J. C. SASSER & W. T. McDONALD.

ATTACHMENT FOR LIFTING JACKS.

APPLICATION FILED SEPT. 5, 1908.

912,737. Patented Feb. 16, 1909.

Fig. 1.

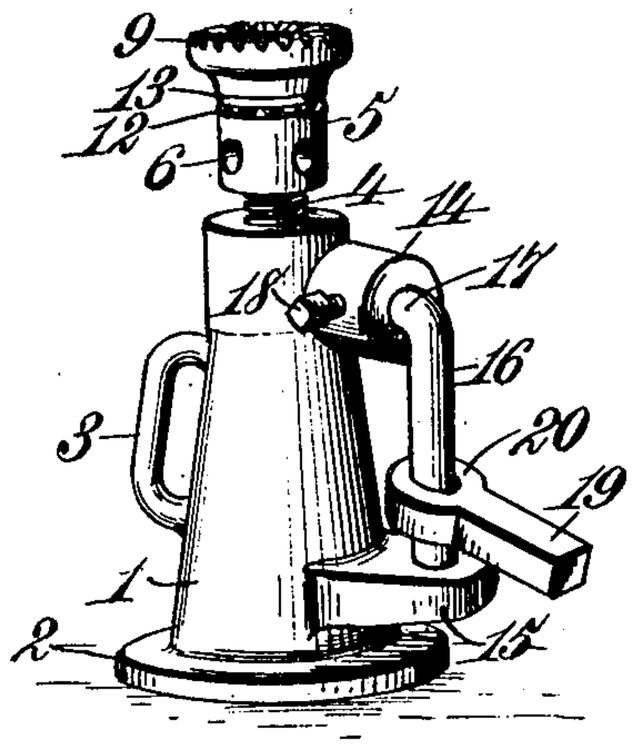
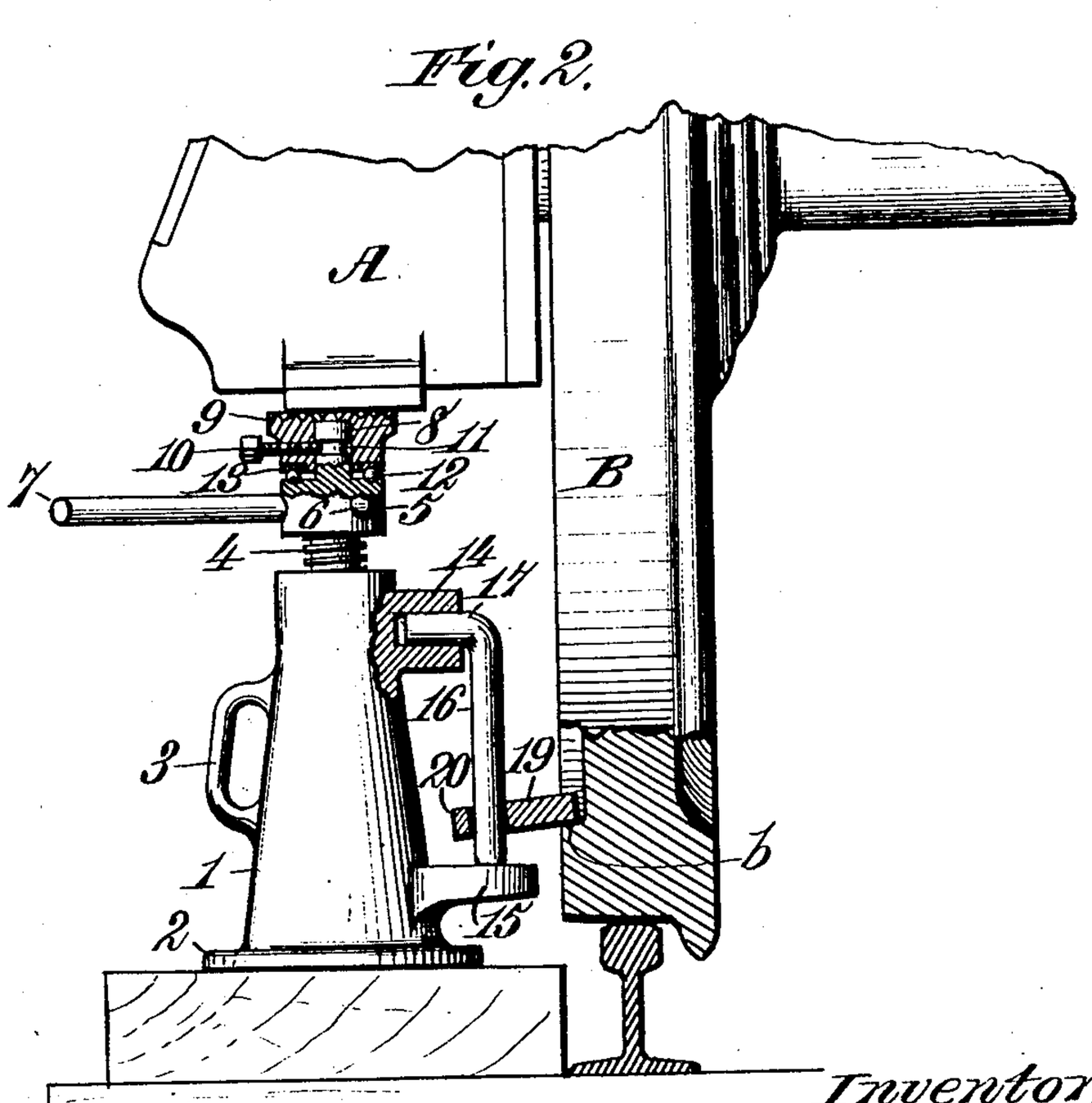


Fig. 2.



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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR LIFTING-JACKS.

No. 912,737. Specification of Letters Patent. Patented Feb. 16, 1909.

Application filed September 5, 1908. Serial No. 451,798.

To all whom it may concern:

Be it known that we, JACOB C. SASSER and WILLIAM T. McDONALD, citizens of the United States, residing at Macon, in the county of Bibb and State of Georgia, have invented new and useful Improvements in Attachments for Lifting-Jacks, of which the following is a specification.

This invention relates to new and useful improvements in attachments for lifting jacks, the attachment being in the nature of a wheel clamp for the purpose of holding down a car wheel during the operation of "jacking up" a journal box, when it is necessary, during travel, to replace the brasses on account of hot box conditions.

The invention has for its primary object to provide a novel wheel clamp attachment which shall be extremely simple and inexpensive in construction, comparatively light in weight, readily assembled and disassembled with relation to the jack structure, strong and practical.

Toward the end of carrying out the above object the novelty of the invention resides, more particularly, in the provision of a rod which is detachably secured to the jack standard for lateral adjustment, to compensate for the different lengths of journal boxes in connection with which the invention may be employed and in mounting upon this rod a wheel clamp member which is adjustable vertically of the rod, to compensate for the different diameters of car wheels. Toward the end of coöperation with the rod and the clamp member, the form of the jack standard is modified somewhat from the form ordinarily used, the modification residing in the provision of a sleeve in which is adjustably secured the angular end of the rod, and of a projecting lug which serves as a retainer to prevent the clamp member from dropping off, when the structure is out of use.

The structural details are set forth in the following description and illustrated in the accompanying drawings, while the novel features of the invention will be defined in the claims hereunto appended.

In the said drawings:—Figure 1 is a perspective view showing the improved wheel clamp attachment set up for use. Fig. 2 is a side elevation, with parts shown in section illustrating the manner of using the jack and the wheel clamp attachment.

Similar characters of reference refer to corresponding parts throughout the views.

The jack structure comprises the standard 1, having a base flange 2 and a handle 3 at one side thereof. Coöperating with the standard 1 is the usual threaded lifting rod 4 provided at its upper end with the enlarged head 5, having a number of radially disposed openings 6, in any one of which the handle or lever 7, for turning the rod 4, may be engaged. The head 5 has an axially extending stem 8 which projects through an opening in a supporting cap 9, the latter being held from axial displacement by a set screw 10, which is threaded laterally through said cap and engages loosely in an annular groove 11 in the stem 8. This manner of attaching the cap 9 permits of the latter being non-rotatable while the screw 4 is being turned. The head 5 is formed on its upper face as a raceway for ball bearings 12, upon which a wear ring 13 is placed, the latter being carried by the cap 9 and in turn constituting a bearing part, should any of the ball bearings become displaced or broken.

The standard 1 is formed at its upper end with a laterally projecting sleeve 14 and at its lower end with a laterally projecting lug 15, which is disposed above the flange 2 and is perpendicularly coincident with the sleeve 14.

The wheel clamp attachment consists of an L-shaped rod 16, preferably of round cross section and having at its upper end a right angular extension 17 which fits into the sleeve 14 for axial adjustment and is held in desired positions by a set screw 18, threaded through said sleeve and frictionally engaging said extension 17. The wheel clamp member comprises a straight shank 19 terminating in an enlarged integral ring portion 20 which loosely surrounds the rod 16 and has its central opening so proportioned that when the shank 19 is disposed horizontally the wheel clamp member may be moved along the rod 16, but when the shank 19 is tilted, the wall of the central opening of the ring portion 20 will have a frictional biting engagement upon the rod 16, such biting engagement being sufficiently strong to hold the wheel clamp member from further movement along the rod 16.

In use, the jack is positioned under a journal box as A, the wheel clamp attachment being disposed adjacent the car wheel, as B. The shank 19 is engaged upon the annular shoulder, as *b*, afforded by the dished formation of the face of the wheel B.

When the parts are so positioned, the shank 19 will have a self-tilting action with the result that its ring portion 20 will have the frictional biting engagement upon the rod 16 as above set forth. It will thus be seen that the shank 19 is immovable on the rod 16 and will consequently hold the wheel B against upward movement with the journal box as the latter is elevated by the rod 4, which is turned by the operator. The lug 15, prevents the wheel clamp member from dropping or working off the rod 16, when the jack is being carried from place to place.

The provision of the extension 17 and the manner of adjustably engaging the same in the sleeve 14 permits of a lateral adjustment of the rod 16, that is toward and away from the standard 1, in order that the attachment may be readily set up for journal boxes of different length. The wheel clamp member may be moved to desired positions along the rod 16 in order to compensate for the different diameters of car wheels.

The attachment is assembled by fitting the wheel clamp member upon the rod 16 and by engaging the extension 17 of the latter in the sleeve 14. The attachment is disassembled by withdrawing the extension 17 from the sleeve 14 and, if desired, removing the wheel clamp member from the rod 16.

It will be apparent that all strain resulting from the action of holding down the wheel B is centered upon the rod 16 and not upon the standard 1. It will be further apparent that the structure set forth, attains the objects of lightness, simplicity, inexpensiveness, strength and practicability.

Having fully described our invention, we claim:—

1. In combination with a lifting jack standard, a vertical rod, means for attaching the upper end portion of the rod to the standard to permit of lateral adjustment of the rod towards and away from the standard and a clamp member mounted upon the rod for adjustable movement along the length thereof, said member being constructed to lockingly engage the rod at any desired position to which said member may be moved.

2. In combination with a lifting jack standard having a lug projecting at one side thereof, a vertical rod, means for detachably connecting the rod to the standard at one side thereof and above the lug and a clamp member assembled upon the rod for movement to desired positions, said member being held against disassemblage from the rod by said lug.

3. In combination with a lifting jack standard having a sleeve projecting at one side thereof, a rod having an angular extension at one end to fit in the sleeve, a set screw threaded through the sleeve to engage the extension, and a clamp member mounted upon the rod for adjustable movement along the length thereof.

4. In combination with a lifting jack standard, having a sleeve projecting laterally at one side thereof and having a lug projecting laterally at one side thereof below said sleeve, a vertical rod disposed above the lug and having at its upper end an angular extension which fits into the sleeve, a set screw threaded through the sleeve to engage said extension, and a clamp member adjustably movable along the rod.

5. The combination with a lifting jack standard of a vertical rod, integral means for attaching the upper end portion of said rod to said standard to permit of the lateral adjustment of the rod towards and away from the standard, the rod extending parallel to the standard, and a clamp member mounted upon the rod for adjustable movement axially thereof, said member being constructed to lockingly engage the rod at any desired position at which it may be set.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

JACOB C. SASSER.
WILLIAM T. McDONALD.

Witnesses:
W. N. SHINHOLSER,
JAMES P. DALY.