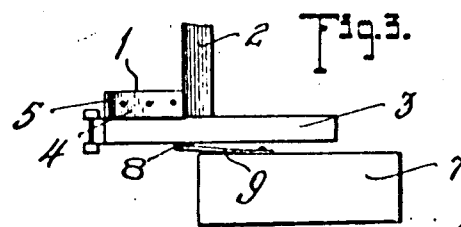
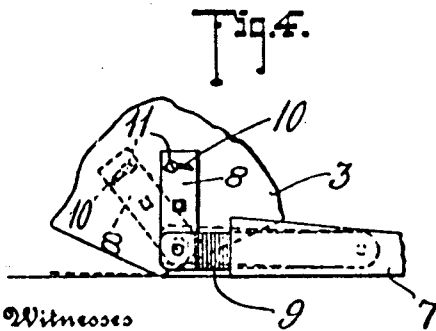
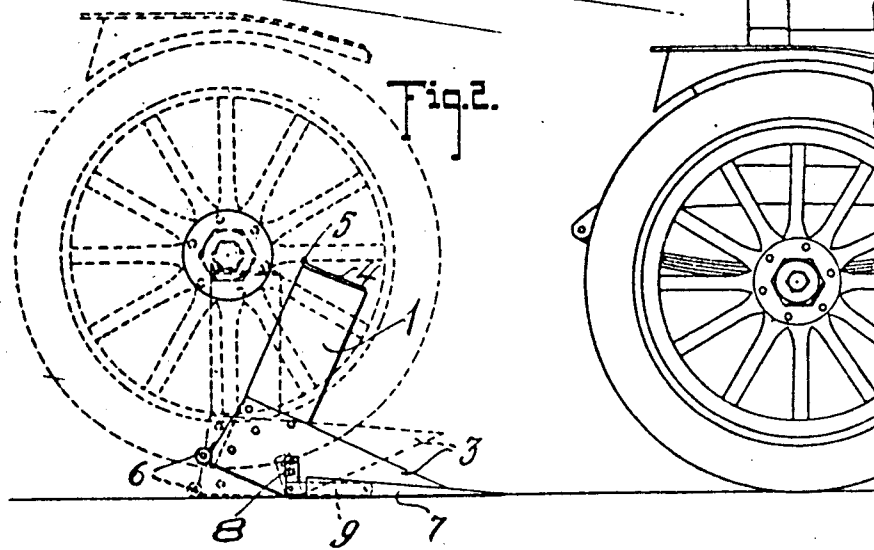
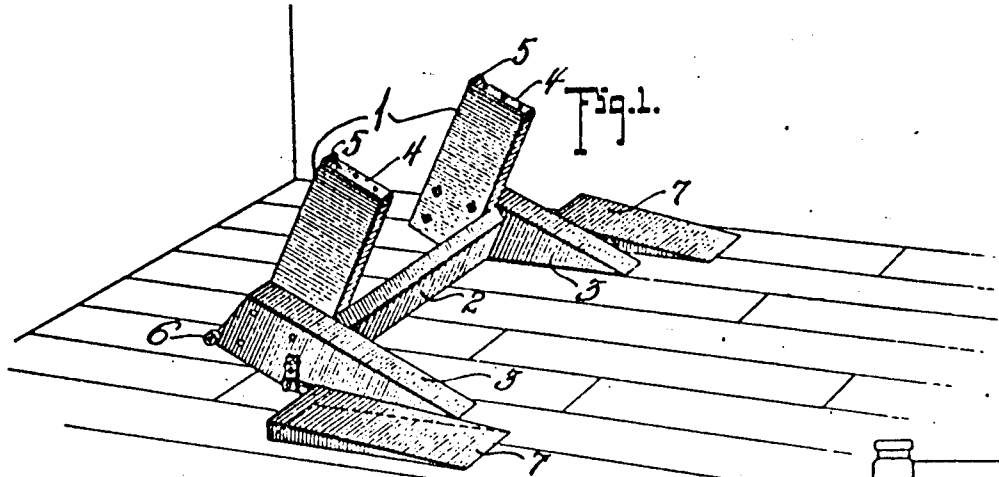


C. A. HART.
 AUTOMOBILE JACK.
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AUTOMOBILE-JACK.

1,030,728.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES A. HART, a citizen of the United States, residing at Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Automobile-Jacks, of which the following is a specification.

This invention relates to jacks and primarily to that type which is operated by the vehicle passing thereon for automatically elevating the latter from the ground.

The invention has particular reference to certain improvements over my previous application Serial Number 654,870. In the jack constituting the subject matter of the application just referred to, it has been found that the momentum of the automobile as the latter rides on the jack will sometimes cause the jack to pass beyond the position of equilibrium and render said jack inoperative. To overcome this I have mounted a plurality of rollers on the base of the jack, which, should there be an excess of momentum, will cause the jack to move with the vehicle until the latter is stopped.

A further object of the invention has been to provide a peculiar connection between the base portion of the frame or lifting part of the jack, and certain runners up which the wheels of the vehicle travel in order that the jack may engage the axle of the latter in the elevating operation.

With the above and other objects in view this invention consists in the construction, combination and arrangement of parts, all as hereinafter more fully described, claimed and illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of a jack embodying the present invention. Fig. 2 is a side elevation thereof, the dotted line portion illustrating the vehicle supported on the jack. Fig. 3 is a fragmentary plan view of the jack, and Fig. 4 is a fragmentary side elevation of the connection between the runner and the jack.

Throughout the following detail description and on the several figures of the drawings, similar parts are referred to by like reference characters.

In carrying out the present invention a tiltable frame is provided comprising a pair of vertical standards 1 held in spaced relation by the connecting bar 2 and the bases 3 bolted or otherwise secured to the stand-

ard 1, said bases being provided with an auxiliary bearing surface disposed at an angle from the main bearing surface. When the jack is supported on the auxiliary bearing surface the former is, in a tilted position adapted to receive the axle of the oncoming vehicle. As the vehicle moves on to the standards 1 the frame is rocked or tilted to a vertical position, the latter being supported on the main bearing surface of the base. The upper or receiving terminals of the standards 1 are capped or provided with the plates 4 which have formed on their rear terminals integral projections which form stops, to be engaged by the vehicle axle and thus tilt the base or fulcrum members until the standards 1 assume a vertical position with the axle elevated. A terminal of each base 3 is beveled rearwardly and downwardly and said base has mounted on the rear end a roller or wheel 6. It has been found by experience that the momentum of heavy cars or vehicles will sometimes overturn the jack, but in providing the rollers, such as are shown at 6 in the drawings, the standards 2 when moved to a vertical position by engagement of the axle of the vehicle will be supported partly by the rollers 6. The rollers 6, of course, constitute anti-friction members which, on engagement with the surface upon which the jack is supported, will permit of a slight bodily movement of the jack as the members 2 assume a vertical position, and in the event that the vehicle, the axle of which is being engaged and elevated by the jack, is not stopped immediately the standards reach such position. The likelihood of overturning of the jack is thus eliminated by the provision of said rollers 6.

The pair of runners 7 are connected to the base members 3 for guiding the vehicle on to the jack. These runners are peculiarly connected to the base members 3, each connection comprising a lever 8 pivoted between its terminals to a base member 3 and a link member 9 connecting one terminal of the lever 8 to a runner 7. The opposite or upper terminal of the lever 8 is provided with an arcuate slot 10 in which is adapted to operate a pin 11 carried by the base member 3.

By reference to Fig. 4, it will be noted that, in the operation of raising one end of a vehicle, the latter will be moved to cause

its rear or front wheels to travel on to the runners 7, the vehicle being thus slightly elevated so as to permit the axle adjacent to said wheels to engage with the upper ends of the standards 2 and tilt the standards into a vertical position. The aforesaid movement of the standards 2 is afforded by a rocking movement of the base or fulcrum members 3 and as said members 3 are moved in the manner described, the levers 8 have a pivotal movement on the base 3, the upper ends of said levers moving in an arc with the pivots of the levers as a center. The movement of the levers 8 is permitted by the loose or pin and slot connection 11—10 above referred to and the connections of which the levers 8 form a part are located substantially at the angle where the main and auxiliary bearing surfaces of the parts 3 meet.

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

1. A jack comprising a tiltable frame, a runner, a lever pivoted between its ends to the frame and provided with a slot adjacent one terminal, a link connecting the opposite terminal of the lever to the runner, and a pin carried by the frame and operable in the slot in said lever.

2. A jack comprising a tiltable frame including standards, base fulcrum members for said standards adapted to support the standards in tilted and vertical positions,

runners associated with the base fulcrum members, and connections between said runners and the fulcrum members each comprising a lever pivoted between its ends to the fulcrum member, a loose connection between one end of the lever and its fulcrum member, and a pivotal connection between the opposite end of the lever and the adjacent runner.

3. A jack comprising a tiltable frame including standards, base fulcrum members for said standards, each of the latter having on its under side main and auxiliary bearing surfaces extending at an angle to one another to support the frame in a tilted or vertical position, runners associated with the fulcrum members to receive thereon the wheels of a vehicle, and a connection between each fulcrum member and its adjacent runner comprising a lever pivoted between its ends to the fulcrum member near the angle at which its main and auxiliary bearing surfaces meet, a loose connection between one end of the lever and its fulcrum member, and a pivotal connection between the opposite end of said lever and the adjacent runner.

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

CHARLES A. HART.

Witnesses:

W. S. HAMMAKER,

C. A. STOCKTON.