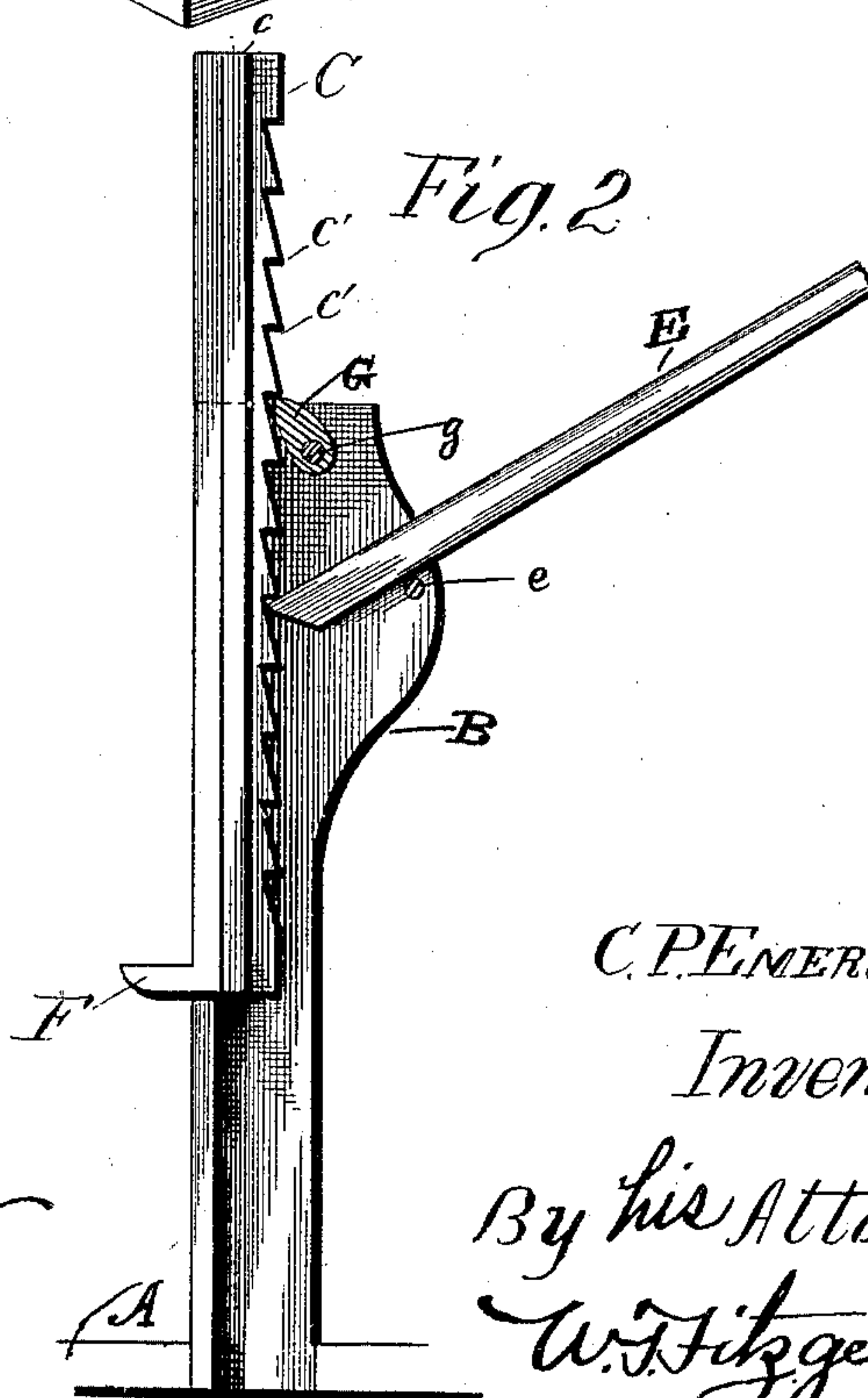
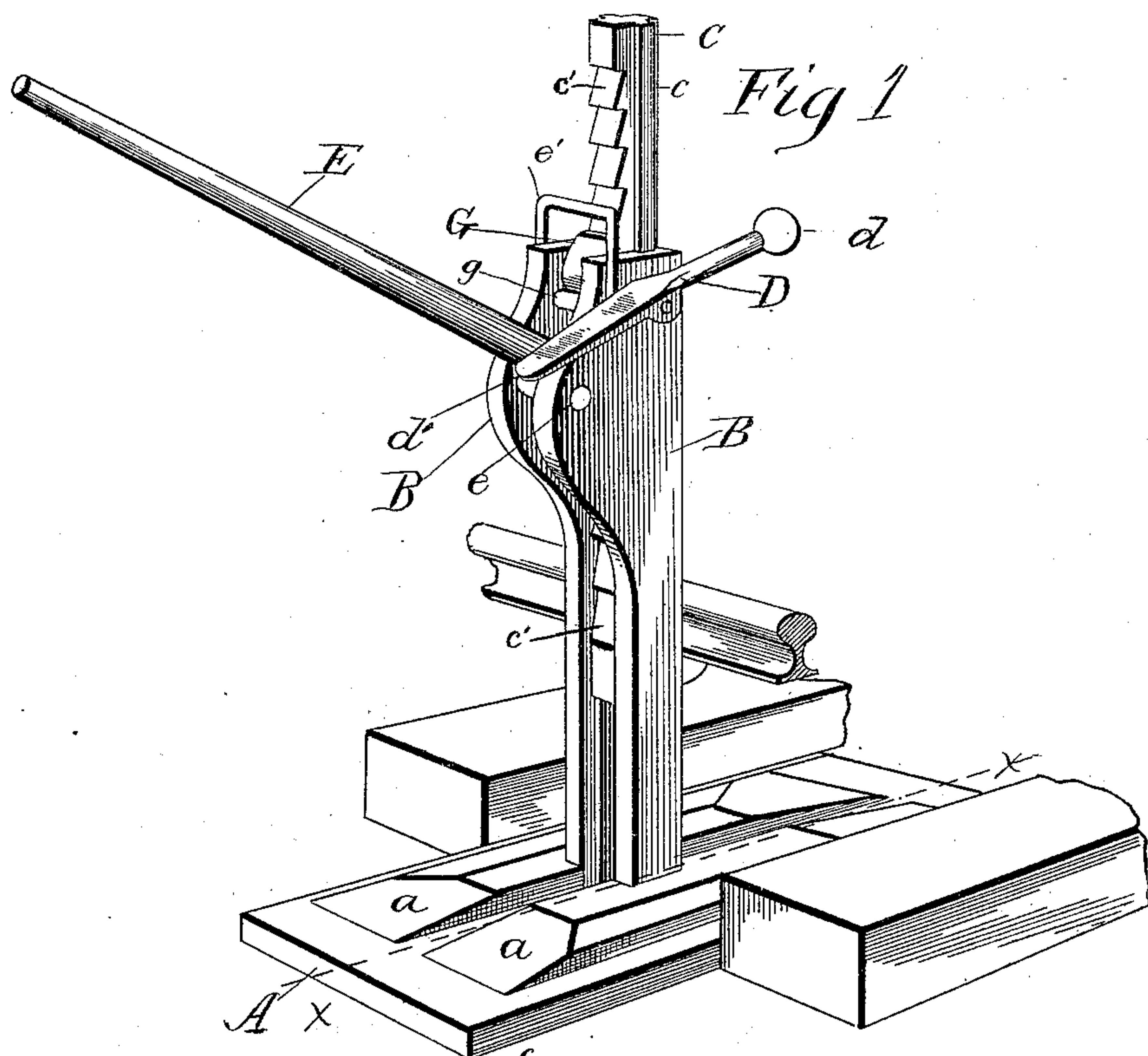


(No Model.)

C. P. EMERSON
LIFTING JACK.

No. 422,014.

Patented Feb. 25, 1890.



Witnesses
C. C. Burdick
Mayo Veeke

C. P. EMERSON
Inventor.
By his Attorney.
W. Fitzgerald

UNITED STATES PATENT OFFICE.

CHARLES PERRY EMERSON, OF YATES CENTRE, KANSAS.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 422,014, dated February 25, 1890.

Application filed November 21, 1889. Serial No. 331,073. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PERRY EMERSON, a citizen of the United States, residing at Yates Centre, in the county of Woodson and State of Kansas, have invented certain new and useful Improvements in Lifting-Jacks; 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 improvements in lifting-jacks, and has for its object the provision of a portable lifting-jack which will be simple in its construction and efficient in operation.

The invention consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my invention as applied to use. Fig. 2 is a central longitudinal section of the same on line *x x*.

Referring to the various parts forming my improved lifting-jack, in order to subserve the convenience of description designation will be made by letters, of which A indicates the base proper, which is preferably made in the form of a parallelogram and is to have a sufficient thickness to secure the requisite strength, in the center of which are erected the parallel standards B B, which are arranged to provide a support and housing for the operating mechanism hereinafter described. The base A is re-enforced on the upper side by the parallel braces *a a*, cut away on their inner sides at their middle to properly surround and receive the lower ends of the standards B B, or may be made integral with said standards. The lifting-bar C is preferably constructed so as to be rectangular in form, except that it is provided upon each side its entire length with ribs *c c*, which are intended to fill and coincide with grooves provided on the sides of standards B B, the purpose of which is to hold said shaft within the housing formed by said standards. The lifting-bar C is also provided upon its rear face with a series of ratchets *c'*, which are adapted to be engaged by the operating-lever. The ends and rear sides of standards B B are sufficiently extended or enlarged to provide a seat

for the fulcrum-bar *e*, upon which the lever E rests when the jack is put into operation. The lifting-bar C on its lower end and front side is provided with the extension F, intended to receive the weight to be lifted. The upper ends of standards B B are also provided with the rod *g*, pivotally secured in such standards and provided with the dog G, for engaging with the ratchets *c'*, while to the extended end of rod *g* is secured the operating-bar D, having upon its upper end the enlargement *d* and upon its lower end the flattened surface *d'*, as shown. This flattened end *d'* provides a smooth and wide surface, so that the bar D can be easily and readily given a motion contrary to that given it by the weight, in order to disengage the dog G from the ratchet-teeth *c'*, and thus permit the lifting-bar to be lowered.

While my invention is applicable to purposes subserved by railway-jacks, it is also equally well adapted to the general requirements of a lifting-jack.

In operation the lifting-bar C, being lowered so that it will be wholly within the housing formed by standards B B, is so placed that the weight will rest upon the extension F when the lever E, which is detachable, is placed between the standards B B, above the fulcrum-bar *e*, so that its point will engage with one of the ratchets *c'* on the rear face of the lifting-bar, when, by lowering the free end of such lever, the lifting-bar C and the weight upon the extension F will be thereby raised and automatically secured by dog G, as the weight formed by the enlargement *d* upon the upper end of operating-bar D will cause said dog to fall within the ratchets *c'* as the shaft is raised. This operation may be repeated by engaging the lever E with the next lower ratchet, when the shaft may be raised to the top of the standards B B, or until the weight is raised to a proper height. A bail or handle *e'* is secured to the upper ends of the parallel standards, so that the device may be readily carried from place to place.

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

The improved portable lifting-jack herein described and shown, consisting of the base

A, the parallel standards rising from said base and provided on their inner sides with vertical longitudinal grooves, the lifting-bar having longitudinal ribs on its sides engaging
5 said grooves and provided with ratchet-teeth on its back, the fulcrum-bar secured horizontally between the standards, the operating-lever resting loosely on said fulcrum-bar and engaging said ratchet-teeth, the dog pivoted
10 between the upper ends of the standards engaging the ratchet-teeth and having its pivot extended through one of the standards, the

bar D, secured on the extended end of said pivot and having the weight d at one end and the flat surface d' , and the bail or handle e' , 15 secured to the upper ends of the parallel standards, as specified.

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

CHARLES PERRY EMERSON.

Witnesses:

N. J. EDWARDS,
BURT SOUTHWICK.