.