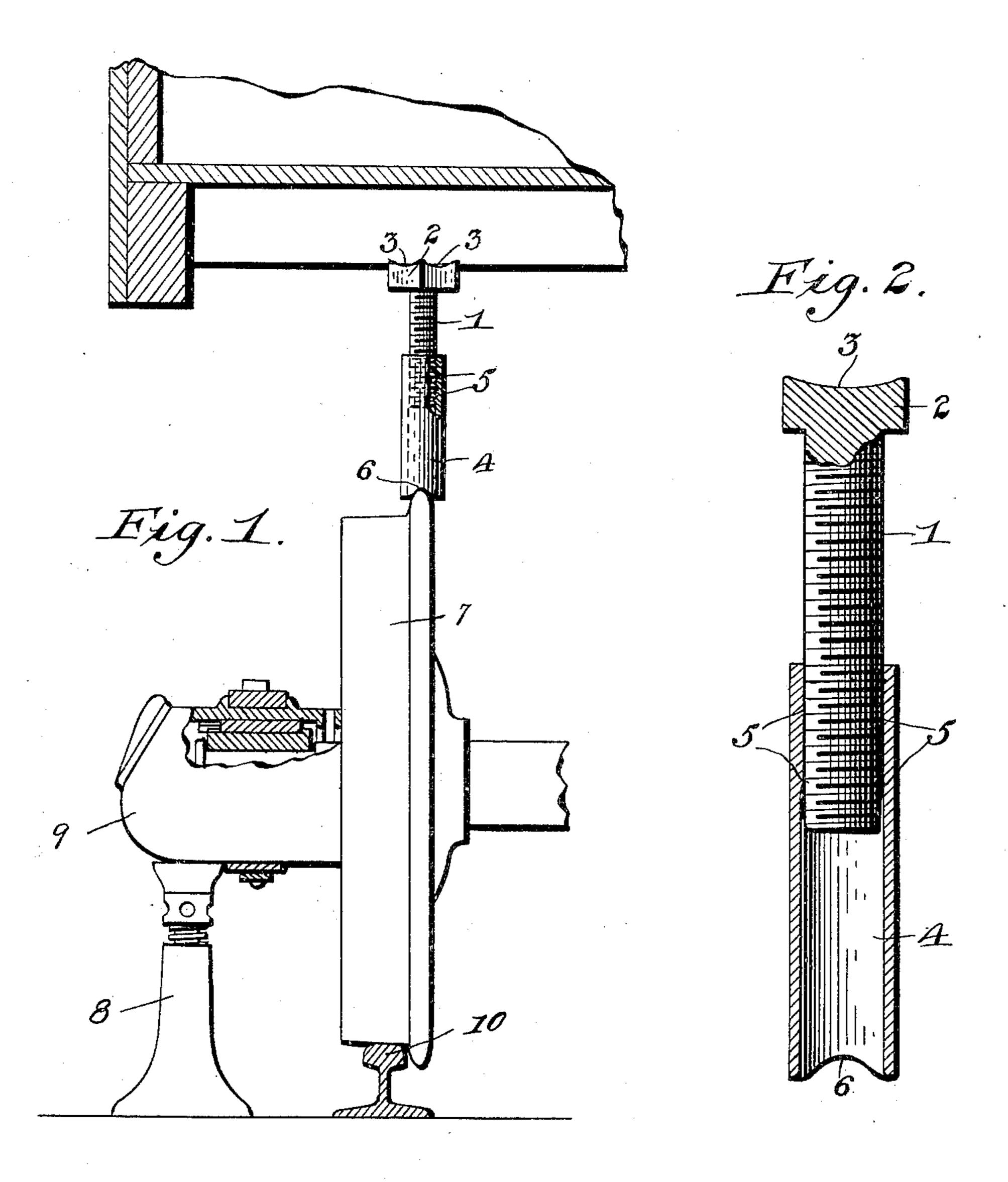
## J. S. COOK.

## DEVICE FOR USE IN THE REMOVAL OF BRASSES FROM CAR JOURNAL BOXES.

(Application filed Dec. 30, 1899.)

(No Model.)



Witnesses Efeverance. Edgar M. Kitchin Joseph Sork Jason Francisk Ruence This Ottomorpe

## United States Patent Office.

JOSEPH S. COOK, OF TACOMA, WASHINGTON.

DEVICE FOR USE IN THE REMOVAL OF BRASSES FROM CAR JOURNAL-BOXES.

SPECIFICATION forming part of Letters Patent No. 684,677, dated October 15, 1901.

Application filed December 30, 1899. Serial No. 742,132. (No model.)

To all whom it may concern:

Be it known that I, Joseph S. Cook, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Devices for Use in the Removal of Brasses from Car Journal-Boxes; 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.

My invention relates to means for facilitating the removal of the brasses from the journal-boxes of car-wheels. Heretofore much difficulty has been experienced in removing the brasses from the journals of car-wheels when worn without removing the axles, wheels, and boxes from the car, and many efforts have been made to produce practical devices for this purpose. The main difficulty has been that when the boxes were raised by jacks or other analogous devices the axles and wheels were also raised, so that no advantage was gained, the weight of the axle and wheel being insufficient to cause the box to separate from the journal.

The object of my invention is to provide improved means whereby the boxes of carson wheels may be raised in order to remove the brasses therefrom without danger of the carwheel being raised with the box.

My invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically claimed.

In the accompanying drawings, Figure 1 is a view in side elevation, partly in section, of sufficient of a car and track to illustrate the practical operation of my invention. Fig. 2 is a longitudinal sectional view of the adjustable stop used in the practice of my invention.

Corresponding parts in the two figures are designated by the same reference numerals.

In carrying out the features of my invention I employ a stop for insertion between the car-body and one of the wheels, comprising a bolt, as 1, which is preferably screw-thread-oed its entire length and is formed with a square head, as 2. The upper surface of the head is made concave, as at 3, so that the cor-

ners of the head project slightly above the remainder of the same, so as to engage the material of the car-bottom in such a manner 55 as not to be easily knocked out of place. Engaging the screw-threads of the bolt 1 is a sleeve or bushing 4, which is internally threaded, as at 5, for about a third of its length. The bushing 4 is hollow throughout, 60 the part which is not threaded being made sufficiently large to permit the bolt to pass through it. The outer end of the bushing or sleeve 4 is preferably notched slightly, as at 6, so that it may engage the flange of a wheel 65 and not easily slip from the same. As seen in Fig. 1 of the drawings, the sleeve is applied with its notched portion upon the flange of the car-wheel 7 and the bolt is unscrewed from the bushing until its head engages un- 70 der the sill of the car or the floor of the same above the wheel. The parts are now in condition for the application of a jack 8 beneath the axle-box 9 and make it possible to raise the said box without lifting the car-wheel. 75 This part of my invention will be found very useful, as it can be carried in the pockets of train attendants, and thus be always at hand for use when a brass wears out and needs replacing. The bolt 1 and the bushing 4 80 are made of sufficient length to accommodate wheels which are at different distances from their respective car-bodies. It will be apparent also that the stop can be as readily applied between the tread of the wheel 85 and the car-body as between the flange of the wheel and the car-body, there being no difference in the result obtained. I have found that while the weight of the axle and wheel is insufficient to prevent the wheel from ris- 90 ing off the track when the box is raised the weight of the car-body, added to that of the axle and wheel, will be sufficient to hold the latter down. I have therefore with my invention provided means whereby the weight 95 of the body may be added to the axle and wheel, so that the body and axle and wheel for the purposes of my invention are rendered substantially a single rigid structure.

In carrying out the invention I first place root the stop, consisting of bolt 1 and sleeve 4, between the top of the wheel and the bottom of the body, as shown in Fig. 1, and then by rotating one of these parts I adjust the length

of the stop to fill the space between the wheel and body, thus making them practically one rigid structure. I next by use of any ordinary jack or lifting device, as at 8, raise the axle-box 9 while the wheel 7 remains on the track 10 and remove the brasses from the box.

The advantages attending the use of my invention will be obvious at a glance. By its use many crude devices will be dispensed with and a heretofore difficult operation easily

and quickly performed.

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Having now described my invention, what I desire to claim and secure by Letters Patent is—

15 1. A device for assisting in the removal of brasses from car journal-boxes comprising a threaded bolt and a sleeve or bushing having internal threads for engaging the said bolt, said sleeve being hollow throughout and formed with oppositely-arranged notches at its lower end adapted to fit upon the flange of the car-wheel, and engage the same at two points for positively preventing its turning

no matter what the curvature of the wheel, said bolt at the same time engaging the carbody whereby the wheel will be prevented

from rising when the journal-box is lifted for manipulating the said brasses, substantially as described.

2. A device for assisting in the removal of 30 brasses from car journal-boxes comprising a bolt threaded upon its outer surface, a head carried by the said bolt having raised corners for engaging the timbers of a car-body, a hollow sleeve open from end to end and pro- 35 vided with internal threads for a portion of its length adapted to engage the threads of the bolt, the lower edge of the said sleeve being formed with oppositely-arranged concaved recesses for fitting upon the flange of 40 the car-wheel, the structure being such that the sleeve will be provided with narrow bearings for engaging the rim of the car-wheel at two points, so that the said sleeve will closely fit the periphery of any car-flange, substan- 45 tially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOSEPH S. COOK.

Witnesses:

FRANK J. MILLER, CHARLES A. MURRAY.