F. C. RHODE.

COMBINED JACK AND RIM CONTRACTOR.

APPLICATION FILED SEPT. 30, 1920.

1,392,355. Patented Oct. 4, 1921.

Fig. 1.

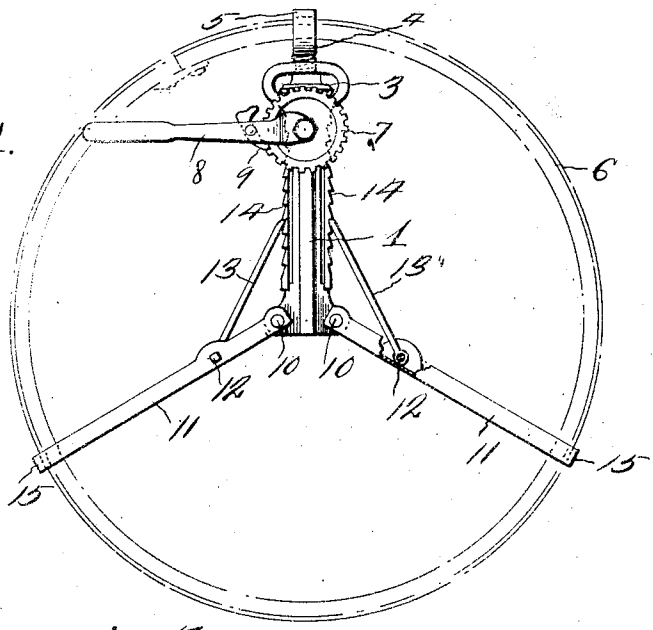


Fig. 3.

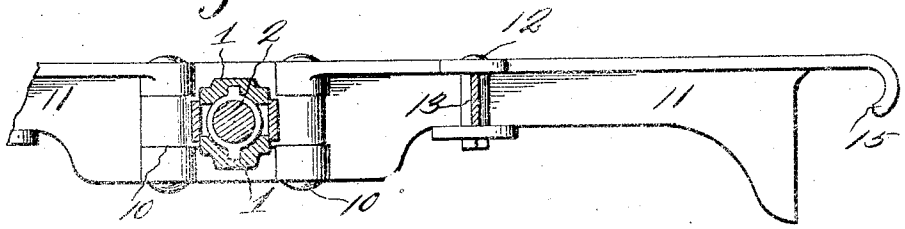
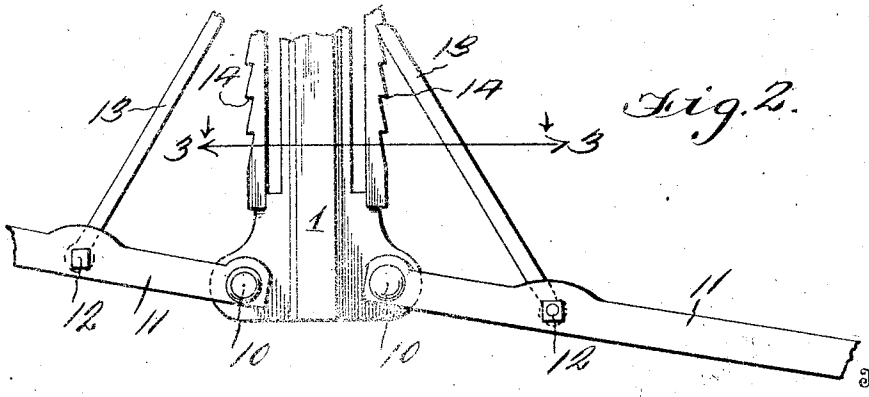


Fig. 2.



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UNITED STATES PATENT OFFICE.

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COMBINED JACK AND RIM-CONTRACTOR.

1,392,355. Specification of Letters Patent. Patented Oct. 4, 1921.

Application filed September 30, 1920. Serial No. 413,810.

To all whom it may concern:

Be it known that I, FRED C. RHODE, a citizen of the United States, residing at Fairview, in the county of Richland, State of Montana, have invented a new and useful Combined Jack and Rim-Contractor; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to automobile jacks and has for its object to provide a device of this character particularly of the gear operated screw type which is provided with a supporting base formed by two pivoted members pivoted to the lower end of the jack body and provided with pivoted braces adapted to coöperate with racks carried by the jack body so that the base may be angularly positioned in relation to the jack thereby allowing the jack to be used on a vehicle when said vehicle is on an incline, such for instance as a hill.

A further object is to provide the upper end of the longitudinally movable screw of the jack with a hook and also the free ends of the pivoted members forming the base with similar hooks which hooks may engage a demountable rim and the jack utilized for contracting the rim.

With the above and other objects in view the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawings, described and claimed it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings:—

Figure 1 is a side elevation of the device showing the same in place on a demountable rim and used as a rim contractor.

Fig. 2 is an enlarged detail view of the lower end of the jack showing the pivoted base members disposed at an angle.

Fig. 3 is a horizontal sectional view taken on line 3—3 of Fig. 2.

Referring to the drawings, the numeral 1 designates the body of the jack, in which body the vertically movable screw 2 is disposed, said screw having threaded on its upper end a gear 3, which gear when rotated moves the screw 2 longitudinally during a raising operation or during a lowering operation. The upper end of the screw 2 is provided with a member 4 adapted to engage an axle or the like during a raising or lowering operation, said member 4 also being provided with a hook 5, which is adapted to engage over the flange of a demountable rim 6 when said jack is being used as a rim contractor. Bevel gear 3 is rotated by means of a bevel gear 7 which is rotated by an operating lever 8, there being a double pawl 9 which may be reversed in position according to whether the screw is being forced outwardly or inwardly.

Pivotally connected as at 10 to the lower end of the body member 1 are arms 11, said arms when the jack is being used for raising an object form a base for supporting the jack as a whole, said arms 11 having pivoted thereto at points 12 spaced from the pivotal point 10 bracing arms 13, the upper ends of which engage teeth of racks 14 carried by the body member 1 and provide means whereby the jack as a whole may be supported in a vertical position for jacking a vehicle when said vehicle is on an incline. In jacks as present constructed and used in connection with motor driven vehicles their bases are of such a small area and constructed primarily for use on a horizontal surface, therefore when they are applied to vehicles on inclines it is practically impossible to raise the vehicle, maintain the same in raised position and hold the same there with any degree of safety. This difficulty is overcome by the pivoted members 11 which may be positioned at the same angle as the incline and held in proper relation to the body member 1 so that said body member will be positively held in a vertical position during a jacking operation.

The ends of the pivoted members 11 are provided with hooks 15 which hook over the flange of the demountable rim 6 as shown in Fig. 1, thereby allowing the jack to be utilized as a rim contractor. By referring to Fig. 1 it will be seen that when the gear 7 is rotated by the operator who grasps the lever 8 that the screw 2 will be fed inwardly or outwardly as desired thereby allowing the rim 6 to be contracted. The expansion of the rim may be controlled if so desired by the device.

The invention having been set forth what is claimed as new and useful is:—

1. The combination with a base of a jack,

of pivoted base members pivoted to said base, arms pivoted to the pivotal base members at points spaced from their pivotal points and racks carried by the jack base and adapted to be engaged by said pivoted arms and forming means whereby the pivoted base members may be positioned at various angles in relation to the jack.

2. The combination with a jack having a base, of base members pivotally connected to the jack base and extending in opposite directions, racks carried by the jack and pivoted arms pivoted to the pivotal base members and adapted to cooperate with the racks so that the base members may be positioned in various angles in relation to the jack and the jack maintained in vertical position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRED C. RHODE.

Witnesses:
C. S. BENSON,
O. H. HALVERSON.