

C. P. GAVER.
Barge-Pumps.

No. 143,069.

Patented September 23, 1873.

Fig. 1.

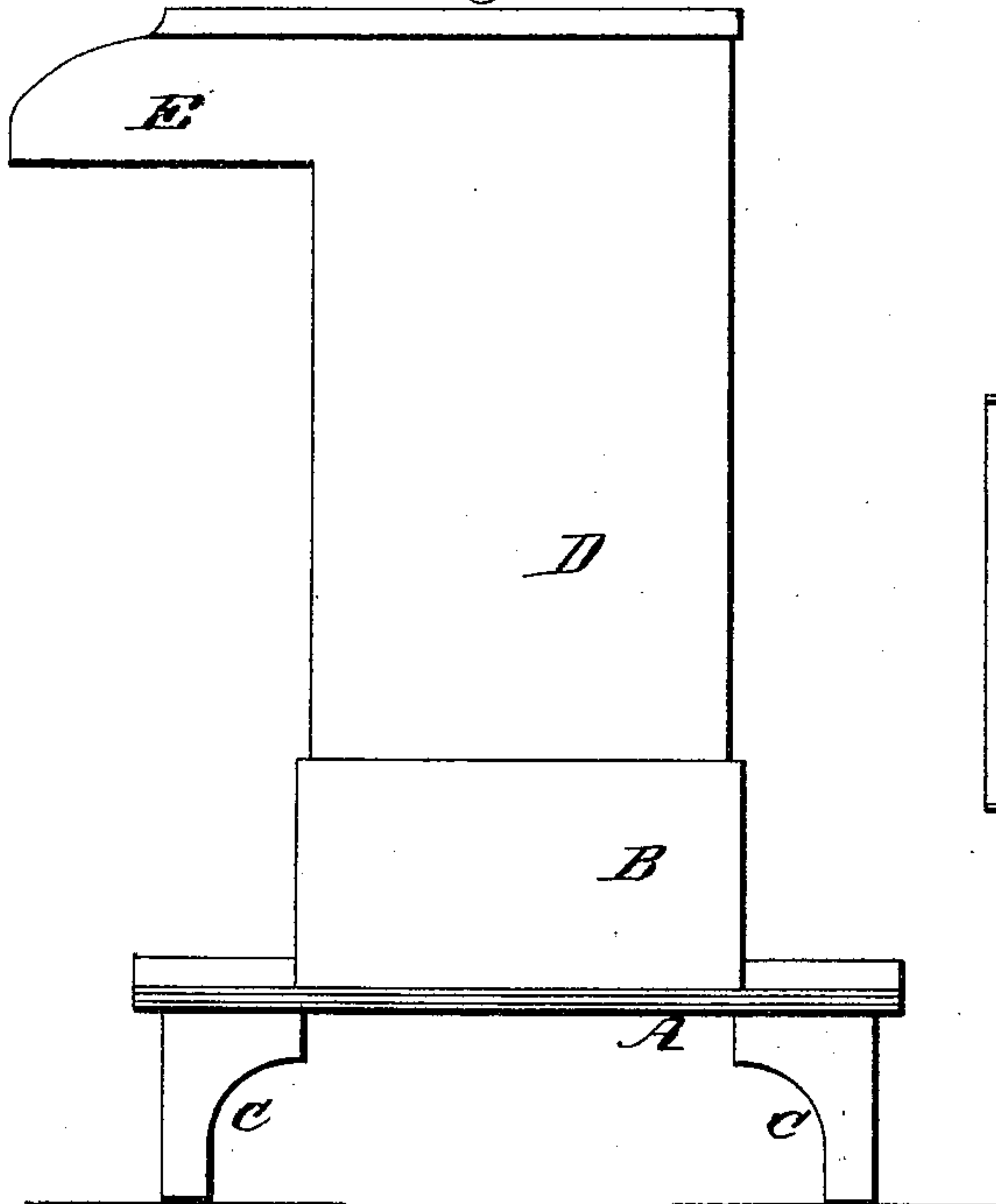


Fig. 2.

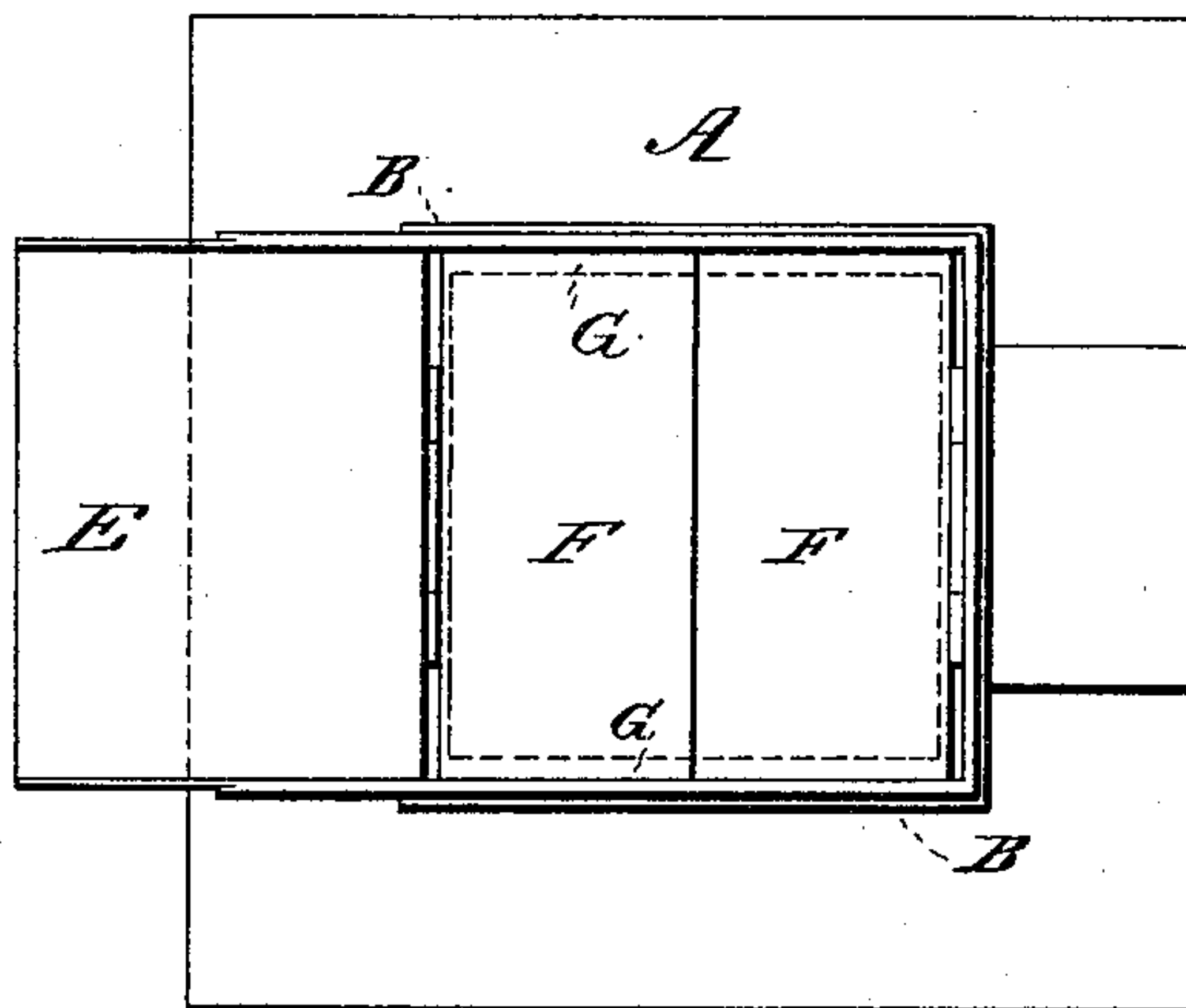
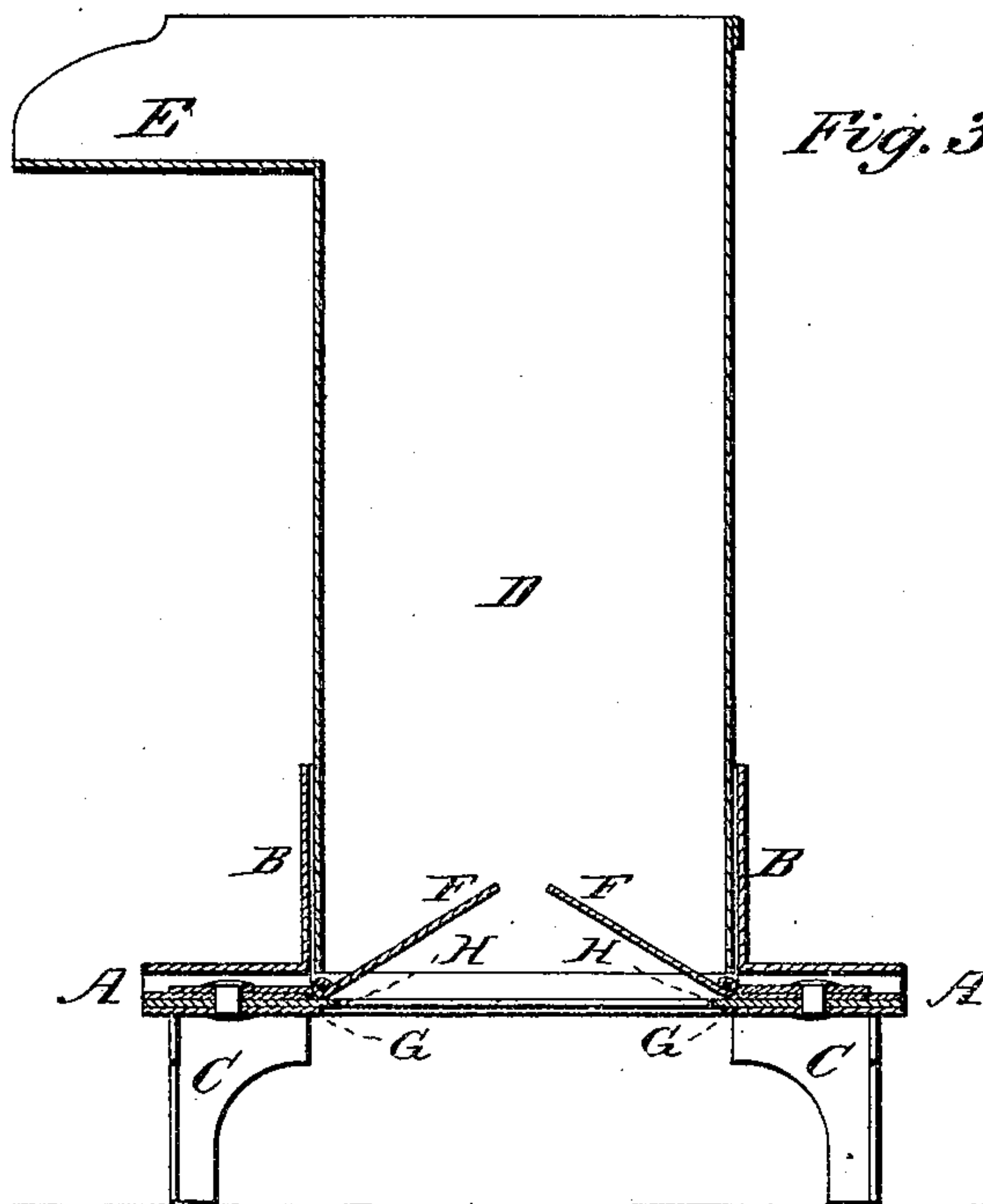


Fig. 3.



Witnesses.

James A. Bartram.
Benjamin Garvey.

Inventor.

Charles P. Gaver.

UNITED STATES PATENT OFFICE.

CHARLES P. GAVER, OF ASHLAND, KENTUCKY.

IMPROVEMENT IN BARGE-PUMPS.

Specification forming part of Letters Patent No. **143,069**, dated September 23, 1873; application filed February 25, 1873.

To all whom it may concern:

Be it known that I, CHARLES P. GAVER, of Ashland, in the county of Boyd and State of Kentucky, have invented certain Improvements in Barge-Pumps, of which the following is a specification:

My invention relates to the combination, with a cast-iron base and plate-iron tube and spout, of plate-iron valves hinged at opposite sides of the opening in the base-plate, meeting in the middle of said opening, and resting on rubber packing, so as to open inward into the tube and allow a stream of water, the full size of the bore of the tube, to enter when the pump-piston is lifted, and to prevent water passing back from the tube when the piston is lowered.

Figure 1 is a side elevation of a barge-pump embodying my invention. Fig. 2 is a plan of the same. Fig. 3 is a vertical transverse section, showing the valves open.

A is the cast-iron base, having a square hole in its center, around which there is cast an elevated flange, B, and beneath which there are feet *c c c c* cast to keep the base raised above the floor of the barge. D is the plate-iron tube, which makes a sleeve-joint with the flange B, whereby the tube D is attached to the base A. E is the spout, which projects over the side of the barge to discharge the water into the river, &c. F F are two rectangular valves of plate iron, which are hinged,

one on each of the two opposite sides of the opening in the base A, in such a way as to open into the tube D. G is a flange, upon which the valves F F rest when closed. H is a packing of rubber resting on the flange G, and which serves to make a water-tight joint when the valves are closed, and to prevent a jar every time the valves close suddenly. The valves F F are made of quarter-inch iron, so that they may be able to bear the weight of water above them and not be readily jarred to pieces by the sudden descent of the pump-piston.

I have not described any pump-piston, for I use the ordinary one in use in barge-pumps.

The base A, being elevated by the feet *c c c c*, the water can flow freely under it. The valves F F, opening against the sides of the tube, allow a stream of water the full size of the tube to enter the tube D without obstruction from cross-bars, &c., and being of stout plate iron they stand hard work and last a long time without needing any repairs.

I claim as my invention—

The combination, with the tube D and base A, of the valves F F and packing H, substantially as and for the purpose hereinbefore set forth.

CHARLES P. GAVER.

Witnesses:

JAMES A. BARTRAM,
BENJAMIN GARVEY.