W. FLETT.

LIFTING JACK.

APPLICATION FILED JULY 3, 1913.

1,079,697.

Patented Nov. 25, 1913.

2 SHEETS—SHEET 1.

Fig. 1

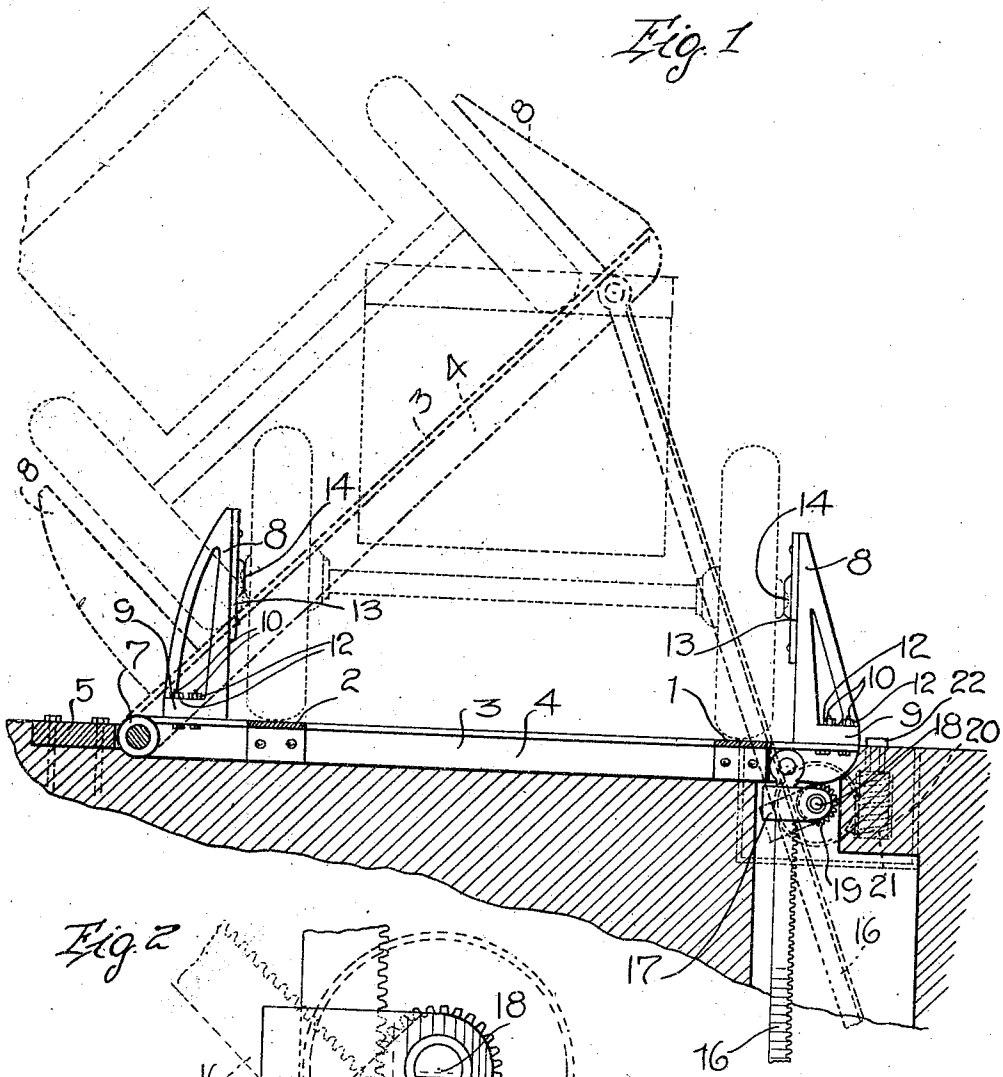
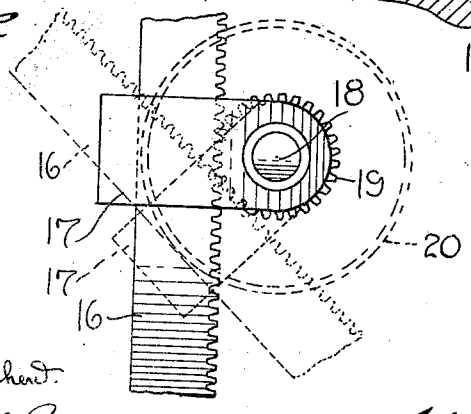


Fig. 2



Witnesses
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2 SHEETS—SHEET 2.

Fig. 3

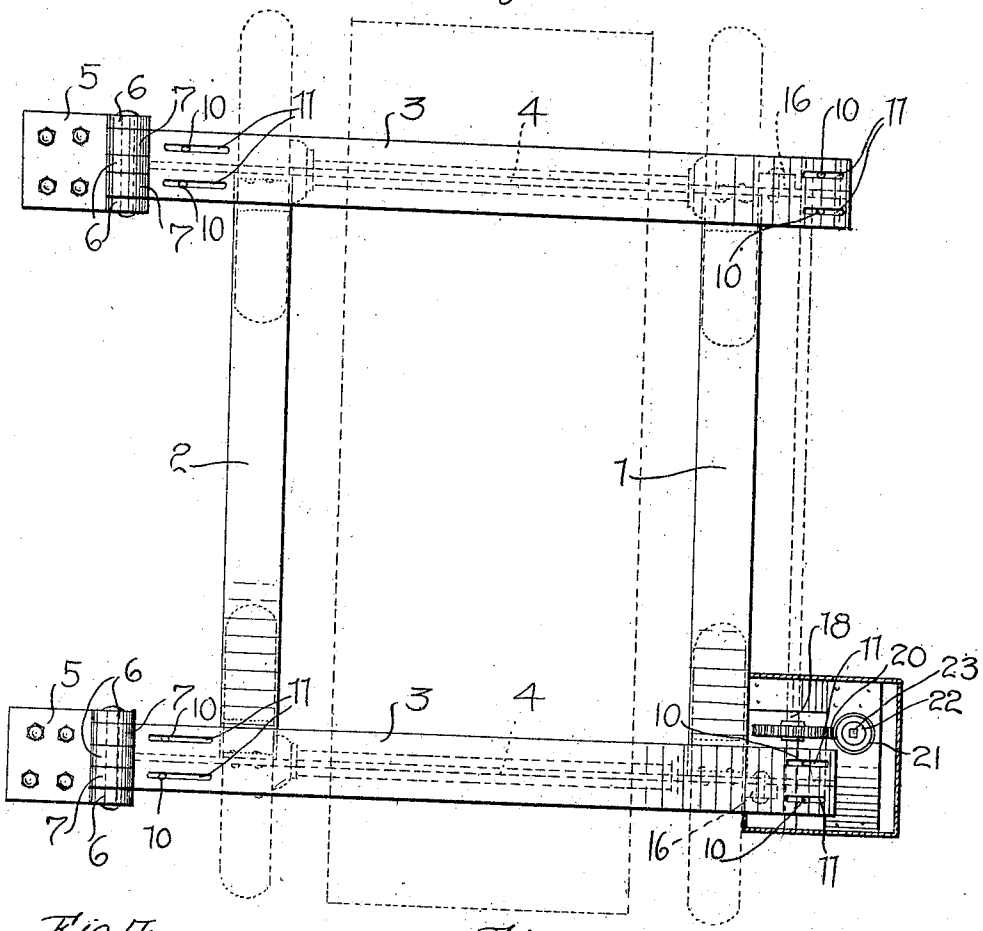


Fig. 4

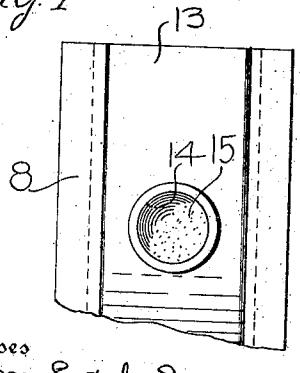


Fig. 5

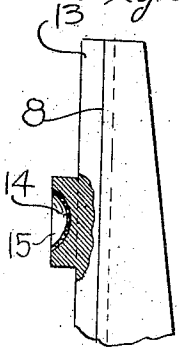
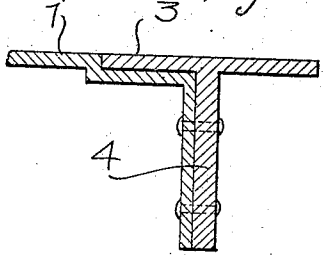


Fig. 6



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UNITED STATES PATENT OFFICE.

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LIFTING-JACK.

1,079,697. Specification of Letters Patent. Patented Nov. 25, 1913.

Application filed July 3, 1913. Serial No. 777,364.

To all whom it may concern:

Be it known that I, WILLIAM FLETT, a citizen of the United States, residing at Hyde Park, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in lifting jacks and more particularly to an automobile lifting jack, the object of the invention being to provide a lifting jack of the above character whereby an automobile may be clamped therein and arranged upon one side so that access to the under side of the machine may be readily had.

Another object of the invention is the provision of a lifting jack of the above character which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

With the above and other objects in view, this invention consists in the novel features of construction and the combination and arrangement of parts to be hereinafter more fully described, pointed out in the claims and shown in the accompanying drawings, in which—

Figure 1 is a transverse sectional view of a lifting jack constructed in accordance with my invention; Fig. 2 is a detail elevation illustrating the relative positions of the lifting jack; Fig. 3 is a top plan view; Fig. 4 is a detail front elevation of one of the clamping blocks; Fig. 5 is a detail side elevation of the same, parts being broken away and in section; Fig. 6 is a sectional view illustrating the manner of connecting the side and end members.

Referring more particularly to the drawings, 1 and 2 indicate the spaced track members upon which the automobile or other vehicle is to run when the lifting jack is to be applied thereto. The parallel tracks 1 and 2 are connected at their ends by means of the transverse members 3. These end members are in the form of a body plate having a longitudinal rib 4 formed on the under face thereof. The end members 3 are hingedly secured to the floor at one end by means of the plates 5, said plates being rigidly secured to the floor and provided with the spaced sleeves 6, said sleeves being arranged upon opposite sides of the central sleeve 7, which is formed at one end of the end pieces 3.

Slidably mounted upon the cross pieces 3 and arranged in opposed relation are the adjustable clamps 8, said clamps being provided with a base portion 9 which is secured to the cross pieces 3 by means of the bolt 10. The bolts 10 are movably arranged within the elongated slots 11 and are held in a clamping position by means of the nuts 12 which are threaded upon the upper ends thereof, said nuts being readily loosened when it is desired to adjust either one of the clamping members. The clamping members 8 are provided at their upper ends and upon the inner faces thereof with the plate 13, at the central portions of which are formed the sockets 14. Arranged within the sockets 14 is the cushioning member 15 against which the hub of the vehicle axle is disposed, said cushioning member protecting the hub against wear or disfiguration when arranged between the two clamping members.

Pivotally secured to the end of the ribs 4 opposite the hinge 6 are the rack bars 16. Slidably mounted upon the rack bars 16 are the brackets 17 in the outer ends of which is mounted a shaft 18 and mounted upon each end of the shaft and engaging the rack 16 are the gears 19. Mounted upon one end of the shaft is the large gear 20, said gear being adapted to mesh with the worm gear 21 which is suspended from the outer end of one of the members 3. Formed integral with the gear 21 and projecting upwardly in a suitable bearing is a stem 22 having a substantially rectangular centrally arranged bore 23 in which a crank handle or other suitable operating member may be inserted to rotate the worm gear 21 and the shaft 18. This operation will rotate the gears 19 to raise and lower the racks 16, said racks raising one side of the frame of the jack so that the automobile or other vehicle which is mounted upon the frame will be tilted upon its side, as clearly illustrated in Fig. 1.

In the practical operation of my improved lifting jack, the clamping members 8 are loosened and moved apart sufficiently to permit the vehicle to pass between the same upon the tracks 1 and 2. After the vehicle has been raised upon the tracks, the clamping members are then pushed inwardly

until the ends of the hub of the vehicles are arranged within the sockets 14. The clamping members are then rigidly secured in position and the shaft 18 rotated through the medium of the crank handle 24 to raise the frame of the jack at one side and tilt the vehicle. It will be readily understood that the plates 13 which are secured to the inner faces of the clamping members 8 will be readily adjusted thereon at various heights to accommodate the same to various sized vehicles. It will be readily understood that in making the frame, the tracks 1 and 2 will be made of sufficient length to accommodate the largest sized vehicle and they may be so mounted upon the cross members 1 that the cross members may be readily adjusted toward or away from each other to accommodate various lengths of vehicles. It will also be apparent that my device is extremely simple in construction and can be manufactured at a comparatively low cost.

While I have shown and described the preferred form of my invention, it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope of the appended claims.

What I claim is:—

1. A device of the class described including a frame hingedly secured at one side thereof, opposed clamping members adjustably mounted upon said frame, plates secured to the inner faces of the clamping members for vertical adjustment, said plates being provided with socket members and means for tilting the frame to any desired degree.

2. A device of the class described including a frame hingedly secured at one side thereof, clamping members carried by the frame and adapted for lateral adjustment, plates secured to the inner faces of said clamping members and adapted for vertical relative adjustment, said plates being provided with socket members, and means for raising one side of the frame whereby the same will be tilted at any desired angle.

3. A device of the class described including a frame, said frame comprising longitudinal spaced bracket members, transverse members connecting the ends of the longitudinal bracket members, a rib formed on the lower face of each of the transverse members, said frame being hingedly secured at one side thereof, said transverse members having spaced slots arranged upon opposite sides of the rib, clamping members having a base, bolts carried by the base and removably arranged in said slots whereby the clamping members may be readily adjusted, plates secured to the inner faces of the clamping members and provided with sockets, and means for raising one side of the frame to tilt the same at any desired angle.

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

WILLIAM FLETT.

Witnesses:

ALICE M. COFFEY,

JOHN C. STEVENS.