## S. & D. BARROW.

LIFTING-JACKS.

No. 193,844. Patented Aug. 7, 1877. Fig:1. Fig. 4. Fig:3. WITNESSES:

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

SAMUEL BARROW AND DAVID BARROW, OF WINDFALL, INDIANA.

## IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. 193,844, dated August 7, 1877; application filed June 18, 1877.

To all whom it may concern:

Be it known that we, SAMUEL BARROW and DAVID BARROW, of Windfall, in the county of Tipton and State of Indiana, have invented a new and Improved Lifting Jack, of which the following is a specification:

This invention relates to lifting-jacks which are designed for raising stumps, wagons, broken-down fences, and for rolling logs, and all purposes where heavy objects are to be moved.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

In the annexed drawings, Figure 1 is a front elevation of the improved lifting jack. Fig. 2 is a section taken vertically through portions of the same. Fig. 3 is a horizontal section taken in the plane indicated by dotted line x x, Fig. 2. Fig. 4 shows the cant-hook.

Similar letters of reference indicate corre-

sponding parts.

The letter A designates a strong standard, which has a base, A', secured to it, and which is adapted to receive and guide a verticallymovable lifting-bar, B, and also to receive between its open cheeks the end of a lever, C. Lever C is constructed with an enlarged head, having a fulcrum-pin, a, fixed eccentrically to it, and this lever is connected to the lower bifurcated end of the lifting bar B by means of a bent link, b. The edges of the cheeks of standard A are notched, as shown at a', to receive the ends of the fulcrum pin a, and to allow lever C to be adjusted higher or lower,

When it is necessary to lift a body higher than the distance between two of the notches a', a pawl, c, in the form of a bail, is used to hold the bar B while adjusting lever C. This pawl c is pivoted to the sides of the standard A, and its horizontal portion lies across the upper end of this standard, and drops into notches c' made in bar C, in which position the top of standard A relieves the pivots of the pawl from strain.

The link b of lever C is bent, as shown in Fig. 2, so that a weight, acting on the liftingbar B outside of the fulcrum-pin a, will cause

lever C to remain down without the aid of the pawl c. For instance, in greasing wagonaxles the pawl c is seldom used, as one downward stroke of lever C will be sufficient to raise the wheels from the ground, and the bend in the link b will not allow the said lever to fly up.

D designates a plate of any suitable width and length, which is attached to the upper end of the bar B by means of a pin, d, that is received into a hole in this bar. The lower end of the plate D is attached to the standard A by two arms, D1, and a cross-link, D2, by detaching which latter from one of the arms D1 the plate D can be removed from the standard.

The vertical edges of plate D are beveled to be received in a dovetail groove formed in an arm, E. This arm is free to slide on the plate D; but when a pressure is applied on one end of it, it will be tilted slightly, and caused to bind hard against the edges of plate D, thus fixing it rigidly to the latter. The arm E is adjustable independent of the plate D or bar B, and is used for raising fences and supporting them while being repaired or straightened.

When it is desired to use the jack for rolling logs or turning heavy beams, the plate D is detached from the jack, and the cant-hook G is attached to the lifting-bar B by inserting the straight portion q into the hole in the up-

per end of this bar.

Having thus described our invention, we claim as new and desire to secure by Letters

1. In combination with the notched liftingbar B, guided in notched standard A, the adjustable lever C, link b, and pivoted pawl c, arranged substantially as described.

2. The plate D, with its fastenings D1 D2 d, and the adjustable arm E, in combination with the standard A and lifting-bar B, substantially as described.

SAMUEL BARROW. DAVID BARROW.

Witnesses:

THOMAS J. LINDSAY, J. A. GROOVELAND.