

(No Model.)

F. L. JOHNSON.
PIPE HOLDING AND HOISTING MACHINE.

No. 595,309.

Patented Dec. 14, 1897.

Fig. 1.

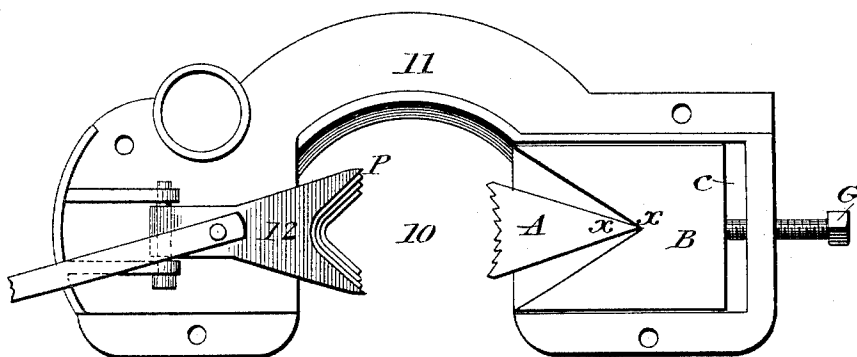


Fig. 2.

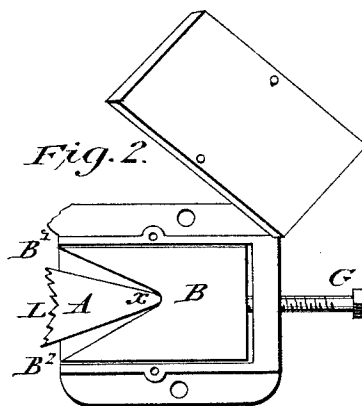


Fig. 4.

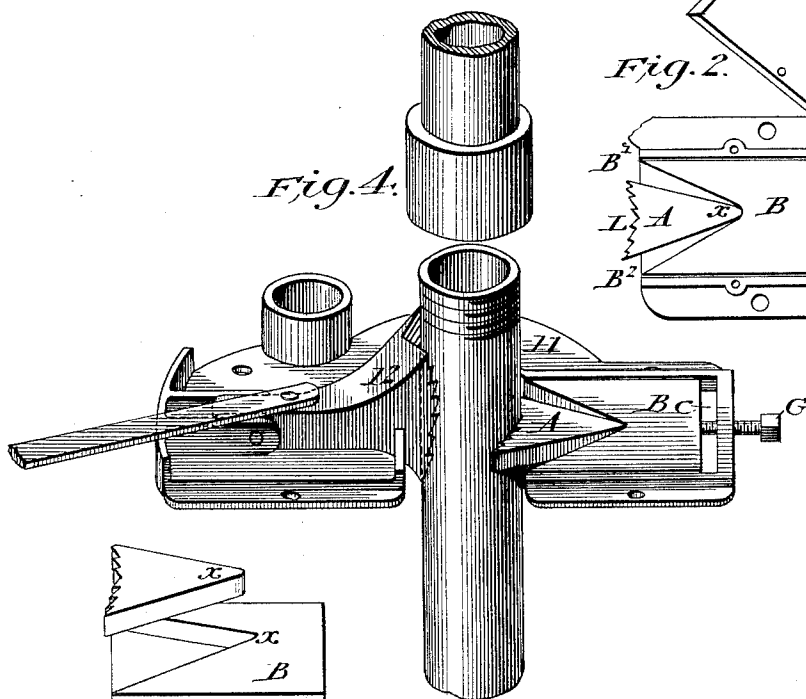
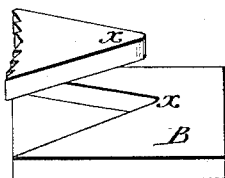


Fig. 3.

Witnesses.

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FRANK LESLIE JOHNSON, OF ALBIA, IOWA.

PIPE HOLDING AND HOISTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 595,309, dated December 14, 1897.

Application filed June 4, 1896. Serial No. 594,330. (No model.)

To all whom it may concern:

Be it known that I, FRANK LESLIE JOHNSON, a citizen of the United States of America, and a resident of Albia, Monroe county, State of Iowa, have invented a Pipe Holding and Hoisting Machine, of which the following is a specification.

My object is to provide an improved machine to facilitate the raising and lowering of tubes in a well and to prevent sections that are gripped fast from rotating when tongs are applied for attaching or detaching sections of the tube by screwing them on or off.

My invention consists in the simple, strong, and durable machine hereinafter set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 is a top view showing all the operative parts combined with a rigid frame adapted to be placed flat upon a platform at the mouth of a well, as required, for practical use. Fig. 2 is a view showing one end portion of the frame broken off and a block slidably connected therewith to be adjusted by means of a screw and a laterally-adjustable tube-gripping device fitted in a cavity in the block and the cover for the block and cavity turned aside. Fig. 3 is a perspective view of the sliding block and cavity. Fig. 4 is a perspective view of the complete device, showing a section of a well-tube rigidly clamped fast therein and securely held thereby, as required, to prevent any vertical or rotary movement of the tube.

The ends of the frame are rectangular in shape and rigidly connected by means of an integral curved portion designated by the numeral 11, so that there will be a vacant space 10 between the two end portions, through which space a well-tube can be extended and clamped fast, as shown in Fig. 4.

One end portion of the frame is of skeleton form, and a block B, having a triangular-shaped cavity at one end, is slidably connected with said skeleton end of the frame. A triangular-shaped dog A, having teeth at its curved side, is fitted in the cavity of the block in such a manner that it is laterally adjustable. A screw G is extended through a threaded bore in the end of the frame and into the end of the block, as required, to move the

block to press the dog A against a tube and to bite fast thereto.

A second clamping device 12, having a curved and toothed end adapted to fasten to a tube, is hinged to the other end portion of the flat frame in such a manner that its free end can be raised and lowered. A handle or locking-bar pivoted thereto when turned at right angles to the longitudinal axis of the hinged clamp can be used advantageously in lifting the clamp from disengagement of a tube, as required, to allow the tube to be raised or lowered in a well. When the handle is in position, as shown in Figs. 1 and 4, it locks the clamp 12, as required, to prevent vertical motion of the jaw relative to the base to which it is pivoted and aids in retaining the tube rigidly fastened, as required, to prevent vertical or rotary movements thereof as long as the tube is to be retained stationary, and it is very important that the tube be retained immovable, and locking the vertically-moving jaw is essential to holding the tube and jaws firm while tube-sections are being screwed on and off at the exposed top of the tube that extends up above the jaws.

From the foregoing description of the construction, function, and arrangement and combination of the different parts the practical operation and utility of my invention will be readily understood by any person of ordinary intelligence.

I claim as my invention—

A well-tube holder and lifter comprising a base or frame adapted to lie flat at the top of a well, a block having a triangular-shaped cavity at its inner end slidably connected with one end portion of said frame, a triangular-shaped dog fitted in said cavity, a screw for adjusting the sliding block seated in the end of the frame and connected with the block, a clamp hinged to the other end portion of the frame to swing vertically, and a bar pivoted to said clamp for lifting and locking the clamp, all arranged and combined as and for the purposes stated.

FRANK LESLIE JOHNSON.

Attest:

FRED TOWNSEND,
FRED D. MASON.