Nov. 25, 1924. 1,516,616

G. W. MEYER

LIFTING JACK

Filed June 29, 1923

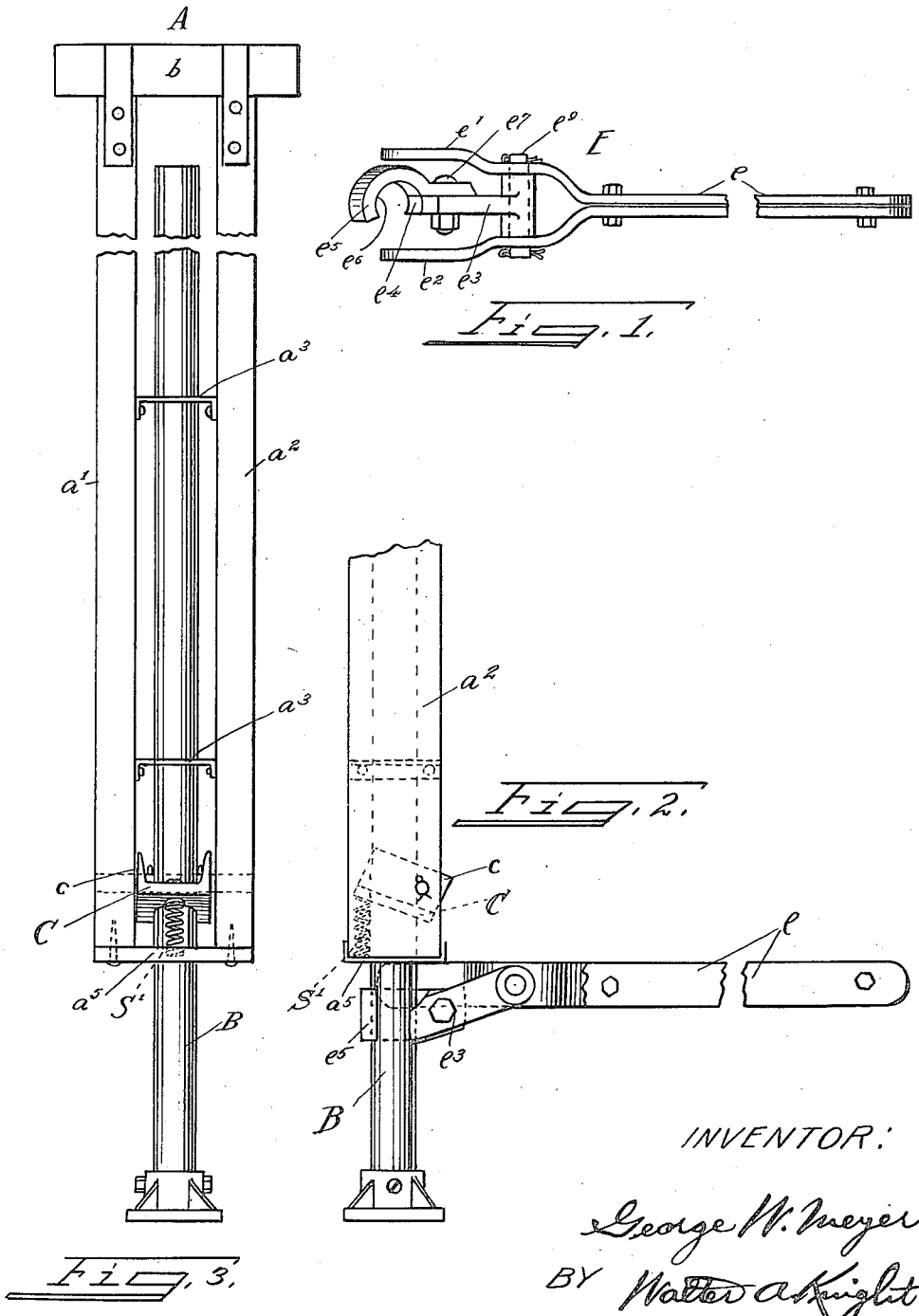


Fig. 1.

Fig. 2.

Fig. 3.

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UNITED STATES PATENT OFFICE.

GEORGE W. MEYER, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO CHARLES A. ROOS, OF CINCINNATI, OHIO.

LIFTING JACK.

Application filed June 29, 1923. Serial No. 648,482.

To all whom it may concern:

Be it known that I, GEORGE W. MEYER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented new and useful Improvements in Lifting Jacks, of which the following is a specification.

My invention relates to jacking devices used particularly in the building art to jack up and tighten adjustable shores. It consists primarily in an improvement over patent to H. W. Roos No. 1,415,055 and is designed particularly for use with adjustable shores described in patent to G. W. Meyer and C. A. Roos No. 1,415,602 and those of a generally similar type.

The principal object of my invention is to provide a device of simple construction for extending or tightening a shore without bending or damaging the parts thereof.

My invention is illustrated in the accompanying drawings in which:

Fig. 1 is a top plan view of my improved jacking device,

Fig. 2 is a side elevation of an adjustable shore showing my device in position for use, with one side of the forked lever broken away, and

Fig. 3 is a front elevation of an adjustable shore adapted to be extended by the use of my invention.

Referring now to the drawings, particularly to Fig. 3, showing an adjustable shore comprising a relatively fixed stanchion B preferably made of steel tubing, telescopically engaged with a movable member A comprising the uprights a^1 and a^2 preferably made of wood and spaced apart in parallel relation to each other by the terminal head b, tie plates a^3 and base plate a^5. The tie plates a^3 and base plate a^5 are centrally perforated, to allow the passage of the stanchion B, therethrough, said perforated plates acting as guides for said stanchion B. An automatic locking device comprising the perforated plate C formed with upturned sides c is pivoted between the uprights, a^1 and a^2 near the base plate a^5 and is actuated by the coiled spring S^1 located between the underside of the plate C and the base plate a^5, so as to hold the movable member A in fixed relation to the stanchion B when said members A and B have been telescopically adjusted.

Adjustable shores of the above mentioned type are initially adjusted by hand to the approximate height of the structure to be supported and are then finally adjusted to the exact height by means of a jacking device

Referring now to the jacking device as shown in Fig. 1. A forked lever E comprising the lever e and the fork arms e^1 and e^2 is provided with a pivot e^9 secured to said arms. A clamping link e^3 pierced at its inner end by the pivot e^9 is provided at its outer end with a grooved clamping edge e^4. A clamping hook e^5 provided with a suitable inner clamping surface e^6 is loosely pivoted to said clamping link e^3 by the stud bolt e^7. Said link e^3 and hook e^5 combine to form an efficient clamp with gripping edges grooved to conform to the shape of the stanchion B of the shore. When it is desired to jack up the shore the hook e^5 and link e^3 are placed in position on the fixed stanchion B—see Fig. 2—the link e^3 being loose on the pivot and the hook e^5 being loosely secured to said link, the entire grooved edges e^4 and e^6 will contact with the stanchion B and form an efficient and even clamp, by exerting a downward pressure on the lever e the pivot e^9 will act as a fulcrum, the arms e^1 and e^2 being forced upward against the under side of the base plate a^5 thereby extending the parallel uprights a^1 and a^2 of the shore with relation to the fixed stanchion B. By constructing the clamping member of two self adjusting parts, namely the hook e^5 and link e^3, the stanchion B is protected from the nicking and bending effects that are experienced when using lifting jacks of the type described in patent to Roos No. 1,415,055.

Obviously many changes may be made in the device without departing from the spirit of my invention and I claim as within the scope of my invention all devices readable on the claims that will be finally allowed.

I claim as my invention and desire to secure by Letters Patent of the United States:

1. A jacking device for use when adjusting extensible shores comprising two separate gripping jaw members, and a lever directly secured by a pivot to one of said gripping jaw members, said jack being completely removable from said shore upon releasing the grip of its jaws thereon.

2. A jacking device for use when adjusting extensible shores, comprising two grip-

ping jaw members pivoted together and a lever directly pivoted to one of said gripping jaw members.

3. A jacking device for use when extending adjustable shores, comprising a forked lever the free ends of whose fork are adapted to bear upon the telescoping end of the movable member of the shore, two separate gripping jaws adapted to engage a contiguous portion of the stationary element of the shore, said gripping jaws pivoted to each other, and one of said gripping jaw members fulcrumed to said forked lever.

4. A jacking device for use when extending adjustable shores, comprising a forked lever the free ends of whose fork are adapted to bear upon the telescoping end of the movable member of the shore, two separate gripping jaws adapted to engage a contiguous portion of the stationary element of the shore, said gripping jaws pivoted to each other, and one of said gripping jaw members pivoted to said forked lever.

5. A jacking device for use when extending adjustable shores, comprising a forked lever the free ends of whose fork are adapted to bear upon the telescoping ends of the movable member of the shore, a T shaped member whose top is pivoted within the fork of said lever and the free end of whose upright is adapted to act as a gripping jaw, and a gripping hook pivoted to said T shaped member in proximity to its gripping jaw so that said gripping hook and gripping jaw will coact to clamp upon the stationary element of the shore.

6. A jacking device for use when adjusting extensible shores having a relatively fixed part below and a relatively movable part above, comprising a lever, a clamping element pivoted to said lever, and a second clamping element pivoted to the first mentioned clamping element, said clamping elements adapted to coact in gripping the relatively fixed part of the shore to be adjusted.

7. A jacking device for use when adjusting extensible shores having a relatively fixed part below and a relatively movable part above, comprising a lever having a prying foot portion, a clamping element pivoted to said lever and a second clamping element pivoted to the first mentioned clamping element, said clamping elements adapted to coact in gripping the relatively fixed part of the shore to be adjusted and hold it while the pressure exerted upon the lever handle causes the force exerted thru the prying foot to change the relative longitudinal position of the shore elements.

8. For use in adjusting telescopically extensible shores composed of two elements, one of which has a metal column; a removable jacking device comprising two separate gripping jaws pivoted together and adapted to impinge upon opposite surfaces of said column and hold said jack seated thereon, and a lever pivoted to one of said jaws and extended over said jaws when they are in said seating position so as to be contacted with the contiguous end of the other member of said shore to extend it.

In testimony whereof I have hereunto set my hand.

GEORGE W. MEYER.