Aug. 19, 1924.

1,505,443

H. A. STONE

LIFTING DEVICE

Filed April 9, 1923

Fig. 1.

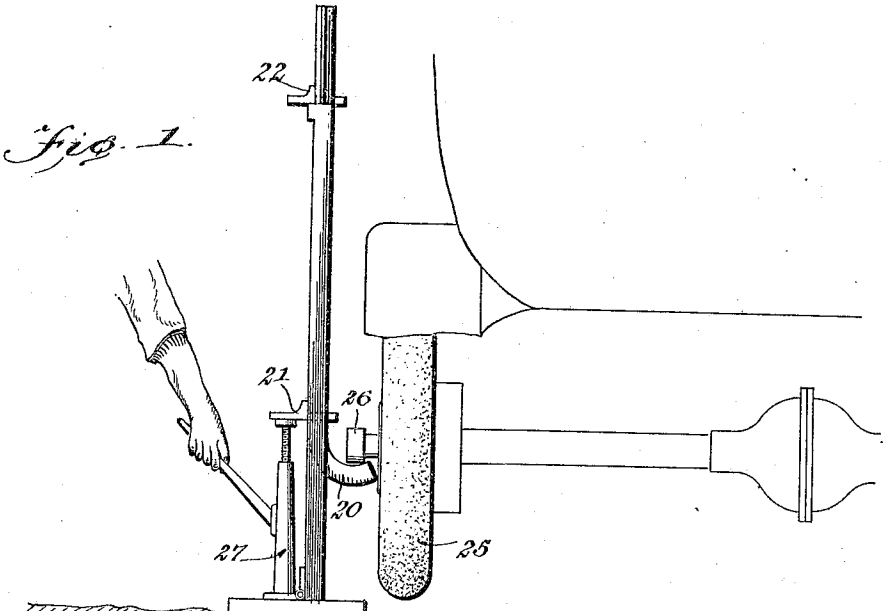


Fig. 2.

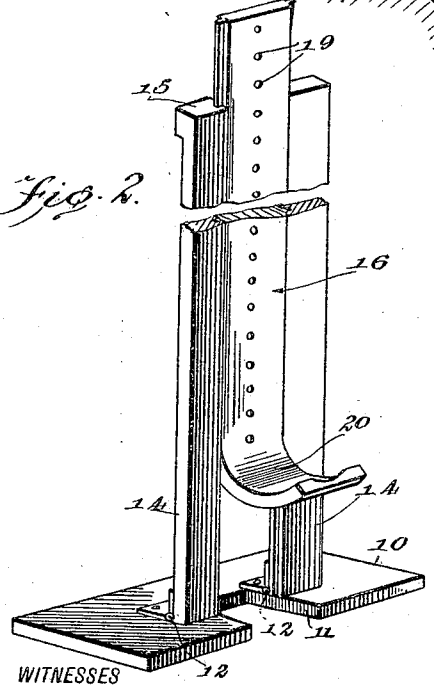


Fig. 3.

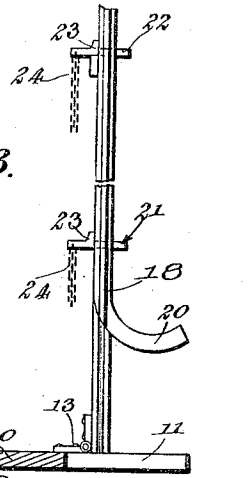
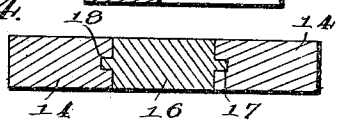


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

HAMPTON A. STONE, OF BEAUMONT, TEXAS.

LIFTING DEVICE.

Application filed April 9, 1923. Serial No. 630,903.

To all whom it may concern:

Be it known that I, HAMPTON A. STONE, a citizen of the United States, and a resident of the city of Beaumont, in the county of Jefferson and State of Texas, have invented certain new and useful Improvements in Lifting Devices, of which the following is a specification.

This invention relates to a lifting device.

As is well known the wheels of a motor vehicle when the same is passing over soft, sandy soil sink deeply into the soil and the motor vehicle becomes stalled. This is especially true with respect to the drive wheels of the motor vehicle and also often occurs in case the same is passing over a muddy roadway.

With the above in view it is the object to provide a lifting device which may be used in conjunction with any conventional form of jack, whereby to lift the wheels of a motor vehicle which has become partially embedded in loose soil, mud, or sand, and thereby to enable a new foundation to be made for the wheel and thus permit the motor vehicle to again move under its own power.

It is also an object of the invention that the lifting device be adapted to be employed for lifting a wheel of a motor vehicle to any desired height.

A further object of the invention is that the device be extremely compact in form and adapted to be carried about in an ordinary motor vehicle.

It is also within the scope of the objects of the invention that the lifting device be exceedingly simple in construction and inexpensive to manufacture.

The invention is illustrated by way of example in the accompanying drawings, in which:

Figure 1 is a view in rear elevation illustrating the application of the invention,

Figure 2 is a perspective view of the lifting device,

Figure 3 is a view in side elevation of the same and also showing the retaining pins employed therewith and illustrating the application of the same,

Figure 4 is a transverse sectional view taken through the uprights or guides together with the movable lifting bar of the device slidable between said uprights or guides.

Referring to the drawings more particularly, the device may comprise a base plate 10 which is formed in one of its longitudinal edges with a recess 11. Upon the base plate 10 there is secured a pair of leaf hinges 12, each hinge having one of its leaves riveted to the base plate 10 and its other leaf riveted to the lower end of an upright or guide member 14, as shown. The members 14 are spaced apart, as shown and the upper ends thereof are secured together by a cross bar 15. This cross bar may be formed integral with the members 14 as shown. Slidably mounted between the members 14 is an elongated lifting bar member 16, which is formed upon each side edge with a tongue 17 adapted to move in a groove 18 formed in the inner edge of the associated lifting bar member 14. The member 16 is also provided with a plurality of openings 19 which are arranged in spaced relation and longitudinally of the member 16. The lower end of the member 16 terminates in a laterally and upwardly bent portion 20 which is substantially in the form of a hook, the purpose of which will later be described.

A pair of pins 21—22 are provided, each pin being formed at its one end with a head 23 and adapted to be extended through any of the openings 19 in the member 16. Also each pin 21—22 may have attached thereto a chain 24 in order to facilitate handling of the same.

Referring to Figure 1, 25 indicates generally the rear or drive wheel of the vehicle, and 26 the hub cap thereof. At 27 there is shown a conventional form of jack.

In utilizing the present device, the same is applied as shown in Figure 1. For the sake of explaining this application of the invention, let it be assumed that the wheel 25 has become partially embedded or sunken in loose or sandy soil and it is desired to lift the same therefrom. The device is then arranged so that the base plate 10 may be positioned as shown in Figure 1 and the uprights or guide members 14 arranged as likewise shown. The lifting bar member 16 is then moved upwardly until its hook portion 20 engages beneath the hub cap 26 of the wheel 25 and the pin 21 is then positioned. The jack 27 is now arranged so that the head of same will engage with the pin 21 and in this way the wheel may be elevated, and after the same has been elevated as far as possible by the jack, then the pin 22 is positioned. This upper pin rests

upon the cross member 15 between the guide members 14 and thus supports the wheel 25 in this position. In case it is desired to further elevate the wheel the pin 21 is positioned in one of the lower openings 19 of the bar 16 and the operation just explained again repeated. In this way the wheel 25 may be elevated the height desired as after the same has been brought to the desired position, the cavity in the earth from which the wheel was lifted may be refilled and the motor vehicle may now proceed under its own power. It is, of course, to be understood that if both drive wheels were sunken that they both might be elevated and placed on a new foundation and also if necessary the front wheels might be likewise elevated and placed on a new foundation.

While I have shown and described the preferred form of my invention, I wish it to be understood, that I am aware of the fact that the construction, combination and arrangement of parts may be changed by those skilled in the art without departing from the spirit of the invention, as indicated by the appended claims.

I claim:

1. A device of the character described, comprising a supporting plate, a pair of uprights secured to said supporting plate and extending in parallel and spaced relation, a lifting member movable between said uprights, said lifting member being elongated and having a hook-shaped projection at its lower end adapted to engage beneath an object to be lifted, said lifting member also having openings arranged in spaced relation longitudinally thereof, a cross member between said guide members, a pin adapted to extend through either of said openings in the lifting member and co-operate with said cross member for adjustably holding the lifting member against downward movement with relation to the uprights, and a second pin adapted to be positioned in an opening of said lifting member and permit a jack to be placed therebeneath and utilized for forcibly elevating said lifting member.

2. A lifting device comprising a base plate of large area, a lifting member, vertical guide members supported by the base, said guide members being adapted to slidably hold the lifting member for vertical movement, and an adjustable pin carried by the lifting member adapted to serve as an abutment for the head of a jack placed upon said base in elevating the lifting member.

3. A lifting device of the character described, comprising a base plate adapted to support a conventional lifting jack, a vertical guide member carried by said base plate, a lifting bar slidably and adjustably mounted on said guide member, and means adjustably associated with the lifting bar and adapted to constitute an abutment for the head of the lifting jack to elevate the lifting bar.

HAMPTON A. STONE.