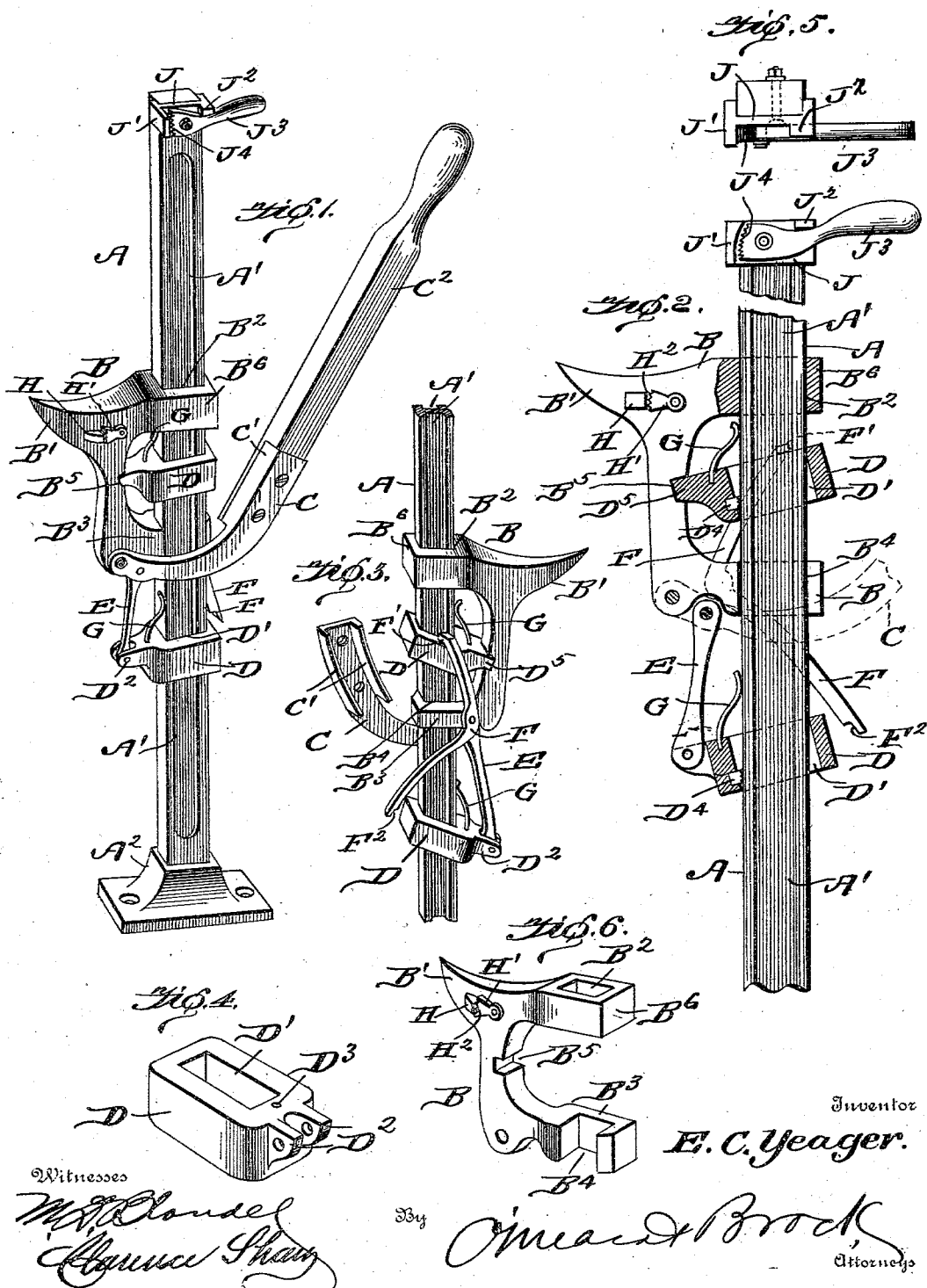


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PATENTED FEB. 16, 1904.

E. C. YEAGER.
LIFTING JACK.
APPLICATION FILED MAY 9, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

EARNEST CURTIS YEAGER, OF ROCKDALE, TEXAS.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 752,502, dated February 16, 1904.

Application filed May 9, 1903. Serial No. 156,452. (No model.)

To all whom it may concern:

Be it known that I, EARNEST CURTIS YEAGER, a citizen of the United States, residing at Rockdale, in the county of Milam and State of Texas, have invented a new and useful Lifting-Jack, of which the following is a specification.

My invention is an improvement in lifting-jacks, and is adapted not only to lift an article from the ground in a vertical direction, but is also adapted to be used when placed in a horizontal position to exert the same power in a horizontal plane; and one object of my invention is to provide a light jack having a detachable base which can be readily turned to a horizontal or inclined position and to provide the horn of the jack with gripping means whereby a pulling effect may be gained as distinguished from a pushing effect and which will enable the operator to lift a load below the support on which the jack is arranged or to exert a tension in a horizontal plane, as in stretching a wire, which, in effect, would be the same as lifting a load from below the point on which the device was positioned.

My invention consists in a standard, a horn sliding thereon, a lever pivotally connected to the horn, clamping members adapted to alternately grip and slide on the standard, and also in the details of construction described hereinafter and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my device as seen from one side. Fig. 2 is an elevation, parts being in section. Fig. 3 is a detail perspective view of the horn and clamping members as seen from the opposite side of Fig. 1. Fig. 4 is a perspective view of one of the clamping members detached. Fig. 5 is a detail top plan view of the standards, and Fig. 6 is a perspective view of the horn detached.

In the drawings above described, A represents a standard cut out along the sides, as at A', to make it lighter, its lower end fitting in a detachable base, which is adapted to be secured to a floor or platform. Sliding upon this standard is the horn B, comprising an upper forwardly-projecting portion B', curved

on its upper face and having a rearwardly-extending integral arm B⁶, which is vertically and centrally slotted at B², adapting the arm to fit over and slide on the standard. The main body of the horn extends downwardly and has a rearwardly-extending arm B³ recessed on one side, as shown at B⁴, the recess being adapted to receive the standard and alining with the slot B². In the rear edge of the body portion intermediate the two arms is formed a notch B⁵. An upwardly-curved lever C is pivotally secured to one side of the lower body portion of the horn, the outer end of the lever being provided with the flanges C', between which is secured the operating-handle C², this handle being on the opposite side of the standard from the horn.

Two clamping members D are provided, each of which is centrally cut out, as at D', and the lower one has parallel forwardly-extending lugs D² at one end. The upper clamping member D has a single lug or nose D³, adapted to engage the notch B⁵. A socket D³ is formed on the upper face of the member adjacent the lugs. These clamping members slide loosely on the standard, one of them being arranged on the standard between the arms of the horn and the other one below the lower arm.

A link E is pivoted at one end between the lugs D² of the lower clamping member, and the upper end of the link is pivotally secured to the lever C adjacent the pivotal point of the said lever.

An elbow-lever F is centrally pivoted to the lower portion of the horn on the side opposite the lever C. The upper member of the lever F is bent inward, as at F', and is adapted to engage the upper face of the upper clamping member, and the downwardly-extending member is cut away on the inner side at the end, forming a shoulder F², which engages the upper edge of the rear end of the lower clamping member.

Compound curved springs G are secured at one end in the sockets D³, and their opposite and upper ends bear against the standard. Each clamping member is formed with an interior recess opening into the cut-out portion

D', and in this recess is positioned a block D⁴, which projects from the recess and has a serrated surface adapted to bite into the standard.

On one side of the horn just below the curved portion is a lug H, and pivoted adjacent same is a member H', having a toothed curved face H², adapted to be swung upward away from the lug and to engage the lug when swung downward.

At its upper end a plate J is secured to the standard, having a curved lateral flange J' and a stop-lug J². A handle member J³ is pivotally secured on the plate. Its inner end has a curved serrated face J⁴, and when the handle is pressed downward a rope or wire will be clamped between the serrated face and the curved flange, and the handle can be also used for carrying the jack, as the lug prevents the handle being raised above a horizontal position.

The operation of my device is as follows: When the handle C² is in the position shown in the drawings, the lower member will be inclined relative to the standard. On drawing downward on the handle the fulcrum-point of the lever C will be at the point where it is pivoted to the link E and the horn will be raised, lifting the upper link into a horizontal position. When the movement of the lever is reversed, the upper member will grip the standard and hold the horn in its elevated position, while the lower member will be drawn into a horizontal position and lifted, so that when the lever is again in position to be drawn downward the lower member will again grip the standard at a higher point. When it is desired to move the horn and clamping members freely on the standard, the shoulder F² of the elbow-lever F is brought to bear on the edge of the lower clamping member, and both of the clamping members will be held at right angles to the standard and will slide freely on same. The nose D⁵ of the upper clamping member takes the place of the lugs D² on the lower member and fits into the notch B⁵.

The springs aid in holding the clamping members at an angle to the standard, and the member H' serves to clamp and hold a wire when the instrument is used as a wire-stretcher.

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

1. A lifting-jack comprising a standard, a horn having an upwardly-curved point, said horn being adapted to slide on the standard, a lever secured to the lower part of the horn, a clamping member sliding on the standard above the lever and adapted to engage the horn, a clamping member sliding on the standard below and pivotally connected to the lever, and a bar pivoted intermediate its ends and adapted to engage the clamping members.

2. In a lifting-jack, a standard, a horn comprising a forwardly-projecting portion curved on its upper face and having a rearwardly-projecting slotted arm adapted to slide on the standard, and a downwardly-extending body portion notched on its inner side adjacent its lower end, and having an integral, rearwardly-extending arm, one side of said arm being recessed for the purpose specified.

3. A lifting-jack comprising a standard, a horn sliding on same, clamping members, the upper clamping member being loosely secured on the standard between the horn and the lever, and the lower member being positioned below the lever, the upper member having a nose adapted to engage a notch formed in the horn, and carrying a block having a serrated face adapted to bite into one side of the standard, and the lower member having a similar block adapted to engage the side of the standard, a link connecting the lower clamping member to the lever, and springs secured in the clamping members and bearing on the bar.

EARNEST CURTIS YEAGER.

Witnesses:

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