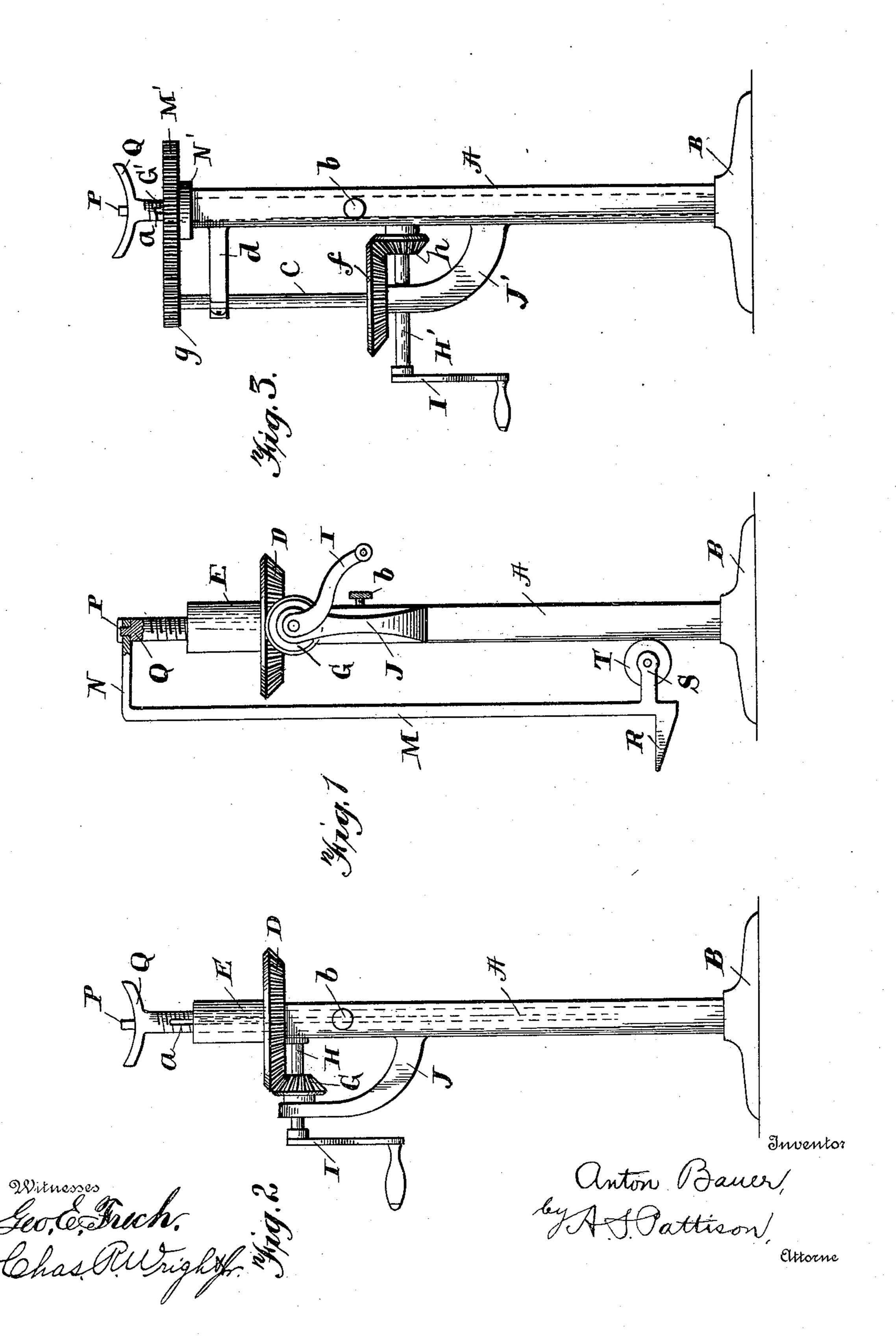
A. BAUER. LIFTING JACK.

(Application filed Aug. 17, 1899.)

(No Model.)



United States Patent Office.

ANTON BAUER, OF BOYD, OREGON.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 641,490, dated January 16, 1900.

Application filed August 17, 1899. Serial No. 727,558. (No model.)

To all whom it may concern:

Be it known that I, ANTON BAUER, a citizen of the United States, residing at Boyd, in the county of Wasco and State of Oregon, have 5 invented new and useful Improvements in Lifting-Jacks, of which the following is a specification.

My invention relates to improvements in lifting-jacks and attachments therefor; and to it pertains to a lifting-jack having a screw construction, all of which will be fully described hereinafter and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is 15 a view of a lifting-jack embodying my invention with the attachment in position thereon. Fig. 2 is a similar view of the lifting-jack with the attachment removed. Fig. 3 is a modi-

fied construction of the lifting-jack. Referring to Figs. 1 and 2, A is a hollow standard having at its lower end a suitable supporting-base B. Within this hollow standard A a vertical screw-shaft C is placed, and this screw-shaft C is provided with a verti-25 cally-arranged groove a, which receives the inner end of a set-screw b, that passes through the hollow standard A. Resting upon the top of this standard A is a horizontal bevel-gear D, having a recess in its lower end adapted 30 to receive the upper end of the hollow standard A, and formed integral with this horizontal bevel-gear D is an upwardly-projecting sleeve or screw-socket E. This socket E is provided with an internal screw-thread which 35 fits and receives the thread upon the rod C, whereby when the horizontal gear D is revolved the rod C is elevated or lowered, according to the direction of rotation of the said gear, as will be readily understood. This gear 40 D is rotated by means of a bevel-pinion G, which is carried at an intermediate point upon a horizontal shaft H, the outer end of the said

shaft being provided with a crank I for rotating the same. This shaft G has its inner end 45 journaled in the upper end of the hollow bevel H and the outer portion journaled in the upper end of an upwardly and outwardly extending bracket or arm J, which has its lower end rigidly connected with the hollow stand-

50 ard A, as clearly illustrated. From this description it will be noted that by means of the

crank-arm the gear-wheel G and its integral hollow screw-threaded sleeve E can be rotated in either direction for the purpose of raising

or lowering the rod C.

In order to enable my invention to be used in connection with an object which is so close to the ground that the jack cannot be inserted thereunder, I provide an attachment. This attachment consists of a vertical bar M, hav- 60 ing at its upper end an inwardly-extending arm N, the end of this arm N having a perforation adapted to receive a projection P just above the cap Q, situated on the upper end of the rod C. The lower end of this bar 65 N extends outward to form a step R, which can be placed under the object to be elevated, and extending inward from the lower end of this bar N is an arm S, which carries a grooved roller T, the said roller adapted to engage the 70 outer side of the vertical standard A. By means of an attachment of this construction friction is considerably lessened in the use of the roller T, which will receive the lateral strain caused by the engagement of the step 75 R with the object to be elevated.

In Fig. 3 I show a modification in which there is a vertical shaft c, which has its lower end journaled in the upper end of a bracket J', the upper portion of this shaft c being sup- 80 ported by an additional arm or bracket d, which projects laterally from the upper end of the standard. The lower end of this shaft c carries a horizontal bevel-gear f and the upper end carries a pinion g. A shaft H' is 85 supported and journaled in the bracket J' and the standard in the same manner as the shaft H of Figs. 1 and 2. Situated upon the upper end of this standard is a horizontal gear M', which meshes with the pinion d and 90 by which it is rotated. This horizontal gear M' is provided with an internally-screwthreaded collar N', which engages the vertical screw-threaded rod G' and elevates the same in the manner described in respect to Figs. 95 1 and 2.

The object of the modification here shown is to increase the power of the jack, as is well

understood by those familiar with mechanics.

A jack and attachment of the construction 100 herein shown and described is simple, strong, and effective in its operation.

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

1. The combination in a lifting-jack comprising a vertical standard and a vertically-adjustable rod, of an attachment consisting of a vertical portion having an inwardly-extending arm at its upper end adapted to be connected with the vertical rod, an outwardly-extending lifting-step at its lower end, and a roller situated at the inner side of the vertical portion thereof and adapted to engage the outer side of the said standard, substantially as described.

2. The combination in a lifting-jack comprising a vertical standard and a vertically-adjustable rod, of a lifting attachment consisting of a vertical bar having its upper end turned inward and capable of attachment to the upper end of the said rod, the lower end of the vertical bar having outturned lifting-steps, and a grooved roller carried by the

lower end of the vertical arm and adapted to engage the said standard, substantially as described.

3. The combination in a lifting-jack comprising a vertical standard and a vertically-adjustable rod having a projection on its upper end, of a lifting attachment consisting of a vertical bar having its end inturned and 30 provided with an opening adapted to receive the projection upon the said rod and an outturned lifting-step at its lower end, the inner side of the lower end of the said vertical bar having a roller adapted to engage the 35 vertical standard of the lifting-jack, substantially as described.

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

ANTON BAUER.

Witnesses:

FRANK MENEFEE, D. S. DUFUR.