G. L. BONHAM.

AUTOMOBILE JACK.

APPLICATION FILED AUG. 16, 1920.

1,396,619.

Patented Nov. 8, 1921.

2 SHEETS—SHEET 1.

Fig. 1.

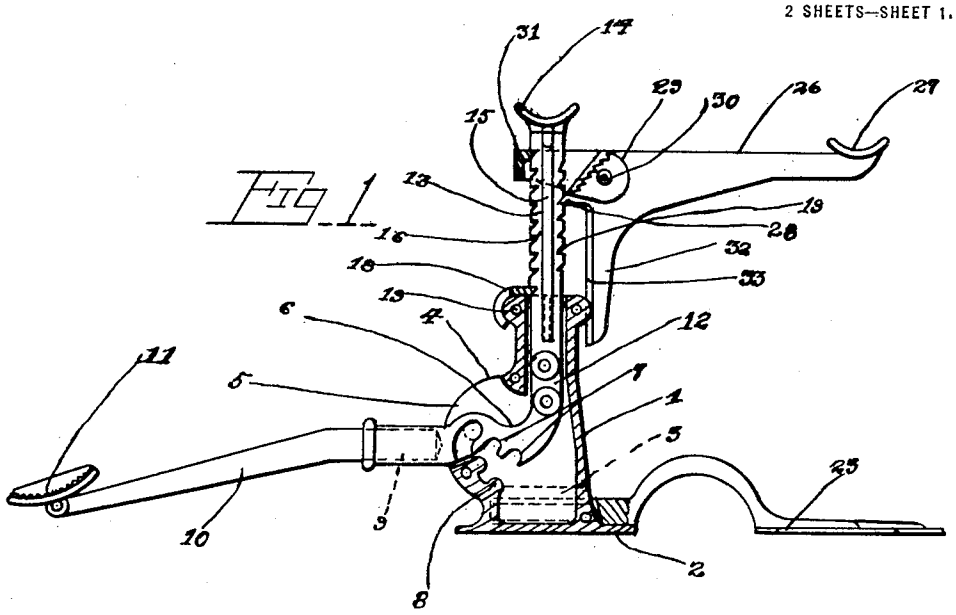
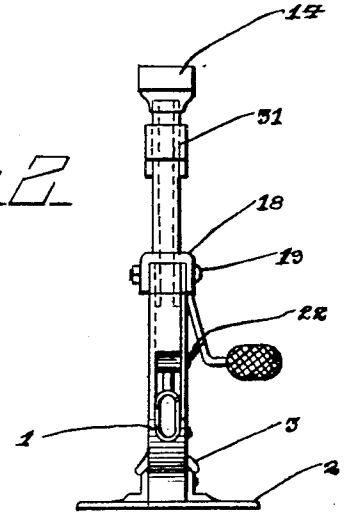


Fig. 2.



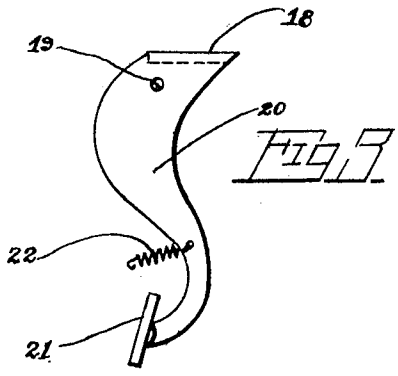


Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 4.

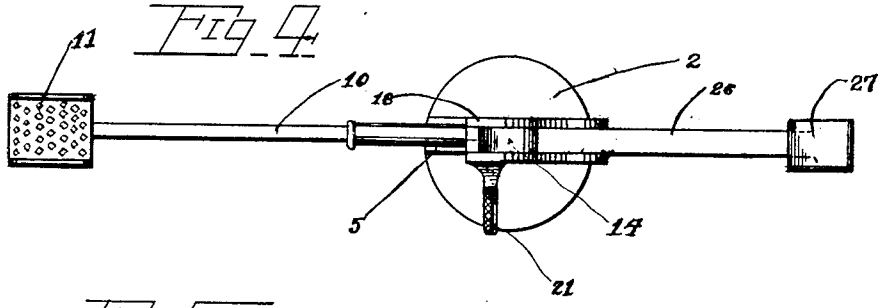


Fig. 5.

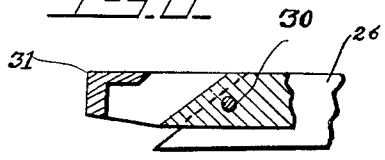


Fig. 6.

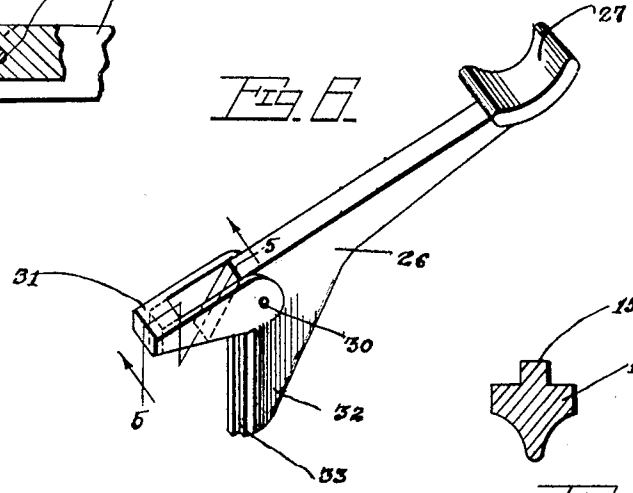


Fig. 8.

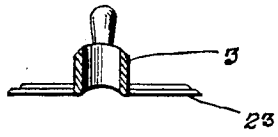
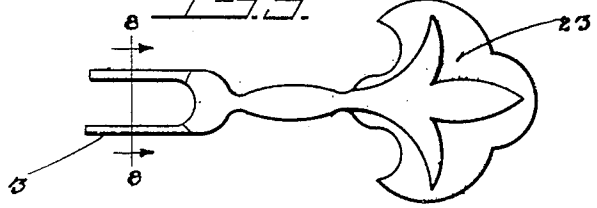


Fig. 7.

Fig. 9.



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UNITED STATES PATENT OFFICE.

GUY L. BONHAM, OF WEST HARTFORD, CONNECTICUT.

AUTOMOBILE-JACK.

1,396,619. Specification of Letters Patent. Patented Nov. 8, 1921.

Application filed August 16, 1920. Serial No. 403,870.

To all whom it may concern:

Be it known that I, GUY L. BONHAM, a citizen of the United States, residing at West Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Automobile-Jack, of which the following is a specification.

This invention relates to a vehicle jack especially designed for use in connection with automobiles, one of its objects being to provide a jack which can be adjusted to position quickly and which, at one movement of its operating lever, can be caused to lift the engaged vehicle the required distance.

Another object is to provide a jack having means whereby it can be placed in position under the axle of a vehicle without requiring the user to reach under the vehicle and soiling the hands or clothing.

A still further object is to provide a jack which is durable, simple and efficient and can be readily manipulated.

With the foregoing and other objects in view which will appear as the description proceeds the invention consists of certain novel details of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims, it being understood that various changes may be made in the construction and arrangement of parts without departing from the spirit or sacrificing any of the advantages of the invention as set forth in the appended claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings—

Figure 1 is a vertical section through the jack.

Fig. 2 is a front elevation thereof, the foot lever being removed.

Fig. 3 is a side elevation of the holding pawl and its lever.

Fig. 4 is a plan view.

Fig. 5 is a section through the gripping end of the extension head.

Fig. 6 is a perspective view of said head.

Fig. 7 is a section through the stem of the lifting head.

Fig. 8 is a section on line 8—8, Fig. 9.

Fig. 9 is a plan view of the extension base.

Referring to the figures by characters of reference, 1 designates a hollow pedestal having a base 2 and located at the sides of the pedestal and above the base are retaining ribs 3. The pedestal has an arcuate extension 4 provided with an elongated opening or slot 5 and extending into this opening is an actuating lever 6 having notches 7 for engagement with spaced projections 8, whereby a variable fulcrum is obtained. The outer end of the lever has a socket 9 in which a foot lever extension 10 is detachably mounted, there being a foot plate 11 at the outer end of the extension, as shown.

The inner end of the lever 6 is extended upwardly and has a link 12 pivotally connected thereto, said link, in turn, being pivotally connected to the lower end of a stem 13 which is slidably mounted in the upper portion of the pedestal. A saddle 14 is provided at the upper end of the stem and extending along one side of the stem is a guide rib 15 adapted to work in a groove provided therefor within one wall of the pedestal.

Formed in the opposed longitudinal edges of the stem 13 are series of notches 16 and 17 respectively the notches of the two series being oppositely disposed, as shown. A yoke 18 straddles a portion of the pedestal 1, as shown and is pivotally connected thereto, as at 19. The transverse edge of the yoke nearest the stem 13 is adapted to engage in any one of the notches 16 to hold the stem 13 against downward movement. One side of the yoke is extended downwardly to form a lever 20 provided with a plate 21 and a spring 22 is connected to said lever and to the pedestal to hold the pawl formed by the yoke 18, normally in engagement with the stem.

The parts heretofore described can be used as a lifting jack. By placing the saddle under an axle and pressing down on the foot plate 11 the stem 13 will be thrust upwardly and the pawl 18 will hold it against downward movement. To lower the engaged vehicle the extension 10 is disconnected from the lever 6 and the toe of the foot is pressed against the plate 21. This causes the pawl 18 to swing out of engagement with the stem 13 and allows the supported car to drop to the ground.

In order to provide a means for lifting a vehicle without the user getting under or reaching under the end of the vehicle, as where the body extends rearwardly some distance from the axle or a gasolene tank is supported back of the body of the vehicle, the jack can be provided with an extension head and with an extension base. The base 23 has a fork 24 at one end adapt-

ed to be inserted between the base 2 and the ribs 3 and to be held, if desired, by a transverse pin 25. Thus the extension base will be connected rigidly to the pedestal. The extension head is adapted to overhang the extension base and includes an arm 26 having a saddle 27 at its outer end while its inner end is beveled to a knife edge 28 adapted to be seated in any one of the notches 17. A yoke 29 straddles said inner end of the arm 26 and is pivotally connected thereto as at 30. This yoke has a knife edge 31 adapted to be seated in any one of the notches 16. A brace arm 32 extends downwardly from the arm 26 and has a rib 33 adapted to slide within a notch in the upper portion of the pedestal 1 as shown.

In using the jack with the extension base and head said base is attached to the pedestal and is inserted under the axle. The extension head is also extended under the axle and is moved upwardly on the stem 13 until the saddle 27 engages said axle. During this adjustment of the head 26 the edge 28 will slide upwardly over the notches 17. After the parts have been adjusted the lever extension 10 is pressed downwardly and causes the stem 13 to move upwardly thereby pressing the saddle 27 against the axle and lifting the vehicle. The vehicle is lowered as hereinbefore described.

What is claimed is:—

1. A jack including a pedestal, a foot lever fulcrumed therein, a stem slidable in the pedestal and connected to the lever, means for engaging the stem to hold it against downward movement, an extension base detachably connected to the pedestal, and an extension head adjustably connected to the stem and overhanging the extension base.

2. A jack including a pedestal, a stem slidable therein, means for shifting the stem, an extension base detachably and rigidly connected to and extending radially from the base of the pedestal, an extension head adjustably connected to the stem and overhanging the extension base, and cooperating means on said extension head and the pedestal for guiding the extension head when moving with the stem.

3. A jack including a pedestal, a stem slidable therein, means for sliding the stem, means for holding the stem against downward movement, an extension base connected to the pedestal, an extension head, coöperating means on said extension head for engaging opposite sides respectively of the slide to support the extension head on the slide, said head overhanging the extension base.

4. A jack including a pedestal having a base, retaining ribs on the pedestal and above said base, an extension base having a forked end insertible between the pedestal base and the ribs, a stem adjustable in the pedestal, an extension head adjustable on the stem and overhanging the extension base.

5. A jack including a pedestal having an extension base, a stem adjustable therein and having opposed series of notches, an extension head, a yoke thereon, means on the head and yoke for engagement with notches of the respective series to support the head adjustably, a brace arm depending from the head and slidably engaging the pedestal, and a saddle upon the head and above the extension base.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GUY L. BONHAM.

Witnesses:
H. C. WHITMAN,
JOHN T. WHITMAN.