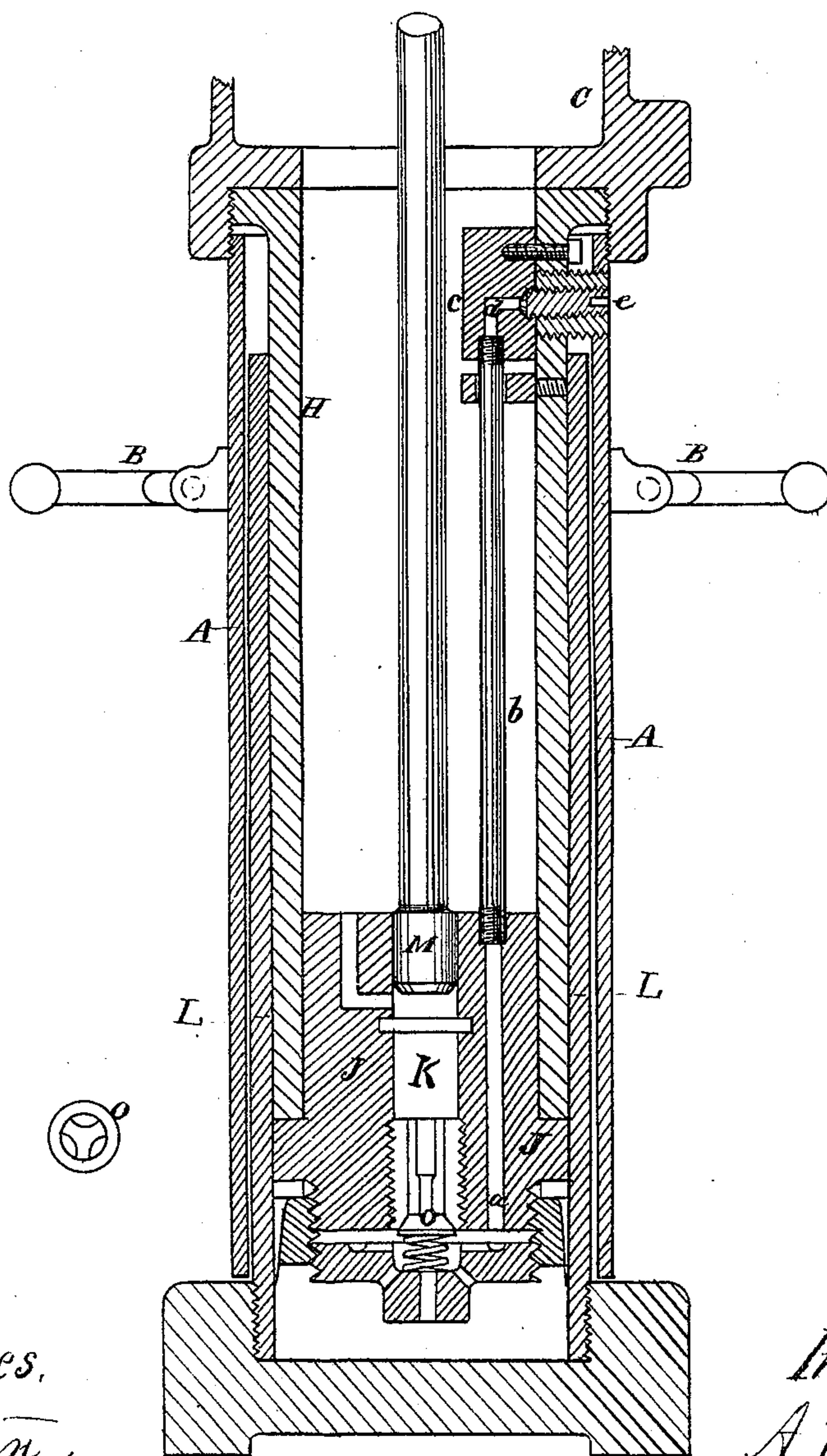


A. V. OJEDA.
Hydraulic Lifting-Jacks.

No. 151,670.

Patented June 2, 1874.

Fig. 1



Witnesses,
E. Patten,
Budd & Smith

Inventor,
A. V. Ojeda,
By his atty,
C. W. M. Smith.

UNITED STATES PATENT OFFICE.

ANTHONY V. OJEDA, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN HYDRAULIC LIFTING-JACKS.

Specification forming part of Letters Patent No. **151,670**, dated June 2, 1874; application filed May 5, 1874.

To all whom it may concern:

Be it known that I, ANTHONY V. OJEDA, of San Francisco, in the county of San Francisco and State of California, have invented an Improvement in Hydraulic Jacks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters marked thereon.

My invention relates to certain improvements in a hydraulic jack for which Letters Patent were granted to me, No. 141,232, dated July 29, 1873; and it consists, principally, in an improved method of letting the liquid pass from the lower side of the piston to the upper side, when it is desired to lower the piston, so that the piston can be depressed as gradually as may be desired, and a perfect control is obtained over its action.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a sectional elevation of my invention.

A is the outside cylinder, having the handle B. C is the head of the ram, and H is the ram, which moves up and down in the cylinder A, being operated by the plunger M, so that when the latter is raised it will carry up the ram H and the head C. J is a cast-iron plug, which contains the force-pump cylinder K, which, when raised, carries the cylinders A and the ram H. A toe may be attached to the outside cylinder, to afford greater facility for raising and lowering, especially when weights are employed either at the top or bottom. The interior of the plunger is bored to receive the working-piston M, by the operation of which the liquid is taken from above the plunger and forced below it, so as to raise it. This is done,

as described in my former patent, by forcing the liquid through the valve *o* until the head *c* has been raised as high as desired. When it is desired to depress the head and plunger again, instead of forcing the valve open by depressing the piston, as in my former patent, I make a passage, *a*, connecting with the space below the valve and extending up through the plunger, as shown. A pipe, *b*, screws into the top of the plug and extends up to a block, *c*, into which it screws. A passage, *d*, from the pipe passes through the block, turning at right angles, so as to open into the chamber above the plunger and return the liquid from below the piston to the space above.

In order to regulate the flow of the liquid, and thus control the depression of the ram-head, I make a screw-valve, *e*, which closes this passage *d*, and can be operated from the outside of the cylinder A, just below the cap.

By this construction I am enabled to completely control the movements of the ram-head, and weights can thus be lowered as gradually as may be desired.

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

The passage *a*, extending from below the valve up through the plunger, the pipe *b*, and the angular passage *d*, together with the screw-valve *e*, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal.

A. V. OJEDA. [L. S.]

Witnesses:

C. W. M. SMITH,
D. K. SWIN.