

No. 773,456.

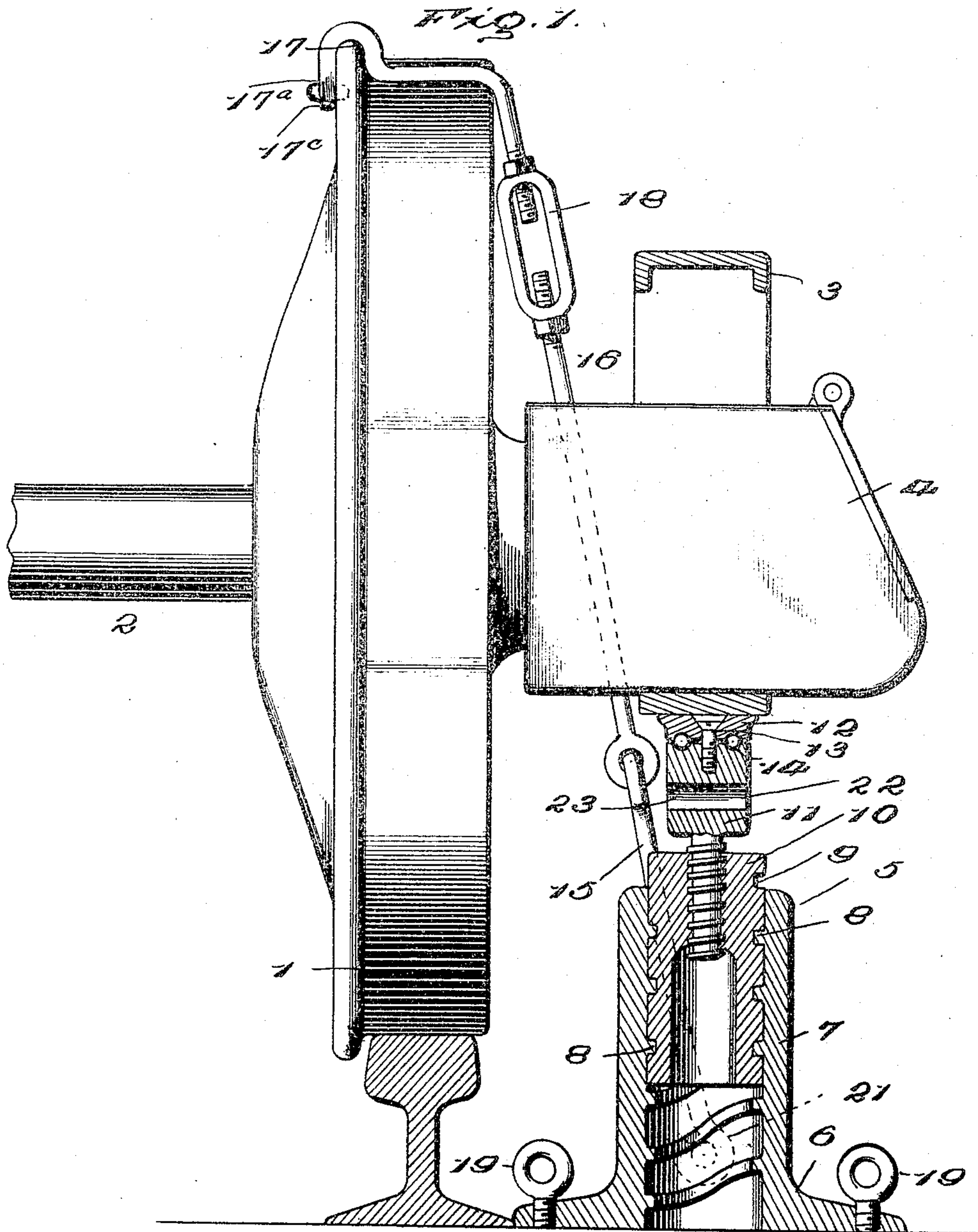
PATENTED OCT. 25, 1904.

V. C. BARTLETT.
LIFTING JACK.

APPLICATION FILED JAN. 20, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



Inventor

vitalus C. Bartlett

Witnesses

J. W. H. H.

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Pharmacy, His Attorneys

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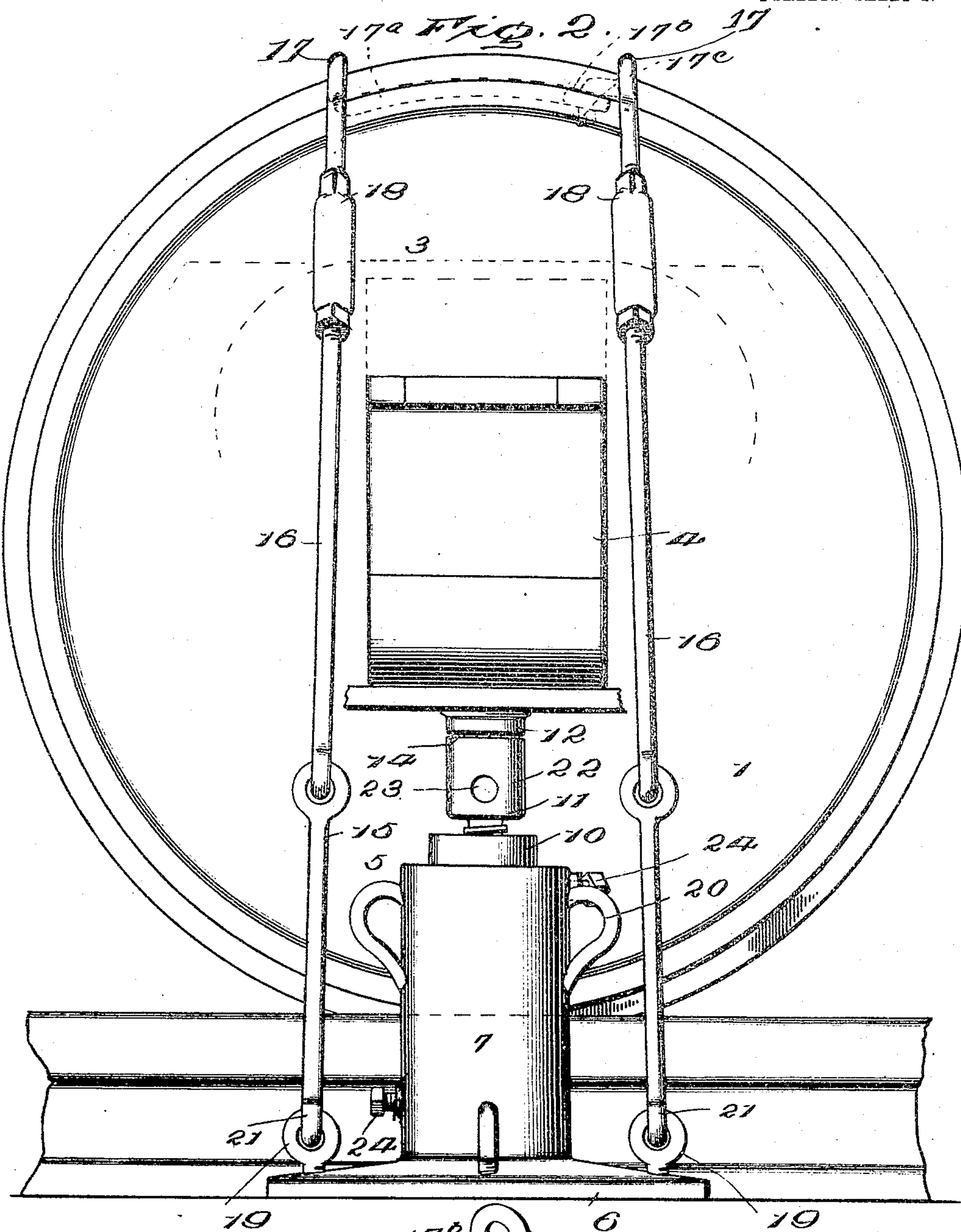
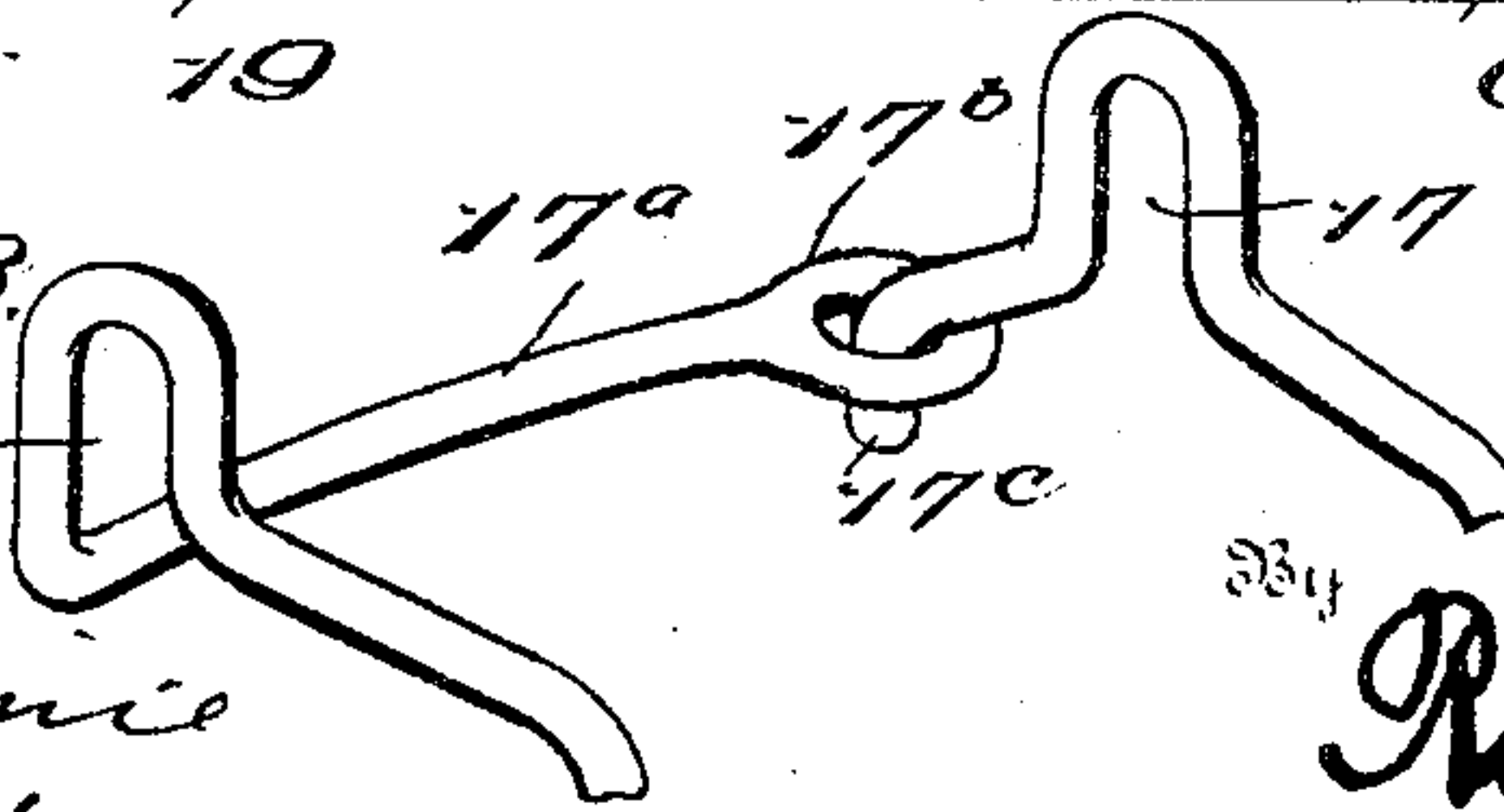


Fig. 3.

Witnesses 17

W. A. Woodson



Inventor
Vitalis C. Bartlett

By *R. B. Sney* his Attorney

UNITED STATES PATENT OFFICE.

VITALUS C. BARTLETT, OF BELINGTON, WEST VIRGINIA.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 773,456, dated October 25, 1904.

Application filed January 20, 1904. Serial No. 189,865. (No model.)

To all whom it may concern:

Be it known that I, VITALUS C. BARTLETT, a citizen of the United States, residing at Belington, in the county of Barbour and State of West Virginia, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a specification.

As is commonly known, in elevating car-trucks to permit removal of journal-bearings the raising of the journal-box will cause the wheel received by such journal-box to move upwardly unless same is blocked to prevent such movement. The upward movement of the wheel when removing the bearings, as above described, will cause tilting of the car toward the side opposite that upon which the journal-box is disposed. The inconvenience of securing blocks to block the wheel down and of removing these blocks is evident; and it is an essential object of my invention to provide a means for elevating the journal-box, and at the same time such means is adapted to prevent tilting of the car and raising of the wheel, as above set forth.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view showing the application of my invention. Fig. 2 is a side elevation, the invention applied. Fig. 3 is a detail view, parts broken away, of the wheel-engaging members carried by the lifting-jack.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Broadly, the invention comprises elevating means in the form of a lifting-jack which is adapted to cooperate with the truck to raise the same. The lifting-jack is provided with engaging members which cooperate with the

car-wheel to fix the position of the latter and obviate the disadvantages arising by lifting of said wheel or do away with the inconvenient method of blocking the wheel.

In the drawings, 1 designates a car-wheel mounted upon an axle 2, said parts being of ordinary form as commonly employed. The truck 3 of the car is of course provided with the journal-boxes 4, which receive the axles of the car-wheels, as will be readily noted. My invention comprises the lifting-jack 5, which consists of a base 6, having an integral tubular support or jack 7 formed therewith. The support 7 is internally threaded, as shown at 8, the threaded portions cooperating with spiral grooves 9 of the screw lift or support 10. The screw-support 10 carries the lifting-screw 11, which directly cooperates to effect the elevation of the part which it is desired to raise. The lifting-screw carries a movable head 12, which head is secured to the screw by means of a fastening 13, the latter being countersunk so as not to receive any of the weight of the part which is being lifted. The upper surface of the head 12 may be roughened or corrugated to afford a greater gripping action for obvious reasons. The head 12 is mounted on roller-bearings 14, carried by the screw 11, whereby adjustment of the screw will permit the elevation of the head without rotary movement thereof. The jack 5 engages the journal-box in raising the same and is provided with spaced hook-bars 15, which are connected by links 16 to engaging hooks 17, which latter engage the upper portion of the wheel 1 in the operation of the invention. The engaging hooks 17 are connected to the links 16 by means of turnbuckles 18, which permit ready adjustment of the hooks preliminary to operation of the jack 5. One of the hooks 17 is provided with a lateral extension 17^a, having an eye 17^b at its end. The other hook is provided with a laterally-extending projection 17^c, which is received by eye 17^b when the hooks 17 are engaged over the upper peripheral portion of the wheel 1. The hook-bars 15 are connected to the base 6 of the jack by means of hooks 21 at the lower ends thereof, which engage in loops 19, inte-

grally formed with the base and projected upwardly therefrom upon all four sides thereof. The jack 7 of the support is provided with handles 20, which admit of manipulation of the support to effect a preliminary adjustment of the screw-lift 10, the said adjustment being utilized to dispose the head 12 of the screw 11 in engagement with the journal-box 4.

10 In the practical use of the invention the base 6 is first disposed beneath the journal-box which it is desired to elevate, and by rotation of the base and jack-support 7 the screw-lift 10 is adjusted so as to dispose the head 12 in

15 contact with the under side of the journal-box. The hook-bars 15 and their link connections 16, together with the hooks 17, are next placed in position, the latter in engagement with the upper portions of the wheel. The turn-

20 buckles 18 are adjusted to rigidly connect the hooks with the base 6. The upper portion of the screw 11 is enlarged, as shown at 22, and the enlarged portion is provided with a plurality of openings 23 to receive a screw-actu-

25 ating bar of common type. This bar (not illustrated) is operated to raise the screw and elevate the journal-box; but the weight of the truck upon the screw serves to rigidly hold the base 6 grounded, and since the said base

30 is so held in position the connections between the base and the wheel of the car are likewise rigid, so that the said wheel is prevented from any movement whatever. It will thus be seen that the journal-box may be readily ele-

35 vated and the journal-bearings removed or replaced or operated upon without movement of the car-wheel. In order to rigidly hold the screw-lift 10 at the proper adjustment, set-screws 24, transversely mounted upon the

40 jack 7, may be employed. These set-screws

engage the screw-lift 10 when properly operated.

Having thus described the invention, what is claimed as new is—

1. In a car-jack, the combination of an elevating-support adapted to engage a journal-box, a car-wheel, spaced hook members adapted to engage the upper flanged portion of the car-wheel, connecting means between said hook members, and adjustable link connections between the hook members and the base. 45 50

2. In a car-jack, the combination of an elevating-support adapted to engage a journal-box, spaced hook members adapted to engage over the upper flanged portion of a car-wheel, one of said members having a lateral extension provided with an eye or the like, the other of said members having a projection engaging the lateral extension of the other member, hook members removably engaging the elevating-support, link connections between the hook members and the hook-bars, and turnbuckles connecting the link connections and the hook members. 55 60

3. In a device of the class described, the combination with a journal-box, a lifting-jack comprising a base, an adjustable screw-lift and a lifting-screw, a car-wheel, hook-bars carried by the base of the jack, engaging hooks coöperating with the car-wheel, and adjustable connections between the said engaging hooks and the hook-bars carried by the base. 65 70

In testimony whereof I affix my signature in presence of two witnesses.

VITALIUS C. BARTLETT. [L. s.]

Witnesses:

W. J. CASLEY,

J. BLACKBURN WARE.