J. VAN MATRE.
Wagon-Jack.

No. 219,785. Patented Sept. 16, 1879.

Fig. 1.

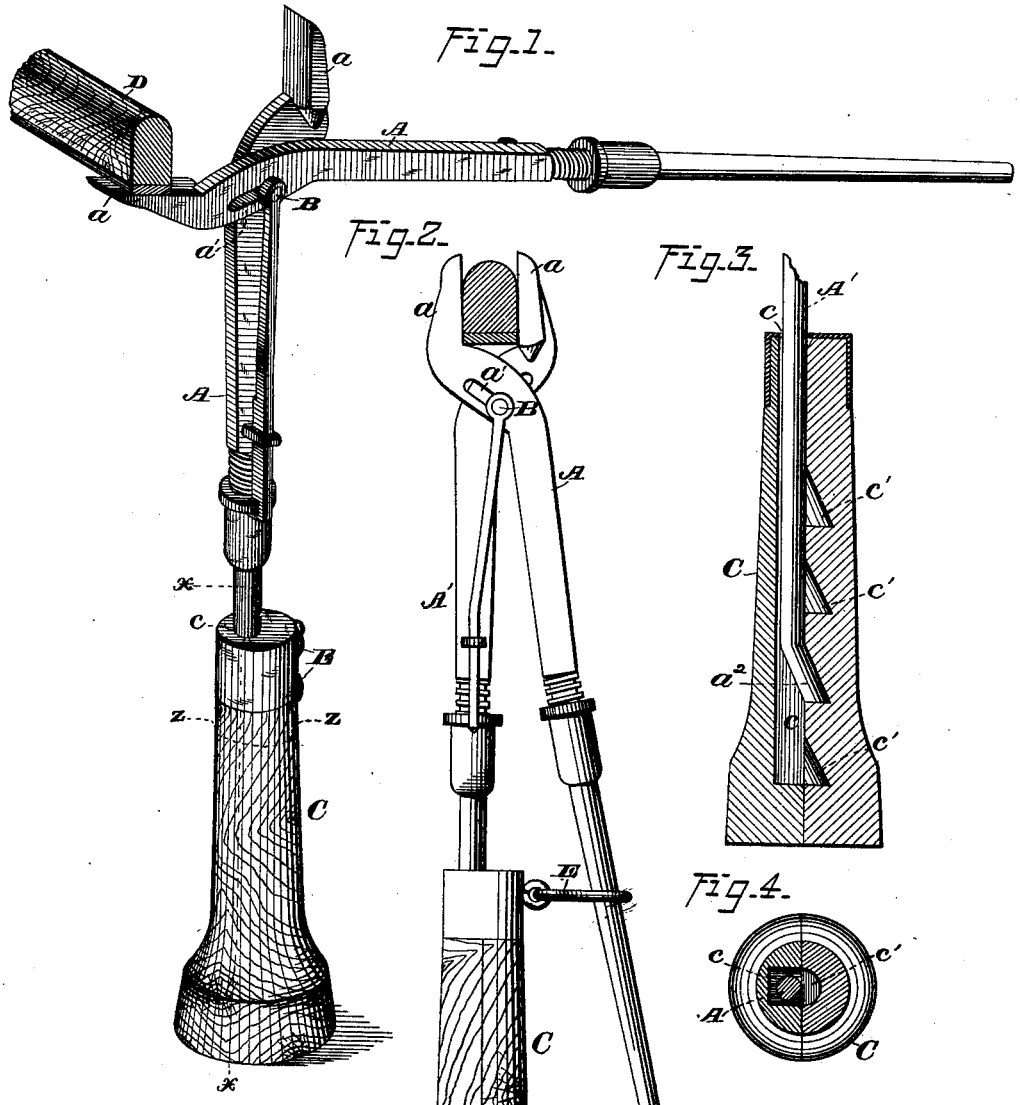

Fig. 2.

Fig. 3.

Fig. 4.

WITNESSES:
Jas. E. Hutchinson.
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UNITED STATES PATENT OFFICE.

JOSEPH VAN MATRE, OF CADIZ, INDIANA.

IMPROVEMENT IN WAGON-JACKS.

Specification forming part of Letters Patent No. **219,785**, dated September 16, 1879; application filed April 14, 1879.

To all whom it may concern:

Be it known that I, JOSEPH VAN MATRE, of Cadiz, in the county of Henry, and in the State of Indiana, have invented certain new and useful Improvements in Wagon-Jacks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my improved jack as arranged to raise a wagon-axle. Fig. 2 is a side elevation of the same after said axle has been raised and secured in position; and Figs. 3 and 4 are longitudinal and horizontal sections of the base upon lines *x x* and *z z*, respectively, of Fig. 1.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable a wagon-axle to be raised to and secured in any desired position; to which end it consists in the device as a whole, its several parts being constructed and combined to operate in the manner and for the purpose substantially as hereinafter set forth.

In carrying out my invention I preferably employ as part of my jack a pair of tongs which were patented by me upon the 5th day of June, 1877, in which the jaws *a* are made adjustable toward or from each other by means of obliquely-formed pivotal openings *a'* within each section or arm A of the tongs, which openings are arranged at opposite angles from each other, and receive a pivotal bolt, B, that, by suitable mechanism, is made adjustable lengthwise of said pivotal openings, the result being that the movement of said bolt toward or from the ends of said jaws will cause the latter to be moved toward or from each other, respectively, by which arrangement said tongs may be rendered capable of grasping any article which has a thickness between the limits to which said jaws may be moved.

One arm, A', of the tongs is inserted within a base, C, which base has a cylindrical upward-tapering form, and has such breadth at its lower end as to enable it to stand firmly upon a floor or the ground.

The base C is provided with a vertical opening, *c*, which extends from the upper end nearly to the lower end of said base, has a rectangular shape in horizontal section, is arranged at one side of the axial center, and within the side next to said center is provided with a series of notches or steps, *c'*, that have horizontal lower ends.

The body of the arm or standard A' is contained within the opening *c*, while its lower end, a^2, has an outward and a downward inclination, which enables it to extend into either of the notches *c'*, and when resting upon the bottom of said notch it sustains said standard and prevents the same from dropping downward.

In one direction the opening *c* has such dimensions as to permit the necessary freedom of motion of the standard A', while in the opposite direction—in a line with the side containing the notches *c'*—said opening has such dimensions as to enable the angular lower end, a^2, of said standard to be turned laterally in either direction out of its notch, in which position said end offers no resistance to the free vertical movement of said standard.

The construction described enables the standard A' to be adjusted to and secured in the desired vertical position beneath the axle of a wagon, after which the operation of the jack is as follows, viz: The arm A is raised to a horizontal position and its jaw *a* passed beneath the axle D, as shown in Fig. 1, after which said arm is moved downward against the base C, and secured in position by means of a hook, E, that is pivoted to or upon said base. The arm A operates as a lever, and its jaw raises the axle D, as shown by dotted lines of Fig. 2, after which said jaw, in connection with the opposite jaw, *a*, acts as a clamp, and holds said axle firmly in place, said jaws having previously been adjusted to such relative position as to enable them to grasp said axle when moved inward, as shown.

By thus clamping the axle firmly within the upper end of the jack, no necessity exists for blocking the wheels of a wagon to prevent the same from moving, it being impracticable for said jack to turn upon said axle or for the latter to change position without dragging the former along the floor or ground.

Having thus fully set forth the nature and

merits of my invention, what I claim as new is—

The hereinbefore-described wagon-jack, consisting of the pivoted arms A and A′, having the jaws *a* and the extension a^2, the base C, provided with the vertical opening *c*, the notch *c′*, and the hook E, said parts being combined to operate in the manner and for the purpose substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of April, 1879.

JOSEPH VAN MATRE.

Witnesses:
WILLIAM VEST,
F. H. JOHNSTON.