F. C. HEALY.

JACK.

APPLICATION FILED JUNE 11, 1920.

1,398,132.

Patented Nov. 22, 1921.

2 SHEETS—SHEET 1.

Fig. 1.

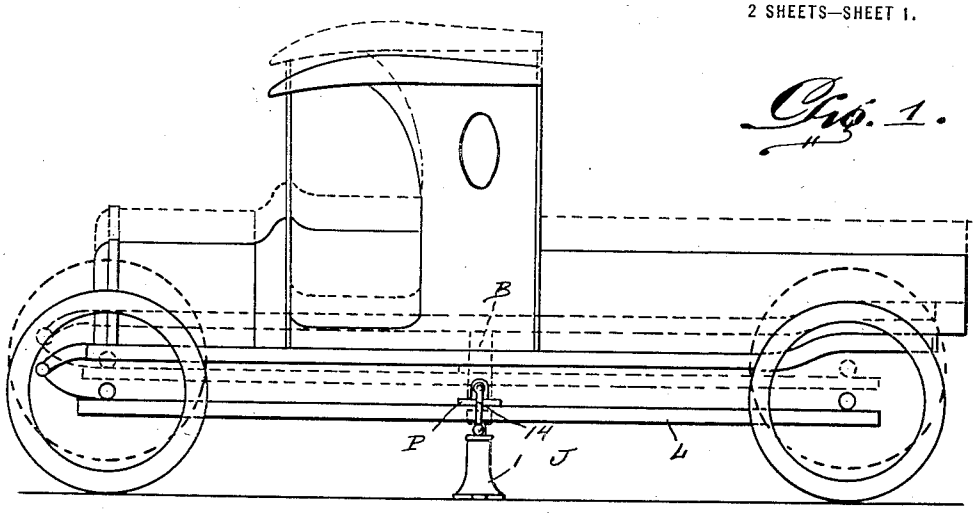


Fig. 2.

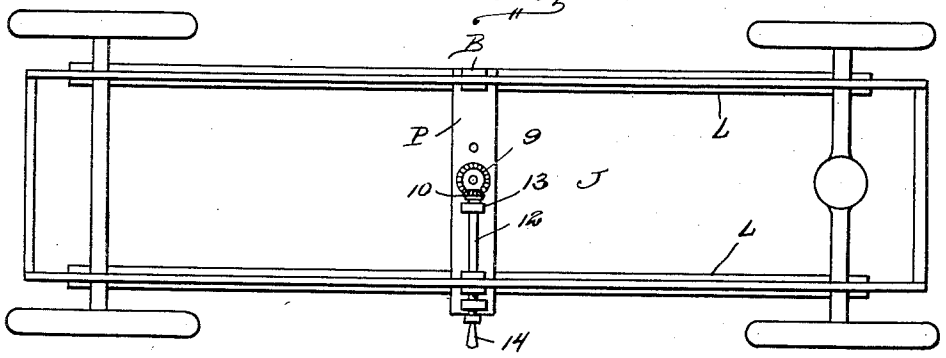


Fig. 3.

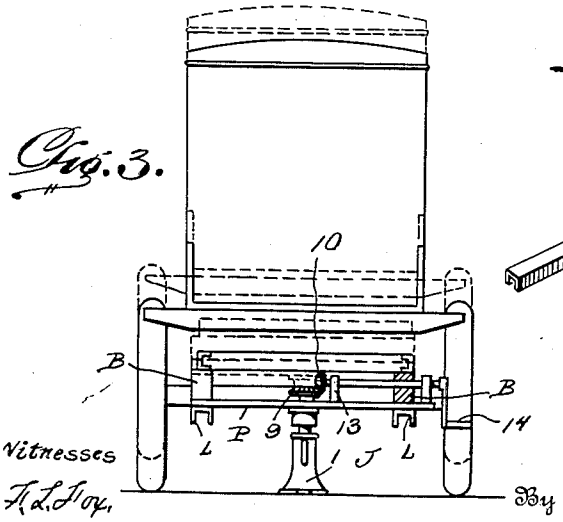
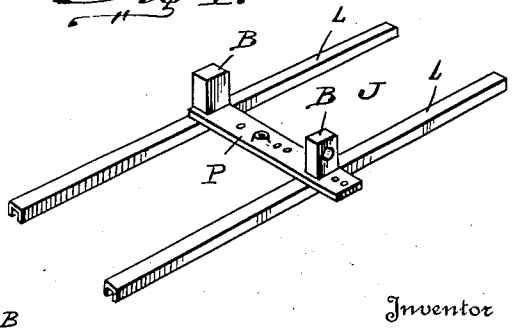


Fig. 4.



Witnesses

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2 SHEETS—SHEET 2.

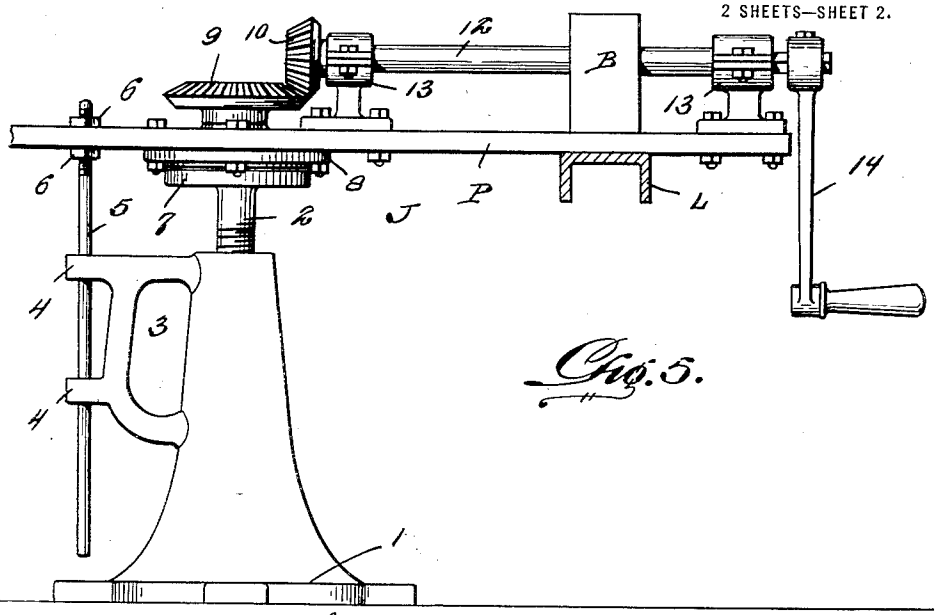


Fig. 5.

Fig. 6.

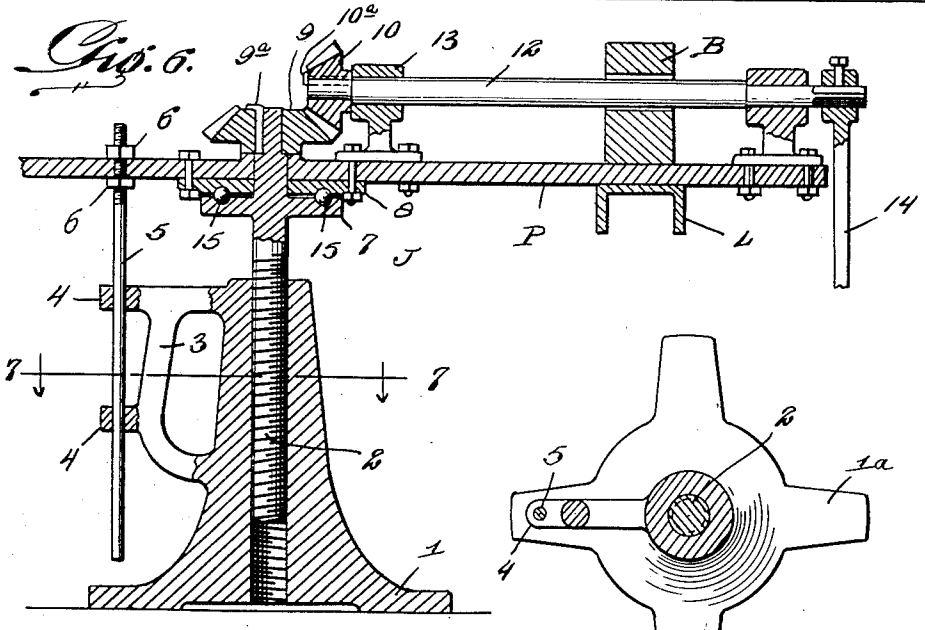


Fig. 7.

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JACK.

1,398,132. Specification of Letters Patent. Patented Nov. 22, 1921.

Application filed June 11, 1920. Serial No. 388,191.

To all whom it may concern:

Be it known that I, FRANK C. HEALY, a citizen of the United States, residing at South Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Jacks, of which the following is a specification.

This invention relates to improvements in jacks, especially designed for lifting automobiles and aims to provide a jack which is capable of simultaneously lifting all of the wheels of the vehicle clear of the ground.

Another object is the provision of a jack which is adapted to be placed beneath a vehicle and operated from one side of the latter to entirely lift the said vehicle from the ground and permit it to be easily turned upon a central pivot, thus providing a portable turn table in addition to many other advantages which the invention possesses.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

In the drawings:—

Figure 1 is a view in side elevation showing the jack in position beneath a motor vehicle, the latter being shown elevated by dotted lines.

Fig. 2 is a plan view of the jack showing the chassis of the vehicle in position thereon.

Fig. 3 is an end elevation of Fig. 1.

Fig. 4 is a detailed perspective view of the jack frame.

Fig. 5 is an enlarged elevation of the jack with the transverse member of the jack frame broken away.

Fig. 6 is a sectional view.

Fig. 7 is a detailed section on the line 7—7 of Fig. 6.

Referring in detail to the drawings, wherein like characters of reference denote corresponding parts, the reference character J indicates generally a jack which includes a frame, formed of spaced longitudinal beams L and a transverse connecting beam P, the latter serving to connect the beams L at a point central of their lengths and carrying blocks B at each end thereof.

The frame is supported upon the jack proper and the latter includes a base member 1 which is provided with a threaded bore for the reception of a screw 2. This screw has secured thereto an annular flange 7 which is provided with an annular groove, the said screw extending beyond the flange through an opening provided in the transverse beam P. Secured to this beam is a member 8 which is also provided with an annular groove and this groove together with the groove in the flange 7 form a raceway for the reception of anti-friction devices 15. The screw 2 is thus permitted independent rotary movement within the transverse beam P.

In order to prevent the base 1 from turning with the screw, the beam P carries a rod 5 which slides within openings provided in spaced ears 4 which extend outwardly from a handle 3 carried by the base. Binding nuts 6 serve to hold the rod within an opening provided in the beam P.

Mounted upon the upper end of the screw 2 and keyed thereon by means of a key 9^a is a beveled gear 9, the latter engaging a beveled pinion 10 which is keyed to a shaft 12 by a key 10^a. This shaft is mounted in bearings 13 carried by the transverse beam P and has secured upon its outer end a crank handle 14. The shaft 12 extends through an opening in one of the blocks B and a handle is positioned upon the outside of the longitudinal beam L so that when the jack is in position beneath the vehicle the handle will extend to one side thereof whereupon the gears may be operated to rotate the screw 2 to raise or lower the vehicle.

In practice, the jack is placed beneath the vehicle with the ends of the longitudinal bars L of the jack frame beneath the front and rear axles and the blocks B beneath the side bars of the vehicle frame, whereupon the jack screw may be rotated through the crank handle 14 to elevate the vehicle. If it is desired to turn the vehicle, the rod 5 may be disengaged from the beam P by removing one of the nuts 6 and allowing the rod to fall. The vehicle may be then easily turned with the screw as a pivot. The blocks B engage the vehicle side bars so as to prevent bending of the longitudinal beams L, while the base which is provided with radial extentions or feet 1^a form a firm support and prevent tilting.

The invention is susceptible of various changes in its form, proportions and minor

details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention what is claimed is:—

A jack embodying a base member having a threaded bore, a screw engaging said bore, a frame secured to the screw, and including spaced longitudinal bars and a transverse connecting bar, said last mentioned bar being provided with an opening for the passage of the screw, an annular grooved flange connected to and surrounding the screw, a grooved disk connected to the transverse beam and provided with a race-way for anti-friction members, whereby the frame will be supported upon the screw in a manner to permit of rotation of the latter and means connected to the screw and extending to one side of the frame, whereby the screw may be rotated.

In testimony whereof I affix my signature.

FRANK C. HEALY