(No Model.)

2 Sheets—Sheet 1.

W. E. TYLER.

LIFTING JACK.

No. 605,210. Patented June 7, 1898.

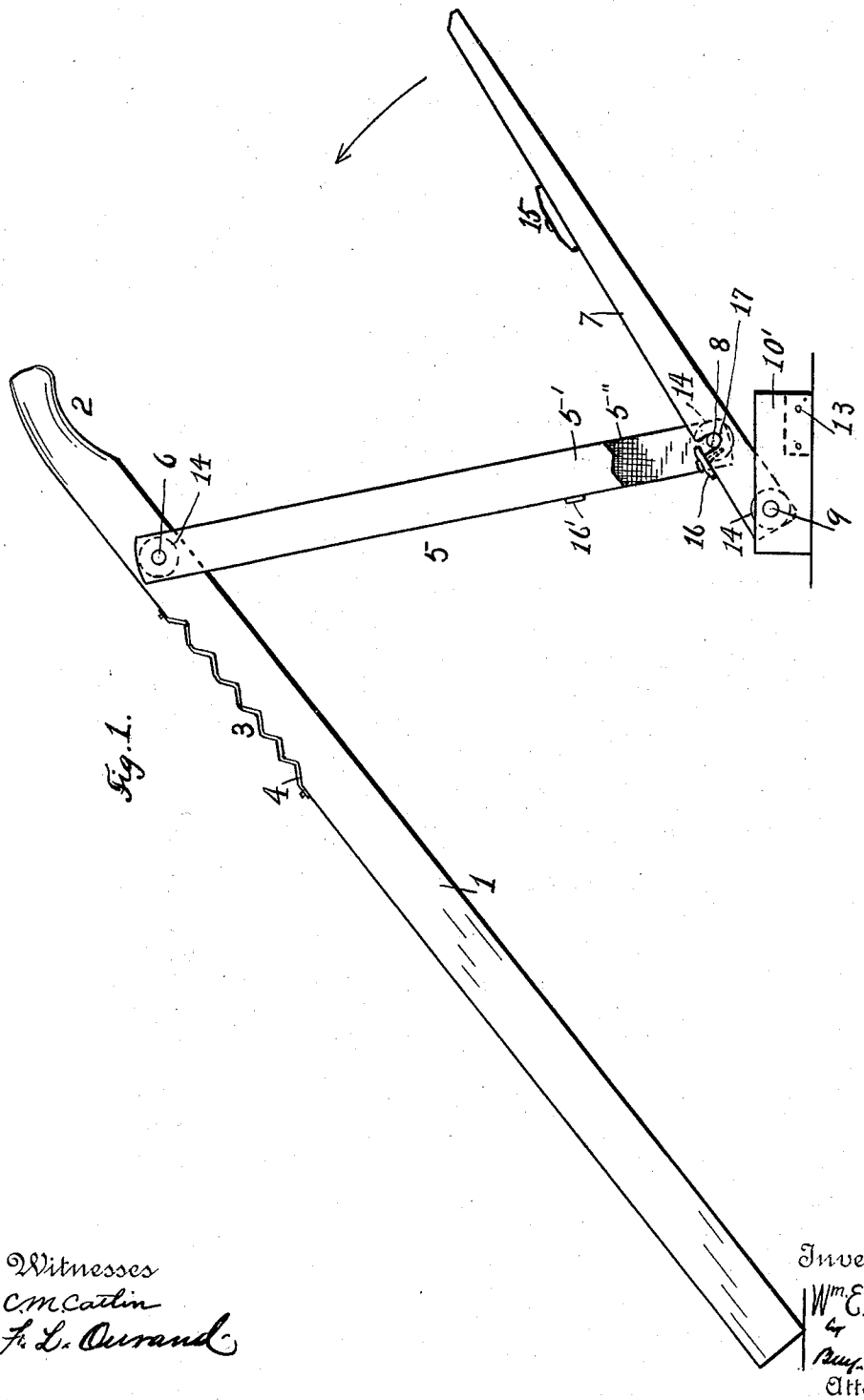


Fig. 1.

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(No Model.)

2 Sheets—Sheet 2.

W. E. TYLER.

LIFTING JACK.

No. 605,210. Patented June 7, 1898.

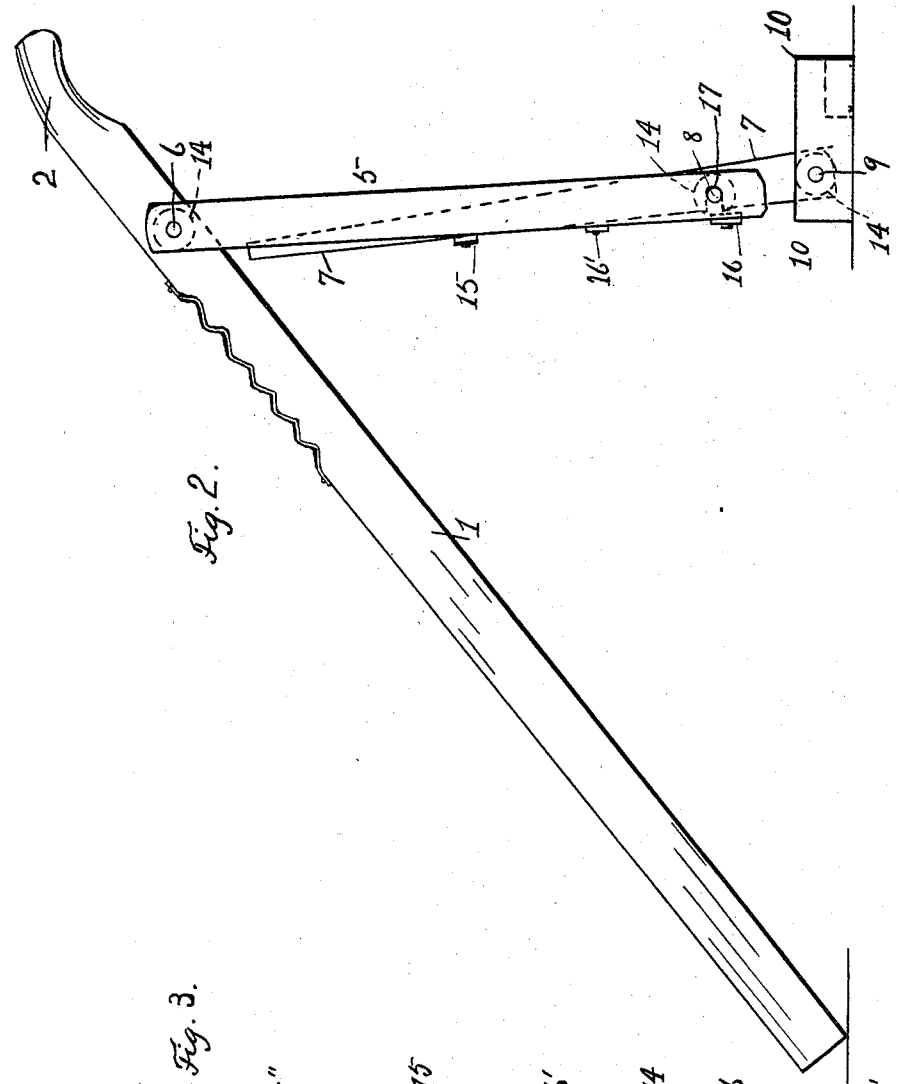


Fig. 2.

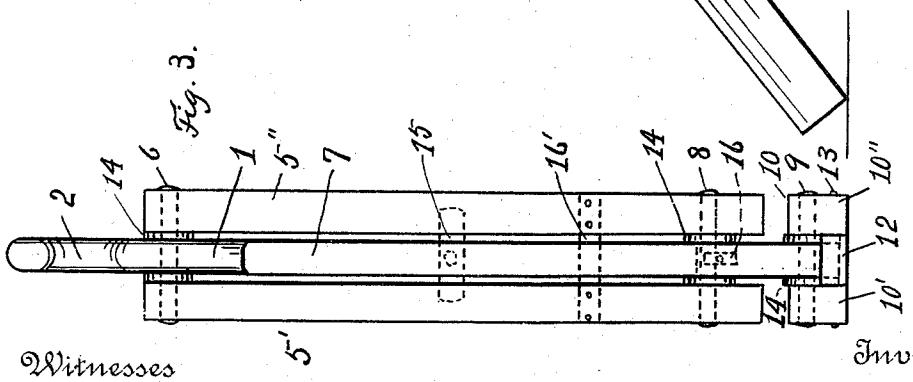


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM E. TYLER, OF ALDIE, VIRGINIA, ASSIGNOR OF THREE-FOURTHS TO HUGH B. HUTCHISON, OF SAME PLACE, AND JOHN A. NICOL AND FRENCH E. RANSDELL, OF MANASSAS, VIRGINIA.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 605,210, dated June 7, 1898.

Application filed December 18, 1897. Serial No. 662,500. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. TYLER, a resident of Aldie, in the county of Loudoun and State of Virginia, have invented certain new and useful Improvements in Lifting-Jacks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The invention relates to lifting-jacks, and has for its object to increase the efficiency and capacity of such devices and avoid undue complexity and cost of the same.

The invention consists in the construction hereinafter described and pointed out.

In the accompanying drawings, Figure 1 is a side elevation of the jack. Fig. 2 is a similar view of the same, the parts being differently adjusted. Fig. 3 is a view transverse to those shown in Figs. 1 and 2.

Numeral 1 denotes a lever provided with a handle 2 and preferably with notches or steps 3. These are intended to receive and hold an axle of a vehicle or like object that is to be elevated by the lever. Conveniently a wooden lever 1 may be notched and then partially lined with sheet metal 4; but other means for preventing an axle slipping on the lever may be employed, if desired. In case this lever is made sufficiently long the friction of the axle on a plain surface will suffice to hold it.

5 denotes a prop having parallel members 5′ and 5″.

6 denotes a rivet or other pivot holding the lever 1 loosely between the two parts of the prop. A second lever 7 is similarly pivoted at 8 between the members 5′ and 5″ of the prop. The foot of lever 7 is pivoted at 9 to a base 10, composed of parallel members 10′ and 10″. These two parts are secured to each other and to a spacing-block 12 by pins or rivets 13 or the like.

Washers are indicated by 14, and 15 is a button for securing the lever 7 when turned on its pivot 9 to the situation indicated in Fig. 2. This button is rotatably connected to and carried by the lever 7 and when turned to a situation parallel with the lever can be passed therewith between the prop members 5′ and 5″.

16′ denotes a stop secured to the prop members 5′ and 5″ and designed to prevent the lever 7 when folded from passing the prop.

16 denotes a button adapted to prevent lever 7 from being accidentally disengaged from its pivot 8.

17 is a pivot-bearing formed by slotting the edge of lever 7, as shown. When the button 16′ is turned as represented, it secures the lever upon the pivot; but when turned ninety degrees it permits lever 7 and the connected base 10 to be separated from the prop 5. When so separated, the lever 1 and its prop can be used independently as a jack.

The device being arranged as represented in Fig. 2, the lever 1 has connection with a base 10, adapted to solidly support the prop 5, said prop being connected to the base by the medium of the folded lever 7. The base keeps the prop from sinking in the soil when used on the ground and gives the jack more stability.

When the jack is arranged as shown in Fig. 1, the levers 1 and 7 coöperate and together afford great leverage for the elevation of loaded wagons or other heavy objects. The operator by raising the free end of lever 7 lifts the prop 5, which pushes up the lever 1, and a small expenditure of power at the free end of lever 7 will raise a heavy load sustained on lever 1.

When the jack is not required for use, the two levers, the intermediate prop or link 5, and the base can be very compactly folded in practically parallel lines and in contact with each other for convenience in transportation or storage.

It will be evident that when desired to elevate an object, as a wagon, the operator by grasping the extension 2 may manually cause lever 1 to contact with the axle. This raising of lever 1 results in raising prop 5, lever 7, and base 10 clear of the ground, causing them to swing from any position in which they may have been to a position approximating the perpendicular, enabling all the movement of lever 7 to be utilized in raising the wagon.

Any desired material may be employed. Wood will be very suitable for the levers and other large parts. The dimensions may be varied as preferred. Stuff having the thickness of an inch or more will be suitable. It may be observed that the prop and base being made double can be made of thin stuff and that the main lever receives its load edgewise and can be made of comparatively thin material. A length of four and a half, five, or more feet will answer for the long lever. The dimensions and material may, however, be changed according to circumstances.

The base 10 is useful in soft sandy situations; but its use is not essential in all cases. If inch boards are used in the manufacture of the jack, a similar base can, if desired, be connected in like manner to the lower end of lever 1, or on soft soils a temporary support can be slipped under it to prevent sinking.

Having described my invention, what I claim is—

1. In a lifting-jack the combination of levers 1 and 7 and the intermediate prop 5 pivotally connecting the levers, a pivot-pin fixed in the prop, said lever 7 being formed with a slot to receive said pin, and means for removably holding the pin in the slot, substantially as described.

2. In a lifting-jack the combination of base 10, levers 1 and 7 and the intermediate prop 5 pivotally connecting the levers, the lever 7 being adapted to be folded parallel with and contiguous to the prop, and a button carried by lever 7 for securing it in the folded position, substantially as described.

3. In a lifting-jack, base 10, levers 1 and 7, and prop 5 pivotally connecting the levers, said prop being constructed of two parallel members, said lever 7 being adapted to be turned upward beyond the vertical position and housed between the members of prop 5, and means for locking lever 7 to prop 5.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM E. TYLER.

Witnesses:
F. D. BLACKISTONE,
BENJ. R. CATLIN.