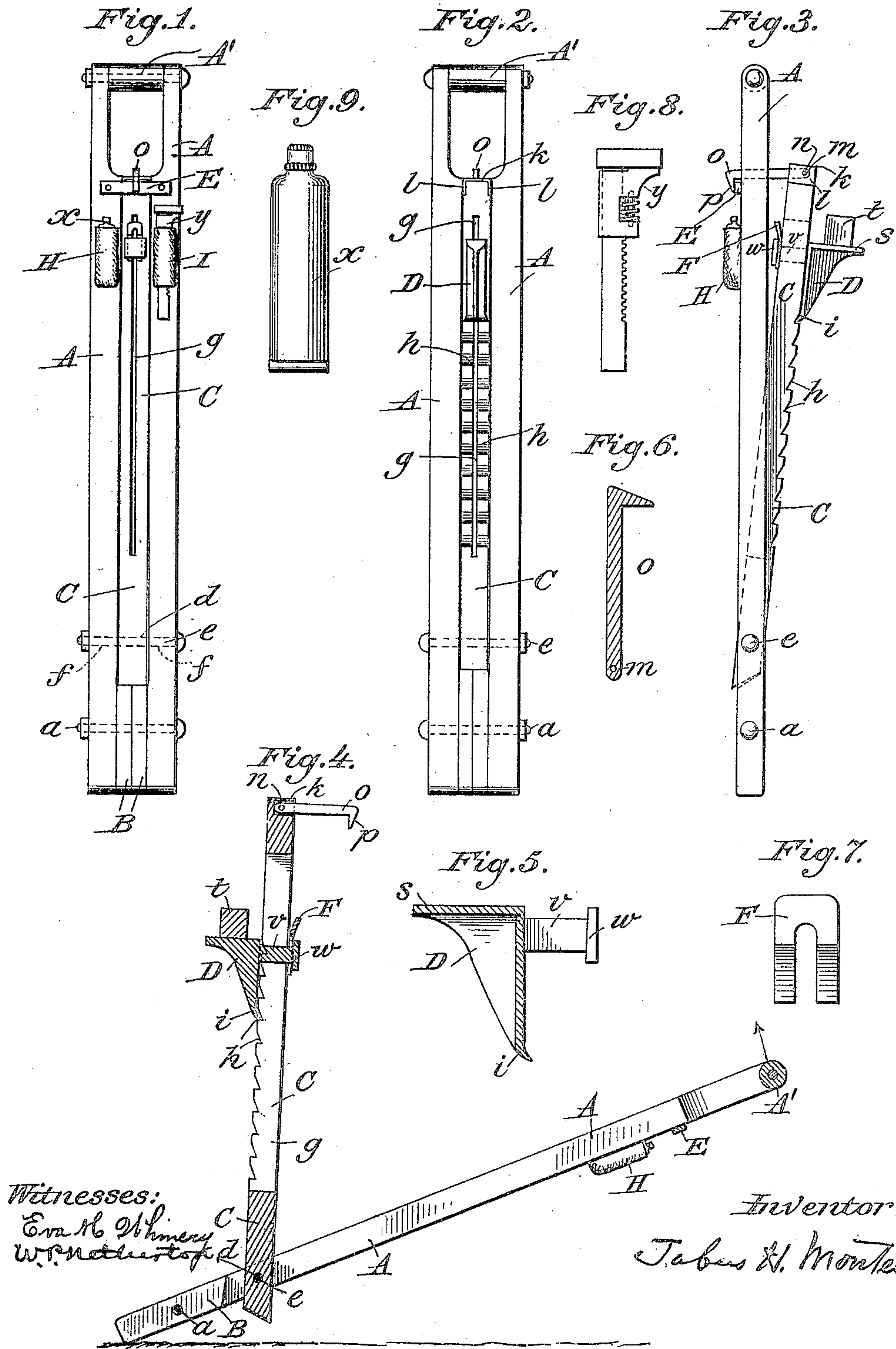


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J. H. MONTEITH.
LIFTING JACK.

APPLICATION FILED DEC. 11, 1905.



Witnesses:

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JABUS H. MONTEITH, OF SANTA CRUZ, CALIFORNIA.

LIFTING-JACK.

No. 818,040.

Specification of Letters Patent.

Patented April 17, 1906.

Application filed December 11, 1905. Serial No. 291,200.

To all whom it may concern:

Be it known that I, JABUS H. MONTEITH, a citizen of the United States, residing at Santa Cruz, in the county of Santa Cruz, State of California, have invented a new and useful Lifting-Jack, of which the following is a specification.

My invention relates to improvements in lifting-jacks, known as the "leverage" type, for raising the axle of vehicles, in which side arms operate in conjunction with a central lifting-bar pivoted and having a sliding bracket, with means for removing the bur or nut of the axle of a vehicle and supplying the lubricant.

The objects of my improvements are, first, to provide a cheap and durable simple lifting-jack with wrench and lubricant attachments that will lift the axle of vehicles and hold the same in place while the wheel is removed and the lubricant applied; second, a handy portable lifting-jack having removably attached thereto a wrench and lubricant-receptacle. I attain these objects by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective rear view of my invention with the parts closed. Fig. 2 is a perspective front view of the same with parts closed. Fig. 3 is a side elevation view of the same, showing it in position used. Fig. 4 is a sectional view of the same, showing it in position for use with the sliding bracket and catch in place. Fig. 5 is a vertical sectional view of the bracket. Fig. 6 is a vertical sectional view of the catch. Fig. 7 is a front elevation of the wedge. Fig. 8 is a side elevation of the wrench. Fig. 9 is a perspective view of the lubricant-receptacle.

Similar letters refer to similar parts throughout the several views.

Referring to the drawings, A represents a pair of lever-arms that are formed of wood or other suitable material, having a handle-piece A' rigidly secured between their outer ends, their opposite ends being rigidly held in place against an intervening piece B, formed of wood or other suitable material and held in place by a clamp-bolt α or nails, as desired.

The inner end of piece B is formed with a face-bevel b , adapted to conform to the opposite face-beveled end c , formed on the inner end of lifting-bar C. This formation stops the lifting-bar C in place when closed in between the outer arms A, preventing its

further inward movement, but permitting of the outward end movement freely.

The lifting-bar C is formed of wood or other suitable material and of a width and thickness to fit loosely between the lever-arms A and of suitable length when placed in position to lift the axle of a vehicle or other object the required distance from base. Lifting-bar C is formed with a cross-perforation d near its inner end, adapted to receive a bolt e , which passes through perforation f in the lever-arms A, that registers with the perforation d in lifting-bar C. Said perforations are adapted to receive tie-bolt e , adapted to hold the parts rigidly in place and form a pivotal rest for lifting-bar C. The outer end of lifting-bar C is formed with a central longitudinal cut g about two-thirds its length, which is adapted to receive loosely the central flat portion of bracket D. The front surface of the lifting-bar C is formed with cross-serrations h , adapted to receive the end flange i of bracket D and form a biting rest that prevents the bracket D sliding down when in use. The outer end of lifting-bar C is provided with a metal cap K, having two inward-projecting side walls l , adapted to fit over the sides of said outer ends to hold the same in place and protect from injury while in use.

The side walls l of cap K and ends of lifting-bar C are formed with registered perforations M, adapted to receive bolt N, that serves to hold the cap K and lifting-bar ends in place and forms a pivotal bearing for the inner ends of catch o . The outer end of catch o is formed with a vertical projection p , adapted to engage with the outer face of cross-bar E, the outer ends of cross-bar E being secured to the back face of the lever-arms A by screws or nails and in cross-line with the lower half of pivoted catch o , which is adapted to hold the lifting-bar C rigidly in place when in use by means of the projecting end p of the catch o passing over said cross-bar E and engaging with the outer face of the same.

Bracket D is formed of metal, with a flat top surface s adapted to fit under a vehicle-axle t . Said bracket D is formed with an elongated body having an inward-projecting flange i at its terminal end adapted to engage with the serrations h , whereby it is adjusted to fit under the axle of vehicles of different heights from the ground. The front face of bracket D recedes vertically from the top

surface *s* to the projecting flange *i*, and the rear face of said bracket *D* is formed nearly flat to conform to the outer surface of lifting-bar *C* and is provided with a flat fin-shaped extension *v*, adapted to pass loosely through the longitudinal cut *g* and rigidly engage with the inner surface of the cross retaining-knob *w*. By this construction the bracket *D* is held in place in the lifting-bar *C* and can easily be moved vertically to the position desired in use.

To further provide for security of position of bracket *D* when in use, a wedge-shaped split key *F* is formed of metal or wood and adapted to readily slip down between the inner face of knob *w* and the rear face of lifting-bar *C* and over the extension-piece *v*, its purpose being when pressed down in place to materially aid in holding bracket *D* in place.

Catch *o* is formed of metal or other suitable material and preferably flat-shaped, with a projection *p* on the lower face of its outer end, its inner end being perforated to receive bolt *N*, on which it is pivoted.

On the back face of the lever-arms *A*, near their outer ends, loops *H* and *I* are rigidly secured with nails. Said loops are formed of flexible material, preferably of leather, the purposes of which are to hold a wrench and lubricant-receptacle. Loop *H* is formed to receive and hold a lubricant-receptacle *x*, and loop *I* formed to receive and hold a wrench *Y*. By this construction and attachment the operator is enabled to find the wrench, lubricant-receptacle, and the lifting-jack all in one place instead of losing time in searching for wrench, lubricant, and lifting-jack in different places, and, further, the said combination being light and portable can be carried in the vehicle adapted for use whenever required.

The operation of my device is as follows: The operator desiring to raise a vehicle-axle sets the bracket *D* at desired place in lifting-bar *C*, adjusts the wedge-key *F* between the knob *w* and the lifting-bar *C*, holding bracket *D* firmly in place, then seizes by his right hand the handle-piece *A'*, with the left hand moving the outer end of lifting-bar *C* outward, at same time moving the handle inward until the bracket *D* or the end cap *K* are adjusted under the vehicle-axle to be raised. When so adjusted, the quick forward movement of the right hand brings the lever-arms *A* into nearly a vertical position, forcing the lifting-bar *C* upward, raising the axle, and causing the catch projection *p* to pass over the upper edge of cross-bar *E* and engage with the outer surface of the

same, whereby the lifting-bar *C* and the lever-arms *A* are firmly held in place. The operator then takes the wrench from loop *I*, removes the nut from axle-arm, takes off the wheel, then takes the lubricant-receptacle from loop *H*, applies the lubricant to the axle, then returns the wheel, replaces nut with wrench, replacing the wrench and lubricant-receptacle in their respective loops, raising the outer end of catch *o*, releasing the handle and arms *A*, also the lifting-bar *C*, permitting the removal of the lifting-jack, and the axle lowered to place.

I am aware that prior to my invention a lifting-jack has been made of a single piece of wood or metal with a central lifting-bar having a bracket rigidly secured to its outer face by a bolt and nut. I therefore do not claim, broadly, such construction; but

I claim—

1. A lifting-jack, consisting of a pair of lever-arms, a central longitudinal cut lifting-bar pivoted between said arms and provided with front cross-serrations, and an adjustable bracket loosely secured within said cut and adapted to engage with said serrations, substantially as set forth.

2. A lifting-jack consisting of a pair of lever side arms, a lifting-bar pivoted between said arms, and provided with front serrations and a longitudinal cut and an adjustable bracket having an end projection adapted to contact with the inner surface of the lifting-bar, substantially as set forth.

3. A lifting-jack consisting of a pair of lever-arms, a lifting-bar pivoted between said arms and provided with front serrations and a longitudinal cut, an adjustable bracket formed with an end knob and held loosely within said cut, and a split tapering wedge inserted between said knob and the lifting-bar, substantially as set forth.

4. A lifting-jack consisting of a pair of lever-arms, a lifting-bar pivoted between said arms and provided with cross-serrations and a central longitudinal cut, an adjustable bracket formed with an end knob and loosely secured within said cut, a split tapering wedge adjustably inserted between said knob and lifting-bar, and a retaining-catch pivoted to the outer end of said lifting-bar and adapted to engage with a cross-bar that is rigidly secured to the lever-arms, substantially as and for the purpose set forth.

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Witnesses:

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