(No Model.) 2 Sheets—Sheet 1.

E. E. TAYLOR.

CAR JACK.

No. 564,233. Patented July 21, 1896.

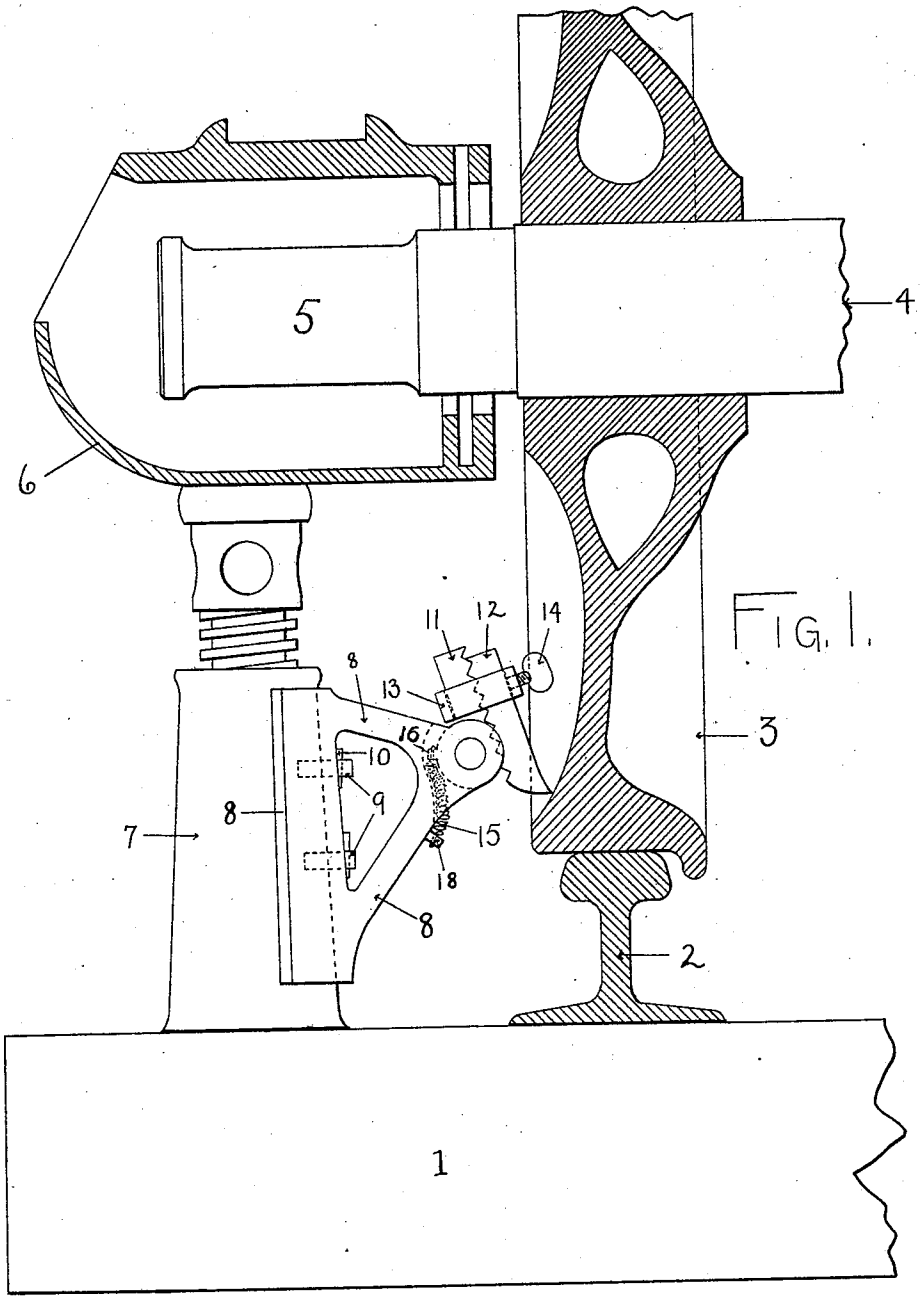

FIG. 1.

WITNESSES:
James H. Rickey
R. Blume

INVENTOR:
Emery E. Taylor
BY P. H. Gunckel
ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

E. E. TAYLOR.

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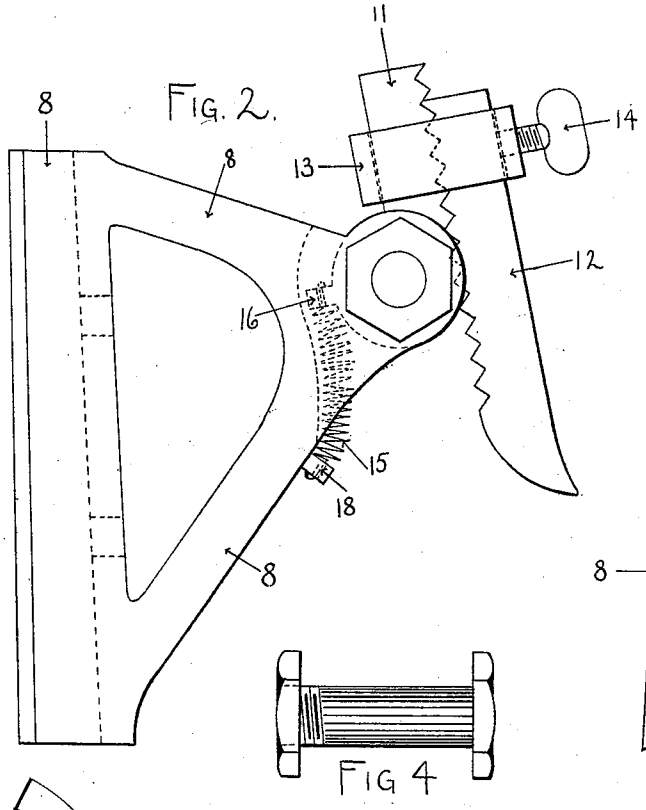

FIG. 2.

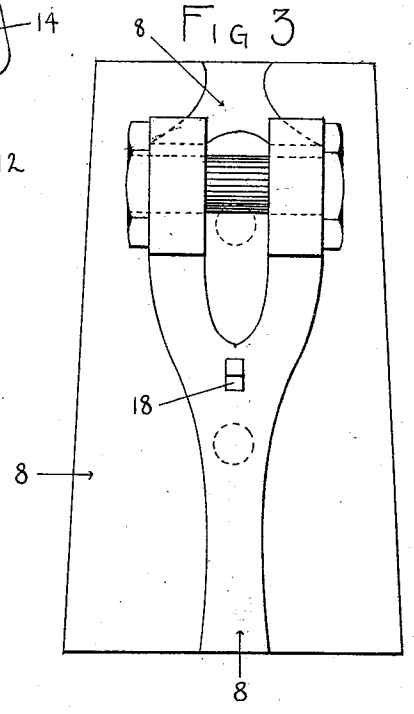

FIG 3

FIG 4

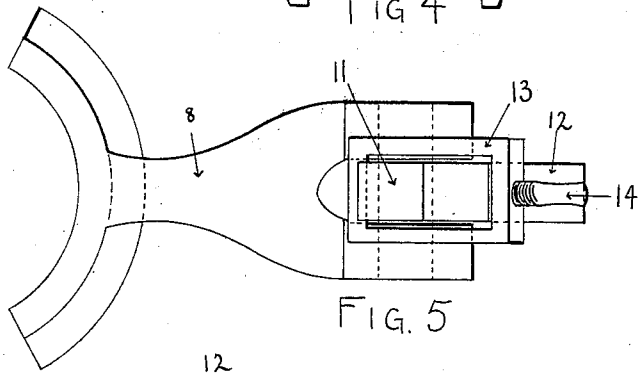

FIG. 5

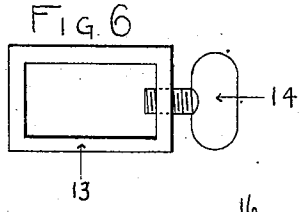

FIG. 6

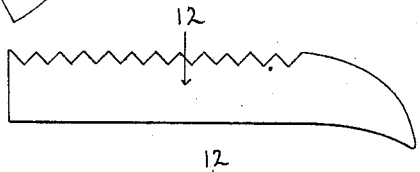

FIG. 7

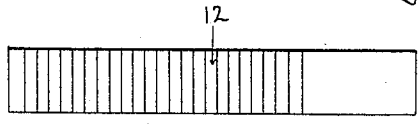

FIG. 8

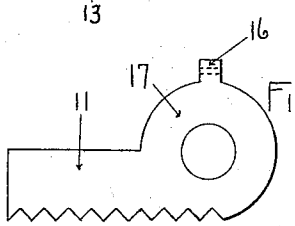

FIG. 9

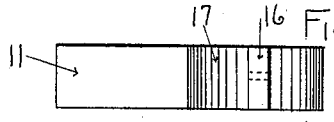

FIG. 10

WITNESSES:

James W. Rickey

J. R. Blume

INVENTOR:

Ernest E. Taylor.

BY: P. A. Gunckel

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EMERY E. TAYLOR, OF MINNEAPOLIS, MINNESOTA.

CAR-JACK.

SPECIFICATION forming part of Letters Patent No. 564,233, dated July 21, 1896.

Application filed October 22, 1895. Serial No. 566,468. (No model.)

To all whom it may concern:

Be it known that I, EMERY E. TAYLOR, a citizen of the United States, residing in the city of Minneapolis, county of Hennepin, and State of Minnesota, have invented a certain new and useful Improvement in Car-Jacks, of which the following is a specification.

My invention relates to devices for raising the journal-boxes of cars; and the object of the invention is the provision of means for preventing the rising of a car-wheel when its journal-box is raised. Usually when a car journal-box is lifted to enable brasses to be changed or for other purpose it is found that the wheel itself (and of course its journal also) rises; and it is the object of the present improvement to avoid or obviate difficulties of the character referred to.

My improvements are illustrated in the accompanying drawings, in which—

Figure 1 shows in elevation, partly sectional, a portion of a car-wheel, its journal-box, and a jack provided with my improvements; Fig. 2, an elevation, enlarged, of my proposed attachment to the jack; and Figs. 3 to 10, inclusive, show details of construction to be hereinafter more fully described.

In such drawings the reference-figure 1 indicates a tie or base, 2 a rail, 3 a car-wheel, 4 its axle, 5 the journal, and 6 a journal-box, all of which parts may be of any ordinary or suitable form and arrangement.

To raise the journal-box so as to permit the changing of bearings or "brasses" or for other purposes, a lifting-jack 7 is usually employed; but it is found in practice that when the journal-box is so lifted the journal itself generally rises, and of course the axle and wheel rise correspondingly. Why this occurs I am not fully able to explain, but that it does occur, and frequently, if not usually, I know from long experience in such work, and when the journal so rises with its box it is necessary to use a crowbar or some other means for pressing the wheel downward before the journal is freed from its bearings, and it is to the end of providing a ready and convenient means for avoiding the necessity of the use of a separate tool that my invention relates, and this I accomplish by providing an attachment on the body of the jack arranged to have an adjustable portion for bearing against the car-wheel to hold it down while the journal-box is being lifted. This attachment is in form of a bracket 8, secured by means of lugs 9 on the body of the jack, extending through holes in the bracket and held in place by cotters 10; but of course the bracket may be connected by means of a band or any other suitable mechanical device.

At the outer extremity of the bracket there is pivotally connected a serrated bar 11, and a coöperating bar 12, serrated to interlock with the bar 11, is provided for engaging the lower portion of the web of the car-wheel. A yoke or band 13 surrounds these bars, and a set-screw 14 serves to lock them firmly together when desired. A spring 15 (spiral or of other suitable form) is connected at one end to a stud 16 on the boss 17 of the arm 11 and at the other end to a lug 18 on the bracket; and the spring tension serves to hold the lower end of the bar 12 in constant engagement with the web of the wheel.

The object of the adjustability of the bar 12 and of the spring tension is to provide a means for having the lower end of the bar 12 in proper position at all times whether the foot or base of the jack be level with the foot of the rail or above or below it. In depots, for instance, there is usually a flooring on a level with the top of the rails; on the road the jack may sometimes be set on the end of a tie, and at other times between ties and lower than their tops; and, too, wheels may vary in diameter and thickness, and so a device of the character described is made to serve under these varying conditions the end of having a bearing on the wheel-flange when the jack is operated to lift the journal-box.

The operation of the device is probably apparent. Upon placing the jack in position and adjusting the web-engaging devices to proper position and securing them, the screw of the jack may then be operated in the usual way to lift the journal-box, and, the attachment being firmly secured to the body of the jack and bearing against the wheel-web, the box may be lifted while the wheel is held in place on the rail.

Having described my invention, what I claim is—

1. The combination with a car-jack, of two intermeshing and coöperating members and

means for adjusting their relative positions, one of such members being pivotally connected to the jack and a spring for holding it in operative position, and the other being arranged to engage a car-wheel, whereby the jack may be operated to lift a box without lifting the wheel, substantially as set forth.

2. The combination with a car-jack, of a device connected thereto and arranged to engage a car-wheel, and consisting of two intermeshing serrated members, one pivotally connected to the jack and the other coöperating therewith in varying positions of adjustment, and a spring for holding the same in operative position whereby the wheel may be held down while the journal-box is lifted by the operation of the jack, substantially as set forth.

EMERY E. TAYLOR.

Witnesses:
R. BLUME,
P. H. GUNCKEL.