(No Model.)

W. QUINN.

SCREW JACK.

No. 493,183. Patented Mar. 7, 1893.

Fig. 1.

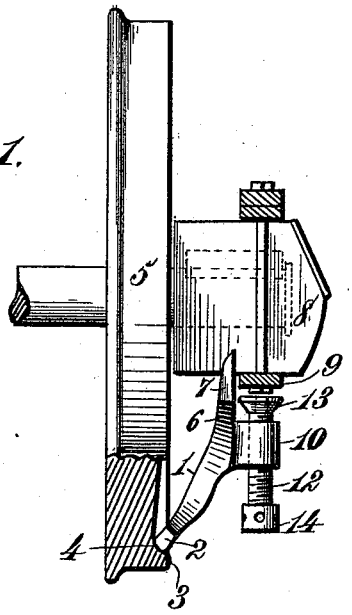
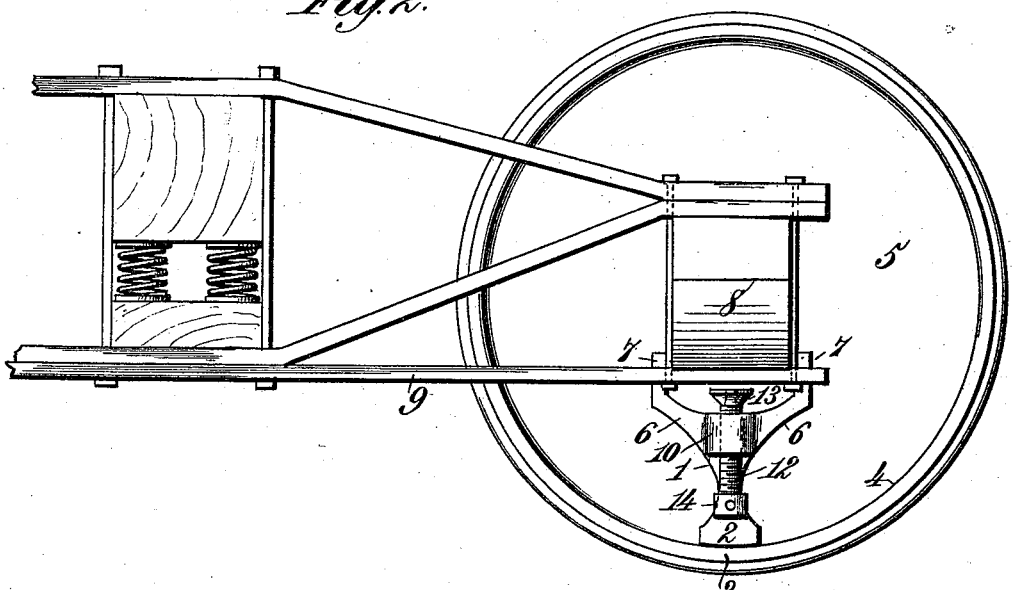


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM QUINN, OF TYLER, TEXAS.

SCREW-JACK.

SPECIFICATION forming part of Letters Patent No. 493,183, dated March 7, 1893.

Application filed December 20, 1892. Serial No. 455,793. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM QUINN, a citizen of the United States, residing at Tyler, in the county of Smith and State of Texas, have invented new and useful Improvements in Screw-Jacks, of which the following is a specification.

This invention relates to lifting jacks, and has for its object to provide a novel, simple, efficient and economical jack which is particularly designed for removing and replacing the brasses in the journal boxes of freight, passenger and other railway cars, and which is so constructed that it can bear against the shoulder formed by the concave part of the car wheel in proximity to the tread and thus avoid the employment of special blocking for the jack, thereby enabling it to be quickly set and operated at any place without preparation of blocking as a foundation for sustaining the jack.

To accomplish this object my invention involves the features of construction and the combination or arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1, is an end elevation of my improved jack applied to a car wheel and journal box, and Fig. 2, is a side elevation of the same.

In order to enable those skilled in the art to make and use my invention I will now describe the same in detail, referring to the drawings wherein

The numeral 1 indicates a jack-arm or frame composed of any metal suitable for the conditions required and having at its lower end a foot-piece 2, constructed to rest upon the annular shoulder 3 formed by the concavity 4 of the car wheel 5. The upper end portion of the jack-arm or frame is bifurcated to provide inclined portions 6, from which rise two vertical jaws or members 7, arranged approximately parallel with each other and adapted to embrace the journal box 8 of a car-wheel-axle at a point inside the usual tie-bar 9. The jack-arm or frame 1 is curved or inclined lengthwise, as shown in Fig. 1, so that when it is in use the several parts will be in such position that the foot piece 2 can rest on the shoulder 3, of the car-wheel, while the jaws or members 7 brace themselves against the sides of the journal box 8 and prevent slipping of the jack when it is being operated to raise the journal box and its superincumbent weight to release the brasses. The jack-arm or frame is formed integral or otherwise provided between its foot-piece 2 and the inclined portions 6, with a lateral projection or enlargement 10, containing a vertical, screw threaded orifice with which engages a vertical jack-screw 12, having a loosely journaled head 13 at its upper end and a rigid head 14 at its lower end adapted to receive a bar or instrument for rotating the screw and causing it to lift the journal box and its superincumbent weight. The sides of the vertical jaws or members 7, which face the tie-bar 9, are rectilinear and flat so that they rest squarely against such tie-bar in the operation of the jack and place the jack-screw perpendicular beneath the center of the journal box so that the latter is uniformly lifted for the purpose of removing or replacing the brasses.

The construction of the parts is such that when the jack-screw 12 is operating to lift the journal box, the jack-arm or frame 1 acts to hold down the car-wheel.

The invention provides a very simple, and efficient screw-jack which can be employed at any time and at any place without the preparation of special blocking for the purpose of conveniently and quickly removing and replacing the brasses of the journal boxes of a railway car whenever occasion demands.

Having thus described my invention, what I claim is—

1. A screw-jack, consisting of a jack frame having a foot-piece at its lower end to rest against the shoulder of a car-wheel, a bifurcated upper end for engaging a journal box and a lateral projection or enlargement provided with a screw threaded orifice, and a jack-screw engaging said orifice and provided at its upper end with a head and at its lower end with means by which it may be rotated for lifting a journal box and its superincumbent weight, substantially as and for the purpose described.

2. A screw-jack, consisting of a jack-arm or frame having a foot-piece at its lower end, inclined portions at its upper end which are

provided with jaws arranged substantially parallel and a lateral projection or enlargement formed with a screw-threaded passage, and a screw-jack engaging the said screw-threaded orifice and provided at its upper end with a loosely journaled head and at its lower end with means for the rotation of the screw, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

WILLIAM QUINN. [L. S.]

Witnesses:
ELBERT RICE,
JOHN B. PARKER.