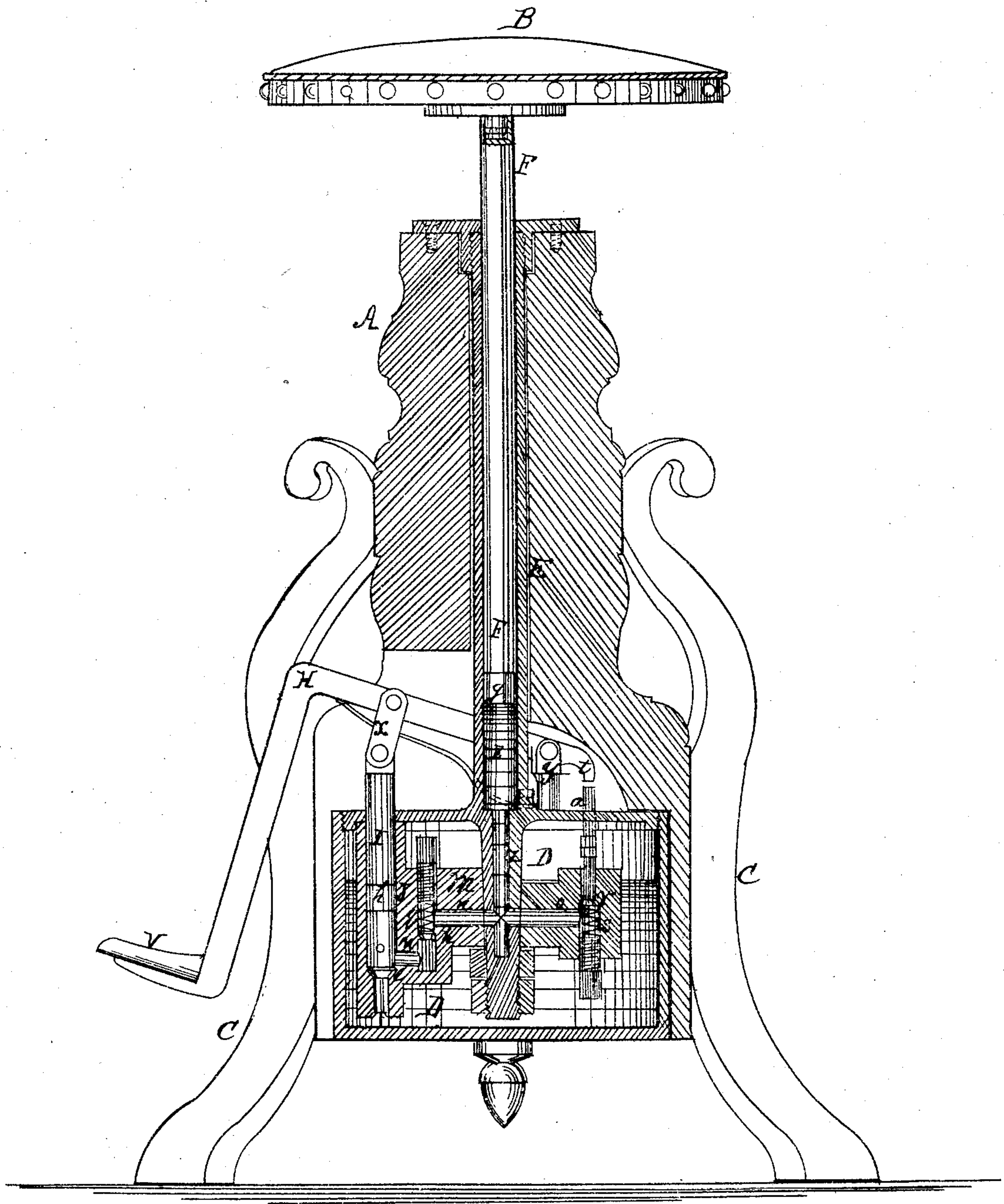


*Bramble & Deihl.*

*Piano-Stool.*

*Nº 76044*

*Patented Mar. 31, 1868.*



*Witnesses*  
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# United States Patent Office.

JAMES BRAMBLE AND HUGH M. DEIHL, OF FORT WAYNE, INDIANA.

*Letters Patent No. 76,044, dated March 31, 1868.*

## IMPROVED PIANO-STOOL.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, JAMES BRAMBLE and HUGH M. DEIHL, of Fort Wayne, in the county of Allen, and State of Indiana, have invented a new and improved Piano-Stool; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention consists in the application of the principle of hydrostatics for elevating or lowering the seat of a piano-stool, whereby the performer may be raised or lowered on the seat, without rising from it, by the action of the foot, as will hereinafter be more fully explained.

The drawing represents a sectional elevation of a piano-stool constructed and operated according to our invention.

A is the stand or column. B is the seat. C represents the legs of the stool. D is a water-chamber or liquid-reservoir beneath the column A, and enclosed thereby. This reservoir consists of a longitudinal section of a water-tight metallic cylinder. E is a central tube, which is attached to the reservoir, which tube is accurately bored out, and to which the spindle or plunger F of the seat is fitted. g represents packing on the end of the plunger. H is a bent lever, by which a force-pump is operated. I is the plunger of the force-pump, and J is the pump-cylinder. k is packing on the pump-plunger. l is a valve, which admits water into the pump when the plunger is raised. This force-pump, and the pipes and valves by which the water is admitted to and withdrawn from the tube E for operating the seat, are confined in and attached to a central core, m, in the reservoir D. n indicates the pipe through which the water is forced from the force-pump. O represents the pipe through which the water is discharged back into the reservoir. p is a stop-valve, which is pressed to its seat by a spiral spring, q. This valve can rise only when the force-pump plunger descends, as seen. r is a valve connected with the discharge-pipe o. This valve is pressed upward to its seat by a spiral spring, s, and it can leave its seat only when the end, t, of the lever H operates upon its stem u. v is a foot-piece on the lower end of the lever H. w is a spring, which bears against the under side of the lever H, with a constant pressure to keep it up and in the position as seen in the drawing. The lever H is connected with the plunger of the force-pump by a jointed connection, as seen at x. The fulcrum of the lever is on the stud y.

The operation will be readily understood from the drawing. For raising the seat of the stool the performer presses with the foot upon the foot-piece v, which forces down the plunger of the force-pump, and forces water (or whatever liquid may be contained in the reservoir) into the tube E. Water being non-elastic, the least movement of the plunger forces up the valve p, and forces water into the tube E through the pipes n and z, and raises the seat by the pressure on the end of the spindle or plunger F. This may be done by the most steady and gentle motion. When it is desired to lower the seat, the foot-piece v may be raised by the heel of the performer. When this is done, the end, t, of the lever H will strike the top of the valve-stem u, and force the valve r from its seat, when the water confined in the tube E will escape back into the reservoir. It will thus be seen that the height of the seat may be controlled by the gentlest motion of the foot of the performer.

We do not confine ourselves to the particular arrangement shown and described for controlling the height of a piano-stool seat by the pressure of water or other fluid. The details may, perhaps, be somewhat varied and the same result be produced.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

Controlling the height of the seat of a piano-stool by hydrostatic pressure, substantially as described.

JAMES BRAMBLE,  
HUGH M. DEIHL.

Witnesses:

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