(No Model.) 2 Sheets—Sheet 1.

H. W. ROBIE.

SCREW JACK.

No. 349,663. Patented Sept. 21, 1886.

Fig. 1.

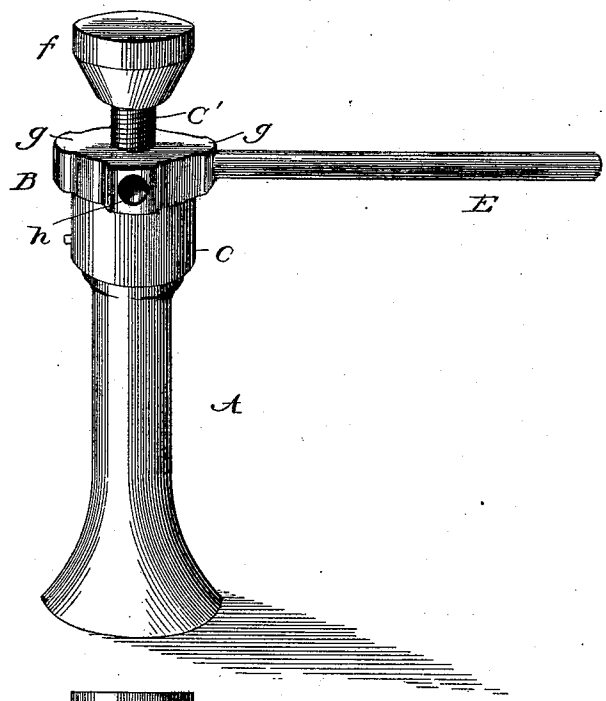
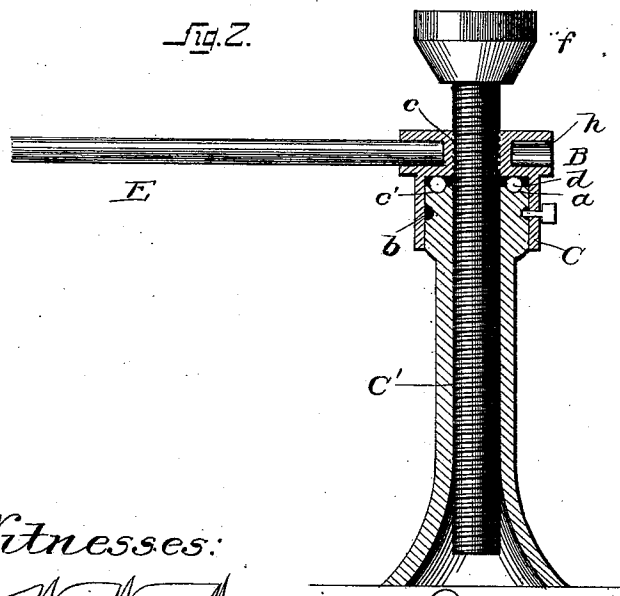


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

H. W. ROBIE.

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Fig. 4.

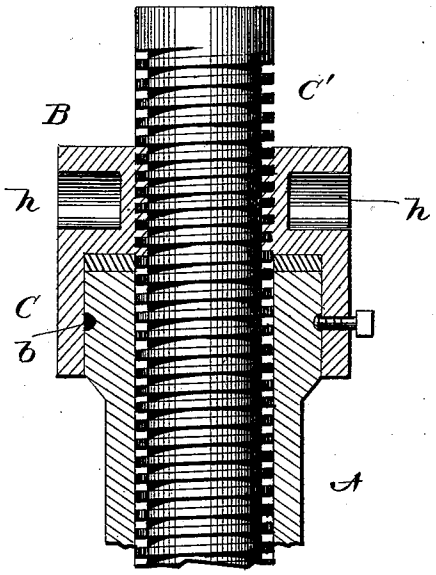


Fig. 3.

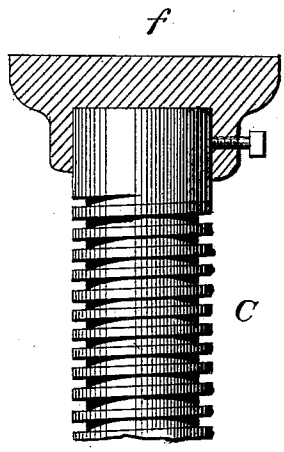
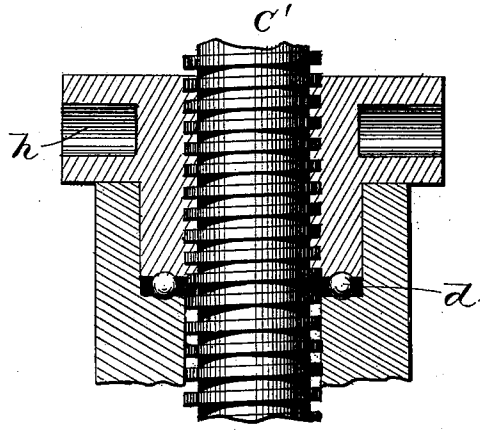


Fig. 5.



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UNITED STATES PATENT OFFICE.

HENRY W. ROBIE, OF PORTSMOUTH, VIRGINIA, ASSIGNOR OF TWO-FIFTHS TO SAMUEL S. ARMSTRONG, OF SAME PLACE.

SCREW-JACK.

SPECIFICATION forming part of Letters Patent No. 349,663, dated September 21, 1886.

Application filed April 27, 1886. Serial No. 200,327. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. ROBIE, a citizen of the United States, residing at Portsmouth, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Screw-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to screw-jacks, the object of the invention being to provide a device of this character which shall be simple in its construction, easy of and effective in operation, strong and durable, and one by which a heavy weight may be raised with but a minimum expenditure of power.

The invention consists in the features of construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a vertical section. Fig. 3 is a detail section of the screw. Fig. 4 is a detail sectional view, and Fig. 5 is a modification.

Corresponding parts in the several figures are denoted by the same letters of reference.

Referring to the drawings, A represents the pedestal, which is made hollow with a smooth bore, and flaring at its lower end to form a wide base or support. Upon the upper edge of the pedestal A, is formed a circular groove or channel, *a*, while in the side of the pedestal, a short distance below its upper end, is formed a circumferential groove or channel, *b*.

B represents the power nut or cap, which is interiorly threaded, as shown at *c*, and is provided with a downwardly-extending flange, C, which fits over the upper end of the pedestal, and has an opening in which is located a set-screw, which registers with the groove in the side of the pedestal, so that when the screw is tightened the cap cannot be accidentally detached if the jack is upset. In the lower edge of the power nut or cap B is formed a circumferential groove or channel, *c'*, and interposed between the edge of the power-nut and the upper edge or end of the pedestal are a series of anti-friction rolls or balls, *d*, as shown.

C' represents the power-screw, which passes through the interiorly-threaded power-nut, and which is provided at its upper end with a removable head or rest, *f*, to give a wide bearing to the power-screw at its point of contact with the weight to be raised.

The power nut or cap is provided at opposite points with extensions *g*, which have openings *h*, any one of said openings being adapted to receive an operating-lever, E.

The operation of my invention is as follows: The jack is placed under the weight to be raised and the lever inserted into one of the openings *h*, and the power-nut turned thereby, which causes the power-screw to be fed upwardly and the weight to be raised, the power-nut remaining stationary so far as vertical movement is concerned, and turning upon the anti-friction rolls or balls.

It will be seen that, if desired, the balls between the power-nut and pedestal might be omitted, and the nut rest directly on the pedestal; but I prefer to employ the rolls, since they reduce friction between the parts and allow the nut to be easily turned.

As shown in Fig. 4, a steel washer may be located on the upper edge of the pedestal, and the rolls rest on it.

In Fig. 5 the pedestal is provided with an interior recess at its upper end, forming a shoulder on which the rolls rest, and the nut is provided with a flange which fits within the pedestal and bears on the rolls.

Having thus described my invention, what I claim is—

1. In a screw-jack, the combination, with a pedestal, of a power-nut supported on the upper end of the pedestal, said nut having a downwardly-extending flange to hold it against lateral movement, and said flange having an opening, a set-screw working therein and adapted to bear against the pedestal, balls between the power-nut and pedestal, and a power-screw, substantially as set forth.

2. The combination, with the pedestal, of the power-nut supported on the upper end of the pedestal and having a downwardly-extending flange inclosing the upper end of the pedestal, said flange having an opening, a set-screw working therein and adapted to bear against the pedestal, and a power-screw, substantially as set forth.

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

HENRY W. ROBIE.

Witnesses:
C. WOODWARD,
J. E. HOBDAY.