

UNITED STATES PATENT OFFICE.

AMOS J. LANDIS, OF COLUMBIA CITY, INDIANA.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **200,140**, dated February 12, 1878; application filed May 19, 1877.

To all whom it may concern:

Be it known that I, AMOS J. LANDIS, of Columbia City, Whitley county, Indiana, have invented a Lifting-Jack, of which the following is a specification:

The object of my invention is to furnish a lifting apparatus which shall be simple in construction and operation, as well as cheaply made, occupying little space, easily handled, self-locking, durable, and in all respects efficient and practical for the purposes and uses for which it is intended. Its principal use is for lifting the axles and wheels of carriages, wagons, and other vehicles for lubricating or other purposes; and it is also useful for raising other objects that require to be lifted and held in certain positions for a given period of time or for any special purpose.

The nature and practical operation of my invention are more fully set forth in the following description, reference being had to the accompanying drawings, which are made a part of this specification.

The base, which supports the working parts of the lifting-jack and the weight lifted by it, is shown at A.

At B is shown a perpendicular standard, having its lower end mortised into or otherwise firmly affixed to base A, and also having the guides F securely attached to its edges, as shown at g. These guides are so shaped and attached as to permit a free upward and downward movement of the elevating-block D between them, this elevating-block being also so made and shaped as to permit of such free movement, substantially as represented. The top of elevating-block D is shaped, as shown, into successive steps or notches, one above the other, whereby the lifting-jack is adapted to be placed under axles or other objects of different heights.

At D² is represented a notch cut in the edge or side of block D. At M is pivoted to D the short end of lever K, which at L is also pivoted to the upper end of the movable fulcrum H, the lower end of which is pivoted or hinged to base A, as shown in the drawings.

Operation: When it is desired to lift any object with this lifting-jack, the long end of lever K is raised up, bringing the block D down to base A, and the upper end of fulcrum H into the position shown in the drawing. Then the lifting-jack is placed with its base on the floor, ground, or other foundation, and with one of its steps, 1, 2, 3, or 4, under the axle or other object to be lifted. Then the long end of lever K is pressed downward, thus elevating the block D and the axle or other weight. The downward pressure on lever K is continued until the lever K, fulcrum H, and block D assume the positions indicated by the dotted lines.

It will be observed that this downward movement of the long end of lever K brings the upper end of movable fulcrum H into the notch D² in block D, thus locking the lifting-jack, and holding up the weight as long as may be desired. The points of pivoting at L and M, the position and shape of the notch D², the weight and length of the handle of lever K, and the length, inclination, and shape of fulcrum H, are all so adjusted, with reference to each other, that when the lever-handle is depressed, as before stated, the lifting-jack is locked, as before stated, and yet this locking is effected in such a manner that the weight lifted can be let down at pleasure by a slight upward pull on the handle of the lever K.

I construct my improved lifting-jack of wood, iron, or other material, according to the use or service to which it is to be applied.

I claim—

The base A, standard B, guides F, elevating-block D, notch D², lever K, and movable fulcrum H, all combined and operated together for lifting weights and holding or locking them in position when raised, substantially as described and illustrated.

AMOS J. LANDIS.

Witnesses:

WILLIAM MIESER,
EUGENE STOUGH.