L. H. ERSKINE.

AUTOMOBILE JACK.

APPLICATION FILED JULY 7, 1915.

1,184,840.

Patented May 30, 1916.

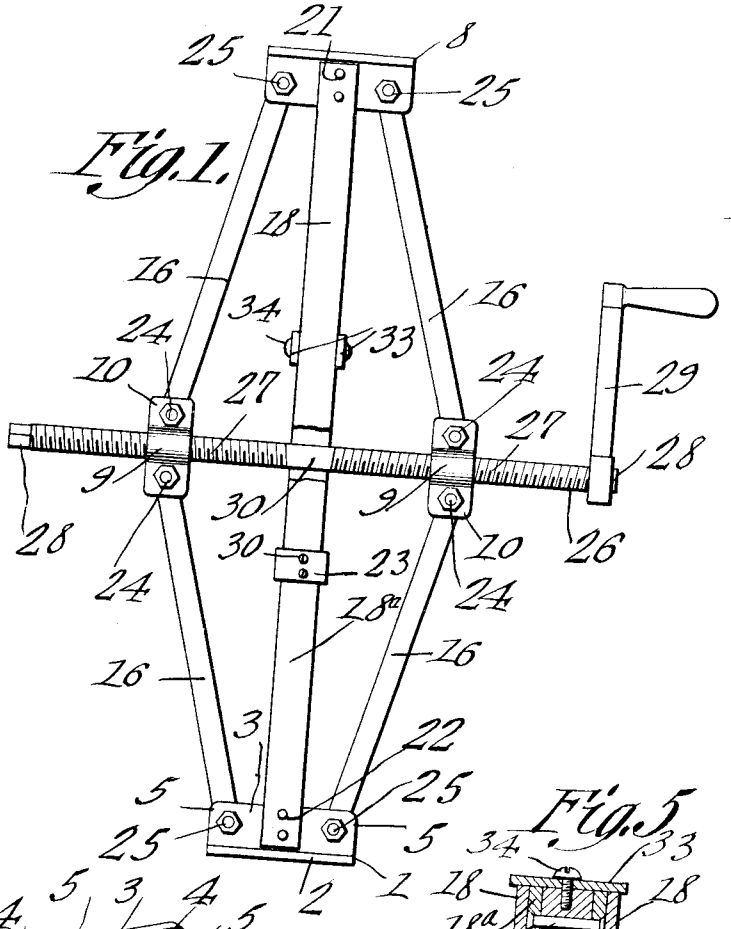


Fig. 1.

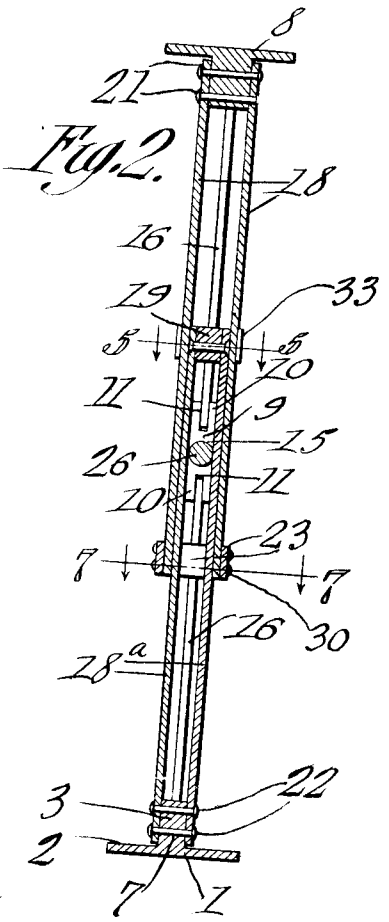


Fig. 2.

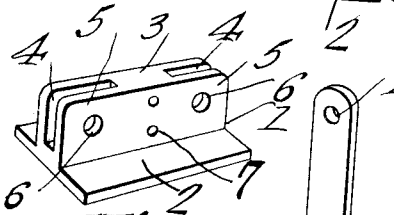


Fig. 3.

Fig. 5.

Fig. 4.

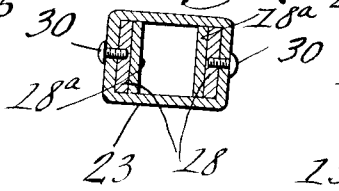


Fig. 7.

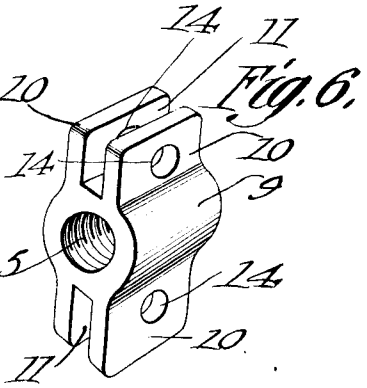


Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

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AUTOMOBILE-JACK.

1,184,840. Specification of Letters Patent. Patented May 30, 1916.

Application filed July 7, 1915. Serial No. 38,534.

To all whom it may concern:

Be it known that I, LEE H. ERSKINE, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented a new and useful Automobile-Jack, of which the following is a specification.

The device forming the subject matter of this application is a jack adapted to be employed for elevating vehicles and for other purposes.

The invention aims to provide novel means for producing relative movement between the base and the top of the jack, and to provide novel means for guiding the movement of the base with respect to the top.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing: Figure 1 shows the invention in side elevation; Fig. 2 is a vertical longitudinal section; Fig. 3 is a perspective delineating the base; Fig. 4 is a perspective showing one of the links; Fig. 5 is a cross section on the line 5—5 of Fig. 2; Fig. 6 is a perspective showing one of the nuts; Fig. 7 is a cross section on the line 7—7 of Fig. 2.

In carrying out the present invention there is provided a base 1 which may be variously constructed, the same being shown as embodying a foot plate 2 provided with an upstanding rib 3 having slots 4 in its ends, the slots 4 defining ears 5 having oppositely disposed openings 6. In the body portion of the rib 3, between the slots 4, openings 7 are formed.

The top of the jack is indicated at 8 and is preferably although not necessarily an exact duplicate of the base 1.

The invention comprises a pair of nuts 9 provided in their ends with slots 11 which defines wings 10 having opposed openings 14. Each nut 9 is equipped with a threaded passage 15, the passages 15 in the respective nuts being threaded in opposite directions.

The invention comprises four rigid links 16 equipped with openings 17 in their ends. The outer ends of the links 16 are received in the slots 4 of the base 1 and the top 8 and are pivotally held to the ears 5 by means of pivot elements 25. The inner ends of the links 16 enter the slots 11 of the nuts 9 and are pivotally assembled with the wings 10 by means of connecting elements 24.

The invention comprises a longitudinally extensible connection uniting the base 1 with the top 8, this connection embodying bars 18 united with the rib 3 of the top 8 by means of securing elements 21 which pass through the openings 7. Bars 18ª lie between the bars 18, the lower ends of the bars 18ª being united with the rib 3 of the base 1 by means of securing elements 22. Surrounding the lower ends of the bars 18 is a ring 23 held in place in the lower ends of the bars 18 by means of securing elements 30. The edges of the bars 18ª are in slidable contact with the ring 23, as clearly shown in Fig. 7. Disposed between the upper ends of the bars 18ª is a filler block 19 held in place by a securing element 32 which may be a rivet, the filler block thus being held in place between the upper ends of the bars 18ª. Guide strips 33 are united with the filler block 19 by means of securing elements 34, the guide strips 33 engaging the edges of the strips 18 in a manner which will be obvious from Fig. 5.

A screw 26 is threaded in opposite directions as shown at 27 into the openings 15 of the nuts 9, the screw being squared at its ends as shown at 28 to receive a removable crank 29, although any other suitable means may be provided for rotating the screw. The said screw 26 passes between the bars 18ª of the longitudinally extensible connection, the intermediate portion of the screw 26 being devoid of threads, as shown at 30, the unthreaded, intermediate portion 30 of the screw bearing against the inner faces of the bars 18ª of the longitudinally extensible connection, to reinforce the same, as will be understood clearly from Fig. 2.

In practical operation, the top 8 is raised and lowered by rotating the screw 26, the nuts 9 traveling toward and away from each other, and altering the contour of the diamond-shaped frame defined by the links 16,

The longitudinally extensible connection comprising the bars 18 and 18^a unites the base 1 with the top 8 for right line movement toward and away from each other.

It will be observed that the jack herein disclosed comprises a minimum number of different parts, the cost of manufacturing being decreased accordingly.

Having thus described the invention, what is claimed is:—

In a vehicle jack, a pair of outer bars; a ring uniting the outer bars at their ends; a pair of inner bars mounted to slide between the outer bars; a filler interposed between the ends of the inner bars; guide strips connected to the filler and engaging the edges of the outer bars; a top to which one set of bars is connected; a base to which the other set of bars is connected; links pivoted respectively to the top and the base; opposed nuts to which the inner ends of the links are pivoted; and a screw threaded in opposite directions into the nuts.

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

LEE H. ERSKINE.

Witnesses:
A. P. TONE WILSON, Jr.,
BESS CAVE.