This invention relates to accessories for automobiles principally in the nature of an attachment for lifting jacks by means of which the wheels may be elevated upon grades without danger of the car toppling over or otherwise becoming disengaged from the jack.

Another object of the invention contemplates the provision and arrangement of an attaching sleeve for the attachment to apply same upon the shafts of jacks.

An additional object of the invention comprehends gripping members upon the sleeve to be brought into engagement with the axles and housings of a vehicle.

More specifically stated the gripping members are provided with a locking member to retain same against displacement incident to the rolling tendency of the vehicle upon a grade.

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

As shown in the drawing:

Figure 1 is an elevation of a jack with the present invention applied and illustrating by full and dotted lines the respective positions of the gripping elements.

Figure 2 is a side elevation of the gripping elements showing the hinge connection therebetween.

Figure 3 is a top plan view of the invention.

Figure 4 is a horizontal sectional view taken on line 4-4 of Figure 1.

As previously mentioned, the present invention primarily resides in the provision and arrangement of an accessory permitting the attaching of the lifting screw of a jack for locking connection with the axles and housings of a vehicle. A locking connection, of this character, is especially desirable when it is necessary to jack up a wheel of a vehicle on a hill while changing tires or making repairs. Chocks, in the nature of stones, logs and etc., generally used by motorists to keep the vehicle from creeping and riding over the conventional forms of jacks, will slip and gradually creep, due to the compression exercised by the forms of chocks against the pneumatic tires therefrom.

The forces of gravity also aid in the creeping action of the vehicle against the chocks and over the jack. The attachment will not only prevent creeping but will also hold the base portion of the jack construction in a vertical plane with the axle or housing engaged whereby the aforementioned base portion of the jack will not be distorted due to the characteristics of the ground.

In carrying out the invention, I provide an adaptor in the nature of a sleeve, designated by the reference numeral 10, and which includes an adjusting or set screw 11 horizontally disposed within the wall thereof for biting engagement with the immediate upstanding reduced extension of the jack screw or jack bar shaft, in accordance with the type of jack employed. The conventional or customary forms of saddle plates may be removed in any desired manner and the sleeve applied in the manner shown in Figures 1 and 2 of the drawings. A stationary gripping element, indicated as at 12, and arranged upon the upper portion of the adaptor sleeve 10, is provided with a hinge member 13 upon one side thereof by means of which a complemental gripping element 14 may be swung thereon to occupy the full and dotted line positions illustrated in Figure 1 of the drawings. The latter mentioned gripping element may swing for appreciable distances outwardly and beyond the dotted line open position shown to facilitate accommodation of the axle or housing of the vehicle.

A jaw, such as indicated at 15, having keys for guides 16 vertically disposed upon the outer surfaces of the ends thereof are slidably received within key-ways or grooves 17 within the swingably mounted gripping element 14. A tongue 18, carried by and upstanding from the upper side of the body 15, is projected through an opening in the top of the gripping element 14 and held in any desired regulated adjusted position through the employment of an adjusting screw 19 having biting engagement therewith. The
jaw 15, after the manner of the stationary gripping element 12, is provided with a gripping or toothed face in order that those portions of the I-beams and differential housings engaged thereby will be held as a unitary structure therewith. After the swingably mounted gripping element 14 has been swung upon the hinge 13 to occupy the full line position illustrated in Figure 1 of the drawing, a locking element in the nature of a plate 20, hingedly mounted, as at 21, upon the upper portion of the gripping element 14 and lying flush throughout the major portion of its length with the aligned surfaces of the stationary and gripping elements 12 and 14 respectively in oppositely disposed relation to that of the hinge 13 terminates at its opposite end in a right angularly offset and apertured ear 22. Said ear is disposed immediately beneath the stationary gripping element 12 and a cap screw 23 is subsequently passed through the aperture therein for threaded engagement within a tapped opening in alignment with the aperture. The opening, as disclosed in dotted lines in Figure 1 of the drawing, is within the solid portion of the stationary gripping element 12. After the locking element 20 has been secured in position, the locking screw 19 may then be released to lower the jaw 15 toward the upper side of axle or differential housing for biting engagement therewith. As shown, the completed jaw face between the stationary gripping element 12 and the jaw 15 define one of diamond shape whereby the different shapes and sizes of axles and differential housings may be most effectively engaged.

This jaw face arrangement, being universally applied to all forms of axles and differential housings, will obviate the necessity of carrying separate jaw faces for each distinctive type of axle or housing. In the Figure 1 illustration, a rear axle differential housing is shown engaged by the teeth of the completed jaw face.

The invention is susceptible of various changes in its form, proportions and minor details of construction, and the right is hereinafter reserved to make such changes as properly fall within the scope of the appended claims.

Having thus described the invention, what is claimed is:

1. An attachment for lifting jacks comprising stationary and movable hingedly secured gripping elements, an adaptor sleeve arranged upon the stationary gripping element and receiving a portion of the jack, a jaw for the movable gripping element slidably positioned therein, a tongue carried by said jaw and projecting through a portion of the movable gripping element, and an adjusting screw carried upon the movable gripping element having biting engagement with the tongue to lock the movable jaw in position for use.

2. An attachment for lifting jacks comprising stationary and movable hingedly secured gripping elements, an adaptor sleeve arranged upon the stationary gripping element and receiving a portion of the jack, a jaw for the movable gripping element slidably positioned therein, a tongue carried by said jaw and projecting through a portion of the movable gripping element, an adjusting screw carried upon the movable gripping element having biting engagement with the tongue to lock the movable jaw in position for use, and a locking element swingably mounted upon the movable gripping element having detachable locking connection at its opposite end with the stationary gripping element to secure the attachment against accidental displacement upon its work.

In testimony whereof I affix my signature.

JOSEPH D. BUDDS.