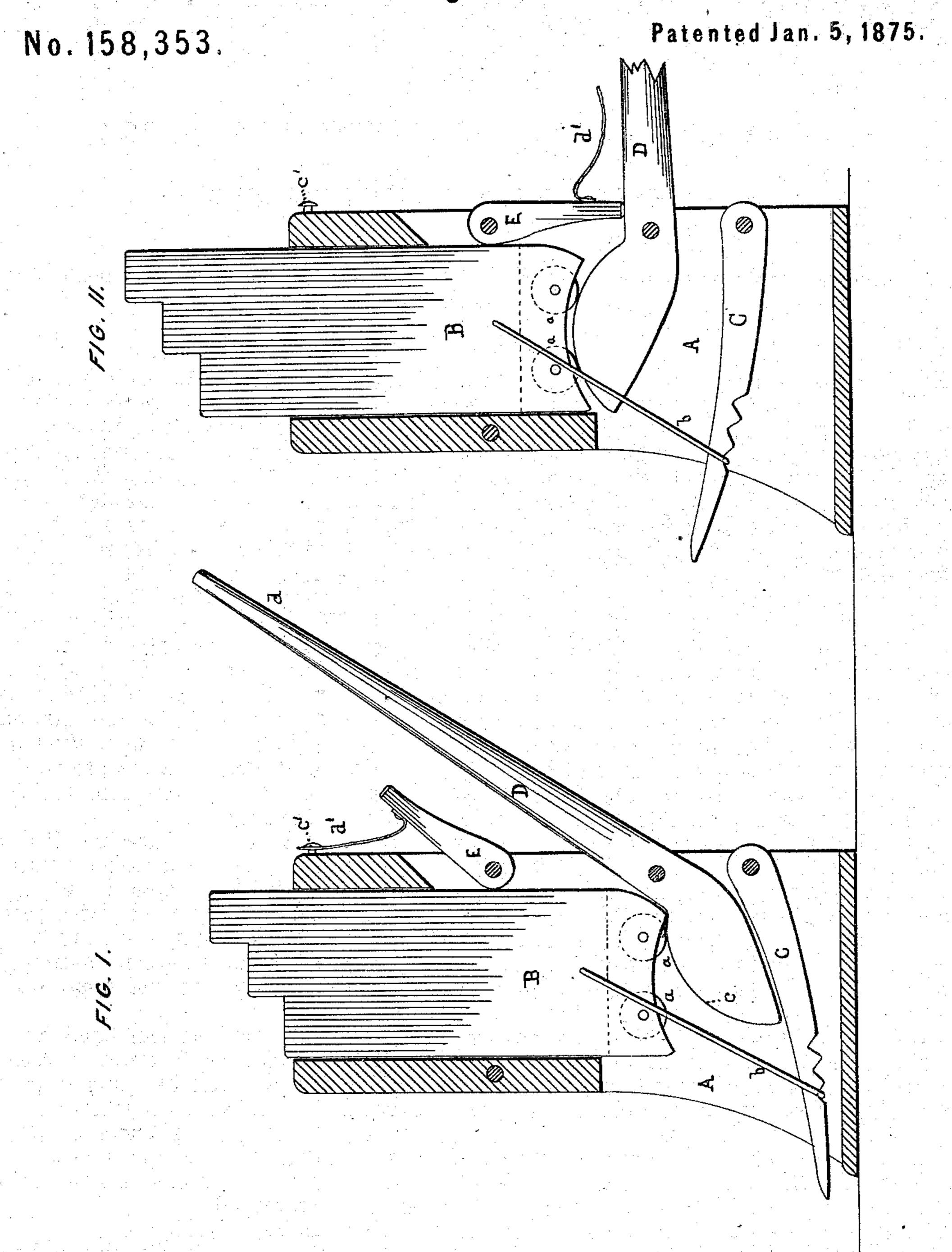
E. E. BANNING. Lifting-Jacks.



WITNESSES: Geowpuhinger Elmore & Banning, By his attorney, James L. Morris.

## UNITED STATES PATENT OFFICE

ELMORE E. BANNING, OF ROCHESTER DEPOT, OHIO.

## IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. 158,353, dated January 5, 1875; application filed June 29, 1874.

To all whom it may concern:

Be it known that I, ELMORE E. BANNING, of Rochester Depot, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Wagon-Jacks, &c., of which the following is a specification:

This invention has for its object to furnish a combined lifting-jack, railroad-rail, and fence-lifter, which possesses much simplicity of construction, and is very convenient in operation.

The invention consists of a frame in which is arranged a lifting-bar, connecting by means of rods or arms with a pivoted lifting leverarm, said bar and lever arm being operated upon by a lever having a cam-shaped head in such a manner that, by depressing said lever, the lifting-bar and lever-arm are raised simultaneously for raising an object, and when the long end of the lever is raised, the lifting-bar and lever-arm are lowered. The lifting-bar and lifting-lever are secured in an elevated position by means of a pivoted pawl, which drops and presses against the lever for retaining the same in a depressed position, all of which will be more fully hereinafter described.

In the accompanying drawing, Figure 1 is a vertical sectional elevation of my improved lifting-jack, showing the lifting-bar depressed, and Fig. 2 is a vertical section, showing the lifting-bar raised.

In the drawings, A A represent the sides of the frame, between which is arranged the sliding lifting-bar B, which is employed for raising the axle of a vehicle. The upper end of the said bar is of the usual stepped construction, and its lower portion is curved and provided with rollers a, journaled in recesses in the same. The lifting-bar is connected by means of rods or arms b, pivoted thereto with a lever-arm, C, pivoted at one end between the frame A A, and having notches or serrations on its under edge, with which the arms b engage. The free end of the lever-arm C projects beyond the frame A A, and can be placed beneath a railroad-rail or a fence for raising the same, as hereinafter mentioned.

Between the frame A A is journaled a lever, D, having a cam-shaped surface or short arm, c, and by depressing the long end, d, of the lever D, so that the cam-shaped surface comes in contact with the rollers a, the lifting-bar B is raised, which latter, through the arms b, also raises the lever-arm C, and thus lifts or raises the axle of a vehicle, or a railroad-rail, or fence, as the case may be.

In order to retain the lifting-bar and leverarm in an elevated position for supporting an object, I pivot or journal between the frame A A a pawl or arm, E, which, when allowed to drop, presses against the edge of the long arm of the lever D, and retains the same in a depressed position, holding up the bar B and arm C, and the said pawl is provided with a looped strap, d', for engagement with a button, c'. on the frame A.

The lower edge of the lever-arm C is notched or serrated, as before stated, for adjusting the arms b to any of said notches, and regulating the height of the lever-arm, with respect to the ground, for operating upon higher or lower objects, and at the same time obtaining greater or less leverage, as the same may be required.

The lifting-bar B is employed for raising the axles of vehicles, in order to remove the wheels for oiling, or other purposes; and the lever-arm C is used for prying or forcing up railroad-rails, or raising fences, or for placing foundation-stones beneath the same, and for other similar purposes where the lifting-bar cannot be employed.

I claim as my invention—

The combination of sliding lifting-bar B and pivoted lifting lever-arm C, connected together by arms b, with the lever D journaled in the frame A, substantially as described, and for the object specified.

In testimony that I claim the foregoing I have hereunto set my hand.

ELMORE E. BANNING.

Witnesses:

WM. BENNETT, J. SWITZER.