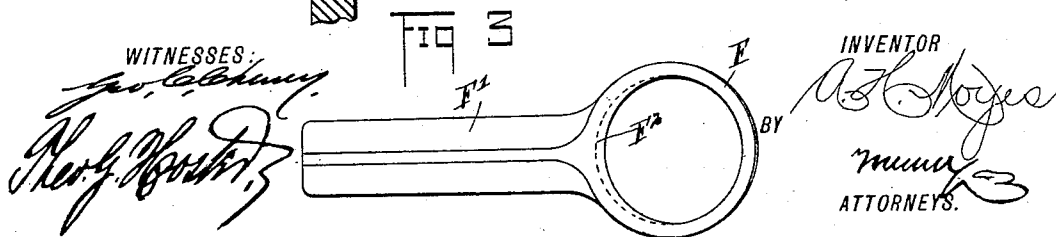
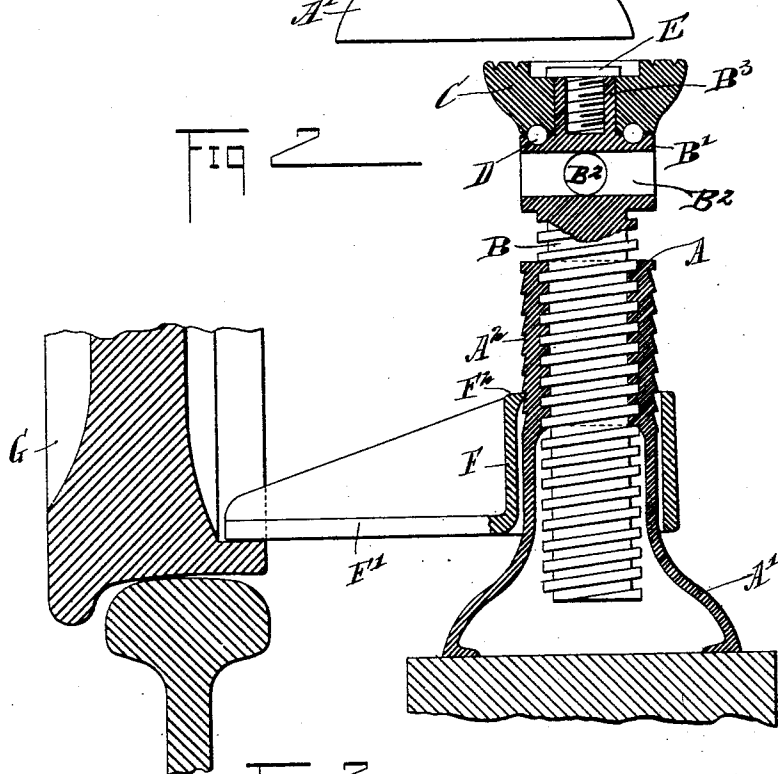
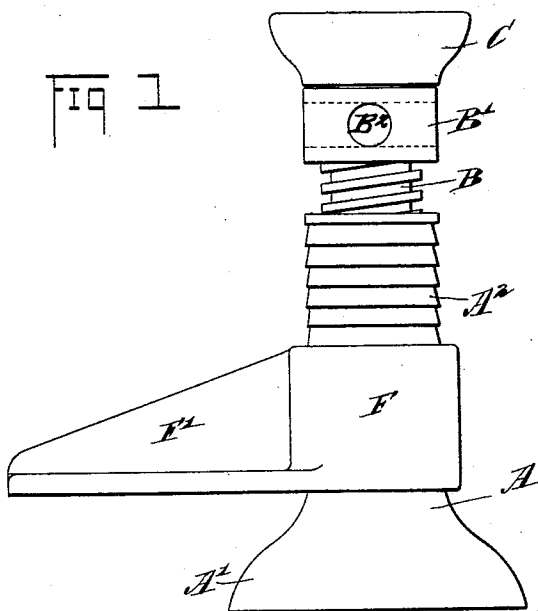


(No Model.)

A. H. MOYES.
SCREW JACK.

No. 573,684.

Patented Dec. 22, 1896.



UNITED STATES PATENT OFFICE.

ALEXANDER HILL MOYES, OF OGDEN, UTAH, ASSIGNOR TO THE OGDEN
TRAIN JACK AND MANUFACTURING COMPANY, OF SAME PLACE.

SCREW-JACK.

SPECIFICATION forming part of Letters Patent No. 573,684, dated December 22, 1896.

Application filed July 7, 1896. Serial No. 598,288. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER HILL MOYES, of Ogden, in the county of Weber and State of Utah, have invented a new and Improved Screw-Jack, of which the following is a full, clear, and exact description.

The invention relates to screw-jacks such as shown and described in the Letters Patent of the United States No. 563,608, granted to me July 7, 1896.

The object of the invention is to provide a new and improved screw-jack more especially designed for use on railroad-cars for conveniently jacking up cars, engines, journal-boxes, and other articles and devices.

The invention consists principally of a casing having exterior circular teeth and a sleeve fitted to slide on the said casing and formed with an arm adapted to engage the wheel-rim to hold the wheel down to the rail while jacking up the journal, said sleeve being formed with a tooth adapted to engage the exterior teeth of the casing.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is a sectional side elevation of the same as applied, and Fig. 3 is a plan view of the sleeve and its arm.

The improved screw-jack is provided with a casing A, preferably made cylindrical and provided at its lower end with a base A', adapted to rest on the ground, railroad-tie, or other suitable support.

The casing A is formed with an interior screw-thread engaged by a threaded post B, formed at its upper end with a head B', having the usual transverse openings B², adapted to be engaged by a lever or other suitable tool for turning the screw-post B up or down in the casing A.

On the top of the head B' is formed a vertically-disposed pivot-pin B³, on which is mounted to turn a cap C, riding on a ball-

bearing D, interposed between the under side of the cap C and the top of the head B'.

A screw E screws in the pivot-pin B³ and extends with its head onto the cap C, so as to prevent an upward movement of the latter, at the same time allowing the cap C to turn freely on its pivot-pin B³. The head of the screw E is set in a recess formed in the top of the cap C, so that the object engaged by the cap does not touch the said head of the screw.

On the casing A is fitted to slide loosely a sleeve F, formed with a laterally-extending arm F', adapted to engage the inside of the rim of the car-wheel G, as plainly shown in Fig. 2. On the upper end of the sleeve F, and at that portion next to the arm F', is formed a segmental tooth F², adapted to engage one of a series of exterior circular teeth A², formed on the casing A.

The operation is as follows: When it is desired to raise the object, then the screw-post B is moved into a lowermost position to bring the cap C under the article to be raised, and then the operator turns the head B', as previously described, to screw up the screw-post B in the casing A. The cap C in engaging the under side of the article to be raised remains stationary during the rest of the operation, as the screw-post by the interposed ball-bearing D will readily rotate without rotating the cap C, and at the same time the friction between the turning screw-post and the stationary cap C is reduced to a minimum. When it is desired to raise a journal-box, then use is made of the sleeve F and its arm F', the latter being engaged with the inside of the rim of the car-wheel G and with the tooth F² in engagement with one of the teeth A² on the casing A. The cap C engages the under side of the journal-box, and by turning the head B' the journal-box is raised, and the car-wheel G is held down to the rail by the action of the arm F' on the said car-wheel.

By the use of the segmental tooth F² the sleeve F is securely held in place on the casing during the lifting operation, so that the car-wheel is firmly held to the rail.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. A jack having a casing the interior of which is provided with a screw-thread and
5 the exterior of which is provided with a series of annular teeth, a threaded post operating in the casing and provided with a perpendicular pivot at its upper end, a cap turning on the pivot, means for holding the cap in
10 place, a sleeve loosely embracing the casing and having an internal tooth at its upper portion and at one side such tooth engaging with the annular teeth on the casing, and an arm projecting outward from the sleeve and
15 from a point directly adjacent to the tooth on the sleeve, substantially as described.

2. A jack having a casing, the lower end of which is enlarged to form a base and the upper portion of which is provided with an

internal screw-thread and with a series of 20 external annular teeth, a sleeve loosely embracing said upper portion of the casing, the sleeve having a tooth at its upper portion and at one side, an arm projecting outwardly from the sleeve at a point adjacent to the 25 tooth, a threaded post operating within the upper portion of the casing and having an enlarged upper end provided with an orifice and with a pivot rising perpendicularly from the said enlarged upper end, a cap turning 30 around the pivot, and a screw passed into the pivot and having its head engaging a counter-sink in the cap whereby the cap is held in place, substantially as described.

ALEXANDER HILL MOYES.

Witnesses:

T. D. JOHNSON,
R. H. WHIPPLE.