

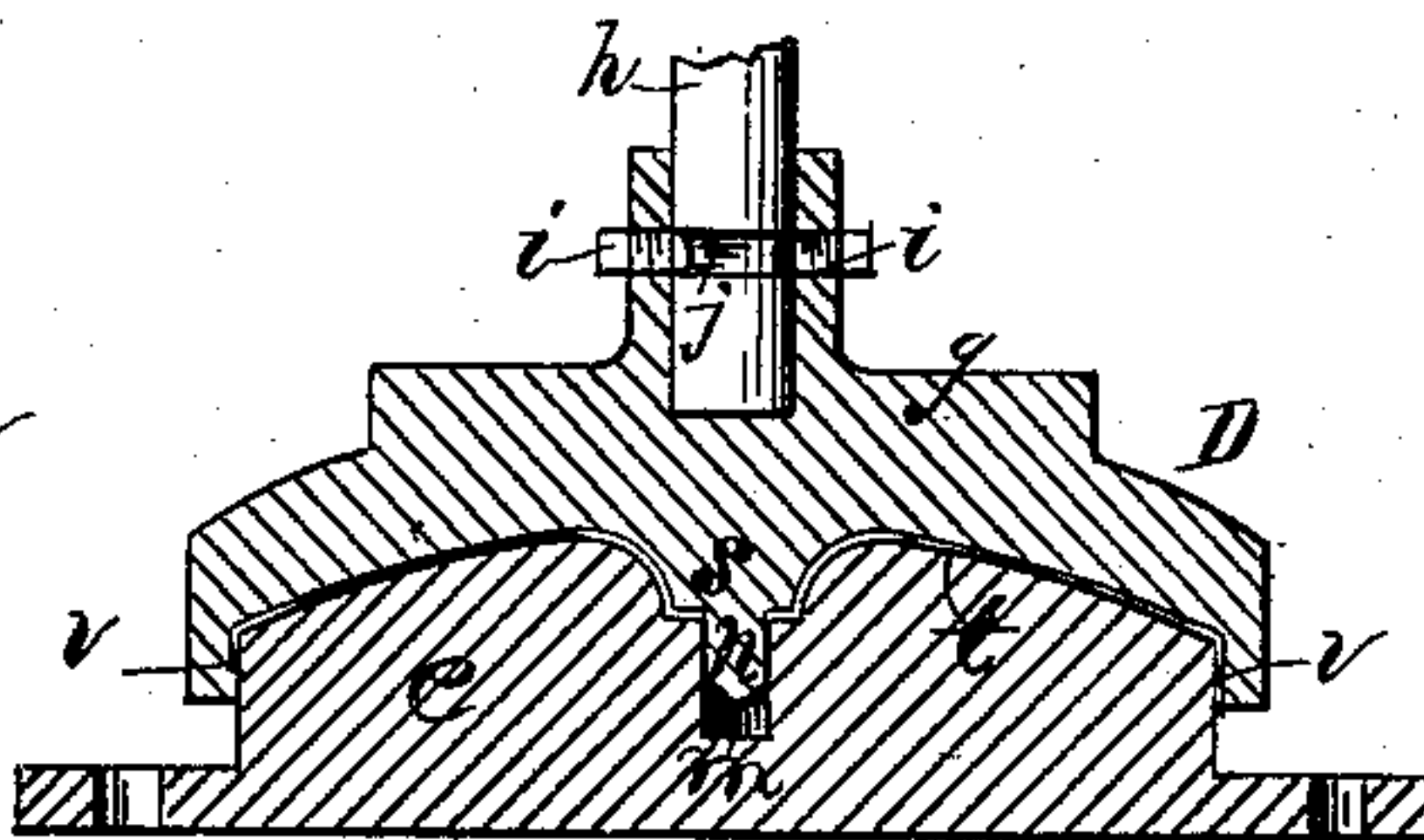
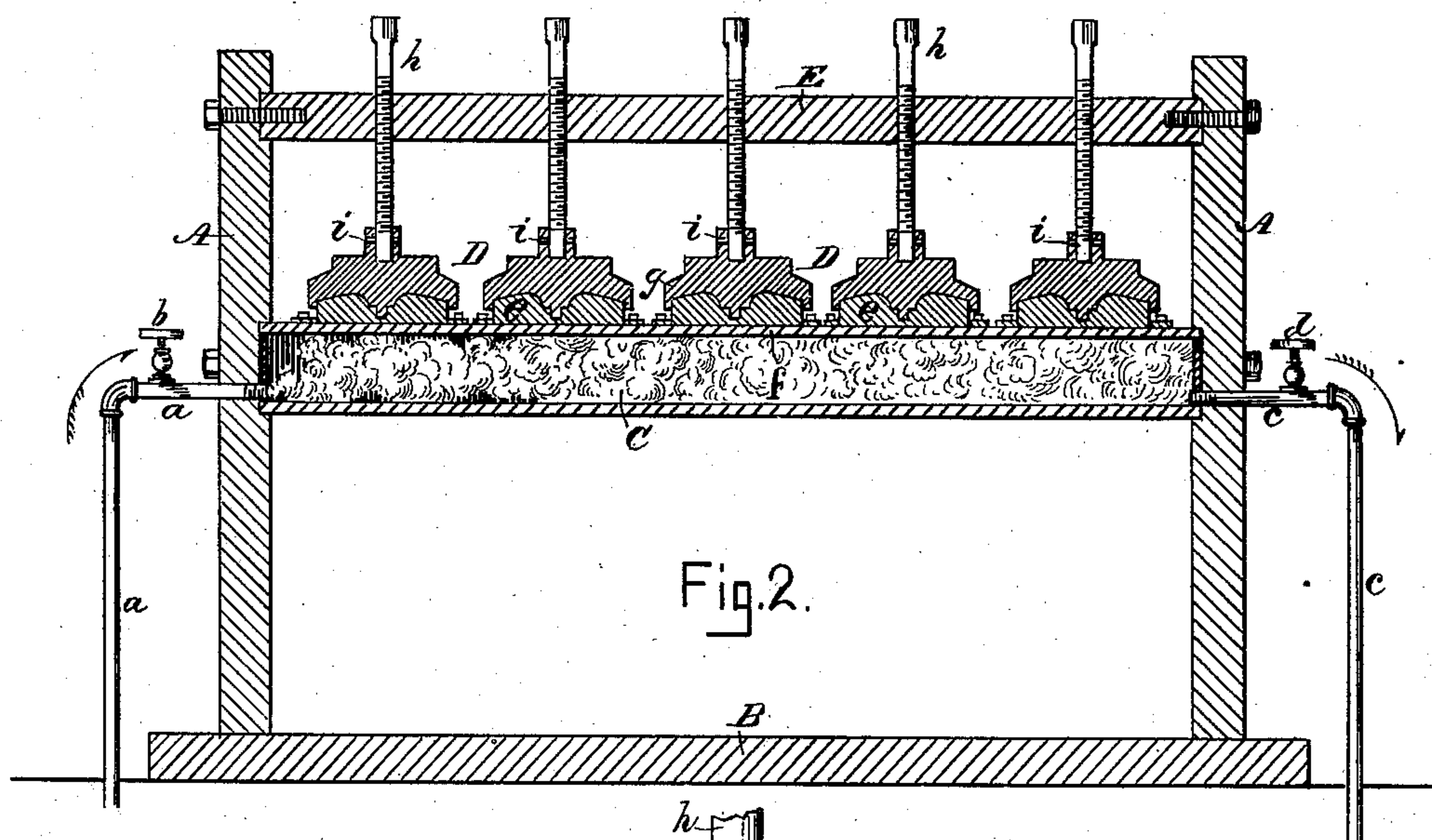
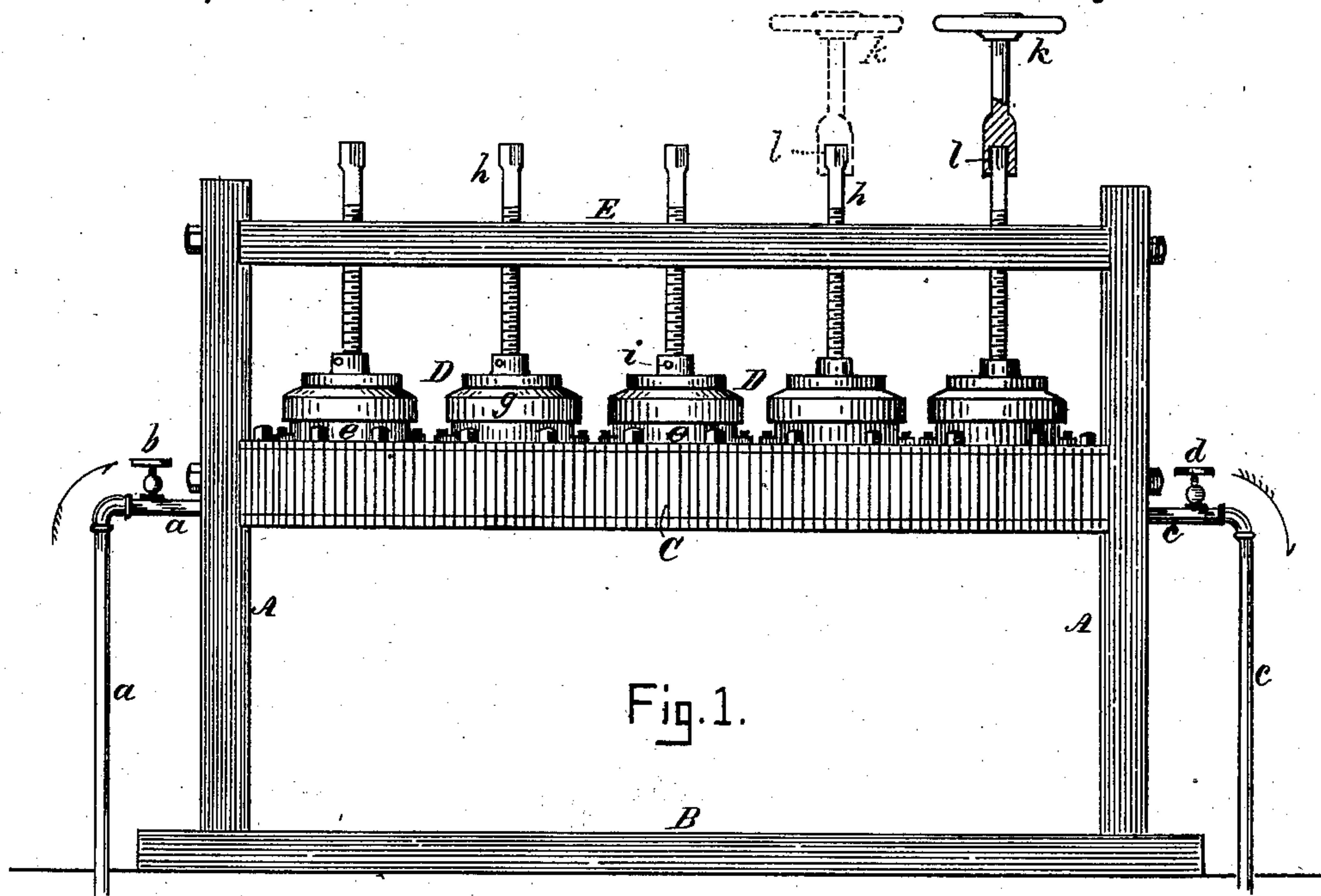
(No Model.)

J. G. BUZZELL.

# MACHINE FOR MOLDING SAND PAPER DISKS.

**No. 260,368.**

Patented July 4, 1882.



Witnesses.  
 C. E. Remick.  
 H. H. Lettorey

Inventor:  
John E. Buzzell  
By Porter & Hutchinson  
Attys

Fig. 3.



# UNITED STATES PATENT OFFICE.

JOHN G. BUZZELL, OF LYNN, MASSACHUSETTS.

## MACHINE FOR MOLDING SAND-PAPER DISKS.

SPECIFICATION forming part of Letters Patent No. 260,368, dated July 4, 1882.

Application filed February 23, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN G. BUZZELL, of Lynn, in the State of Massachusetts, have invented Improvements in Machinery for Molding Sand-Paper Disks for Shaving and Whitening Leather, of which the following is a specification.

The invention has for its object the molding of the abrading-disks which are shown, described, and claimed in Letters Patent of the United States No. 252,928, issued to myself on the 31st day of January, 1882, said disks being employed in connection with a rotary supporting-cushion driven by suitable machinery for shaving and whitening leather, as is set out and described in said Letters Patent; and my present invention consists in the construction and combination of the divers devices embodied therein, as hereinafter more particularly and fully set forth and claimed.

Figure 1 shows in side elevation a machine or apparatus embodying my invention. Fig. 2 is a longitudinal vertical section of Fig. 1, except that the steam-pipes are shown in elevation. Fig. 3 is an enlarged detached view, showing one of the molding dies with the lower portion of the actuating-screw shown in elevation.

In said views, A A represent end supports of the apparatus, which are shown as resting upon base B, but which may bear upon the floor or upon a bench.

C represents a metallic steam-chest, provided with an inflow-pipe, *a*, having a regulating and shut-off valve, *b*; and *c* is an outflow-pipe, also connected with chest C and provided with a regulating-valve, *d*.

The lower halves, *e*, of the molding-dies D are secured upon the top of the lid *f* of chest C, as shown in Figs. 1, 2, and are heated to the desired temperature by the conducted heat of the steam admitted into chest C through pipe *a*, which heat is regulated by means of the described valves in the inflow and outflow pipes.

To each upper half of dies D is connected the actuating-screw *h* by means of screws *i*, which are threaded in the socket of *g*, and engage in concentric groove *j* in the screw, thereby allowing the screw to rotate freely, yet causing it to raise the upper half, *g*, of the dies when retracted. Said screws *h* are re-

spectively threaded in beam E, as shown in Fig. 2, and they are actuated by means of hand-wheel *k*, the socket in the lower end of the stem *l* thereof engaging the square upper portion of said screws, as shown at the right-hand screw in Fig. 1, and the same, being removable, can be successively applied to said screws *h* for the purpose of actuating them, thereby admitting the arrangement of said dies in a smaller space than would be requisite if each were permanently provided with means for actuating it.

The lower half, *e*, of die D is formed with a central hole, *m*, to receive the corresponding pin, *n*, in part *g*. Said part *e* is formed with a depressed center, *s*, surrounding which is the area having a convex cross-section, as shown at *t*, which at its outer periphery retires at or near a right angle to the plane of the die, as shown at *v*, the upper half, *g*, of the die conforming to the described contour of part *e*.

The disks or blanks are cut from the sand-paper of the requisite size, and with a central hole to receive pin *n* to center them relatively to the die, when they are placed between the halves of the heated and open die, with the sanded side upward, and by means of wheel *k* acting upon screw *h* the dies are brought as near together as the thickness of the paper admits, when the heat of the dies in a few moments permanently sets the disk in its molded form, when it may be removed and the operation repeated, such setting to shape taking place so quickly that with a press having five or six molds the operator may be constantly employed in removing the molded and set disks and in replacing the same with blanks to be molded.

I claim as my invention—

The combination of steam-chest C, its inlet and outlet conduits, provided with regulating-valves, the divided molding-dies D, having one half secured to and arranged to be heated by said steam-chest, and provided with means for raising and lowering the upper half of the die and exerting the requisite molding force upon the inserted disk, substantially as specified.

JOHN G. BUZZELL.

Witnesses:

T. W. PORTER,  
H. H. LETTENY.