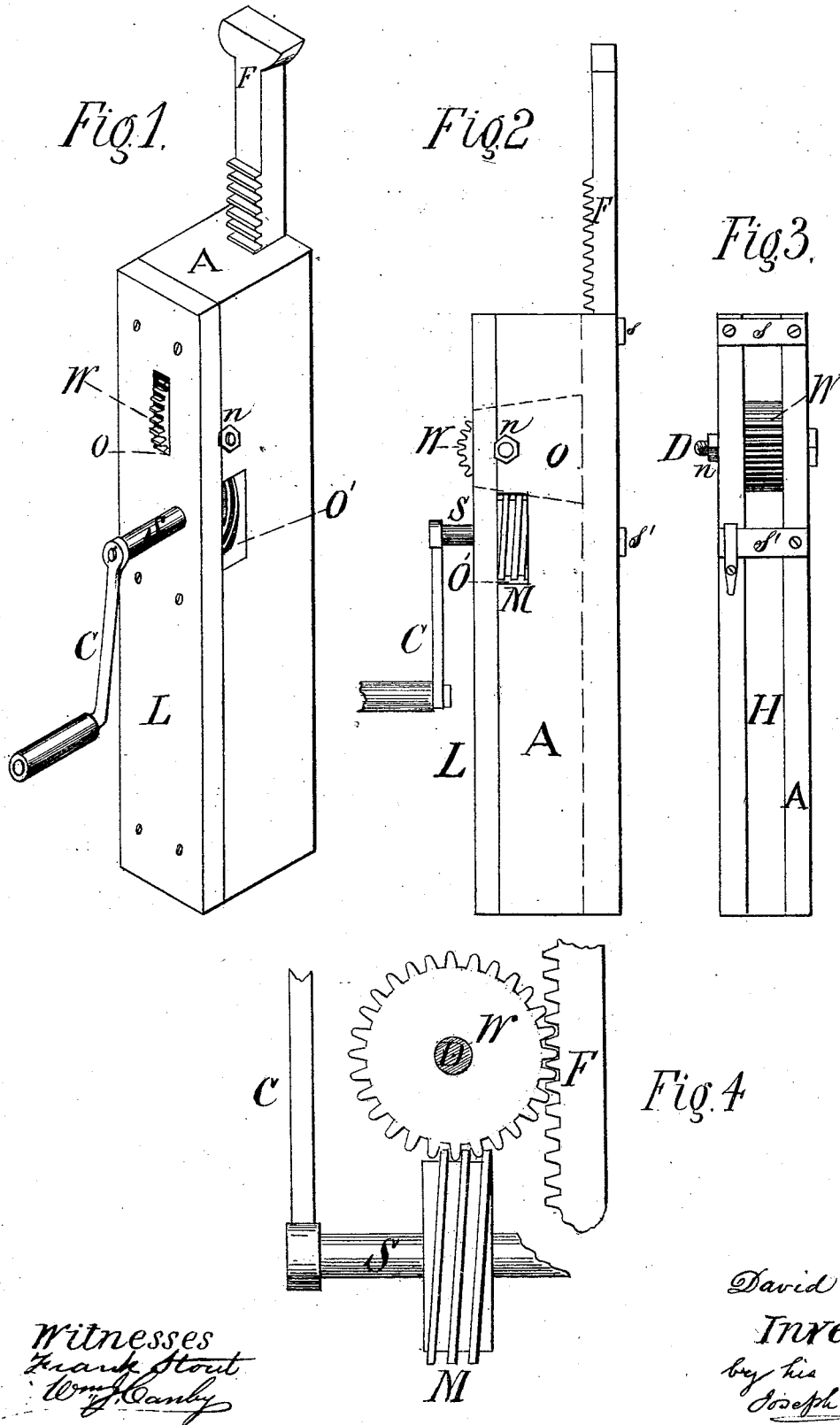


DAVID HIESTAND.

Improvement in Carriage-Jacks.

No. 114,816.

Patented May 16, 1871.



Witnesses
 Frank Stout
 Wm. Canby

David Hiestand,
 Inventor
 by his attorney,
 Joseph Evans.

United States Patent Office.

DAVID Hiestand, of PUGHTOWN, PENNSYLVANIA.

Letters Patent No. 114,816, dated May 16, 1871.

IMPROVEMENT IN CARRIAGE-JACKS.

The Schedule referred to in these Letters Patent and making part of the same.

I, DAVID Hiestand, of Pughtown, in the county of Chester and State of Pennsylvania, have invented certain Improvements in "Carriage-Jacks," of which the following is a specification.

The object of my invention is to provide a simple and effectual method for raising the axles of carriages and other vehicles when it may become necessary to do so for repairs, cleaning, &c.

To accomplish this result I employ an upright rack, an ordinary cog-wheel moved by a worm, the whole inclosed in a substantial frame-work, as will be hereinafter described.

Figure 1 is a perspective view of my machine.

Figure 2 is a side view of same.

Figure 3 is a back view.

Figure 4 is a detached view of the cog-wheel, rack, and worm.

To enable those skilled in the art to make and use my invention, I will now proceed to describe the same.

A is the frame of the machine, constructed of any suitable wood.

In the back part of the same is cut a vertical groove, H, in which the rack F moves.

Near the upper part and center of the frame A is cut a rectangular opening, O, shown by dotted lines in fig. 2, in which is inserted a geared wheel, W, which is held in proper position and revolves on a rod or bolt, D, which passes through the frame A, and is secured firmly in place by the nut n.

Near the front, and a short distance below the open-

ing O, and on a line with the lower part of same, is cut or formed an opening, O', figs. 1 and 2, in which is centered on the shaft S a worm, M, the said worm gearing in the wheel W.

On the end of the shaft S is attached a crank, C, for revolving or rotating the worm M, which communicates motion to the geared wheel W and transmits it to the rack F, thus raising or lowering the same as desired.

On the front part of the frame A is secured, by means of screws or otherwise, a lid, L, suitable opening being formed in same for the wheel W and shaft S.

The rack F is retained in the groove H by means of metallic straps s and s', the strap s' being so arranged as to swing back in order to allow the rack F to be disengaged and removed if desired.

Having thus described my invention,

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

The combination and arrangement of the frame A, lid L, geared wheel W, bolt or rod D, worm M, shaft S, rack F, and straps s and s', so as to operate substantially as and for the purpose specified.

In testimony whereof I have hereunto signed my name in the presence of the subscribing witnesses.

DAVID Hiestand.

Witnesses:

CHAS. M. GRIFFITH,

ISAAC P. DAVIS.