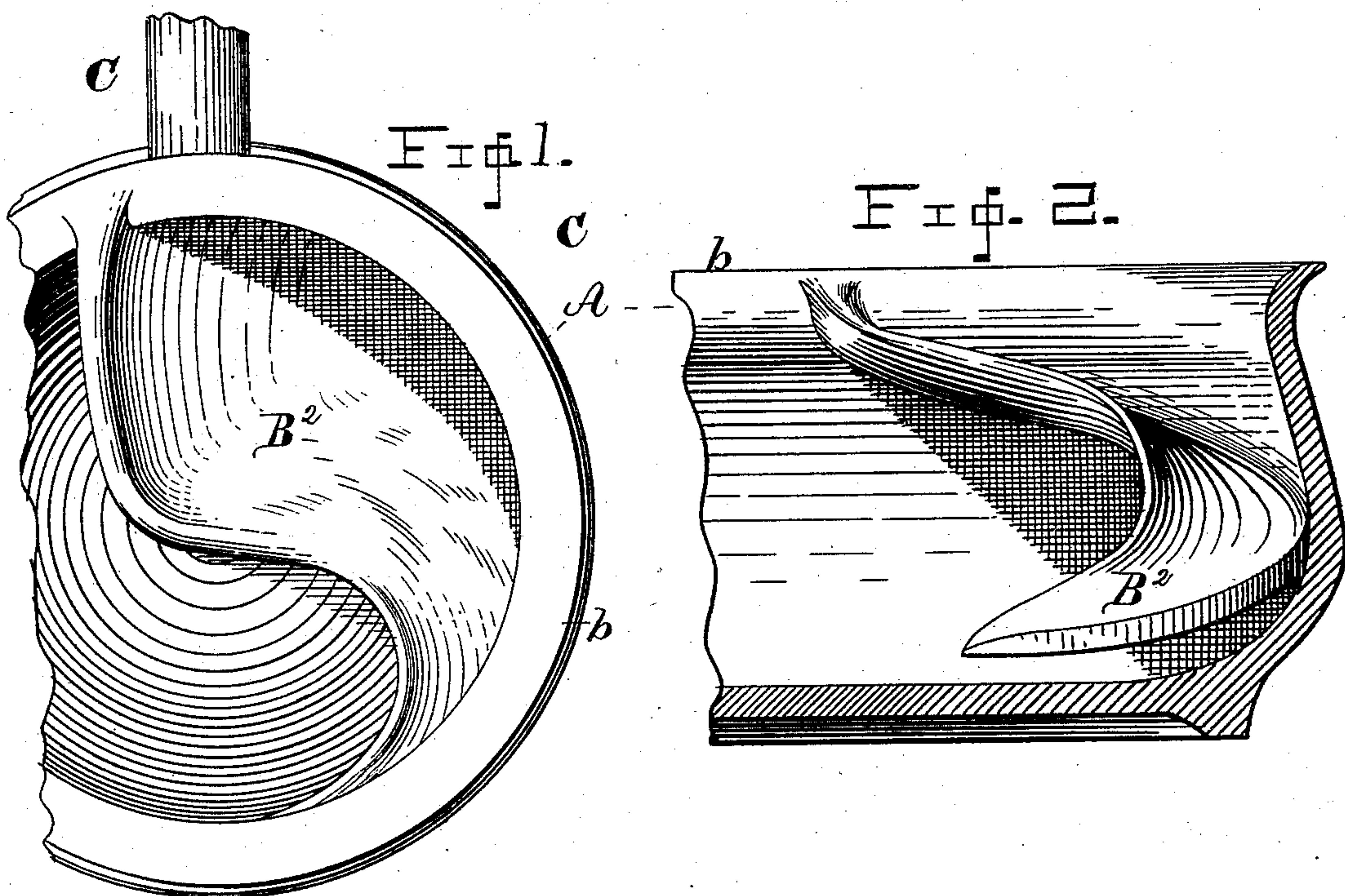


(No Model.)

J. A. DAVIS.
CHAMBER VESSEL.

No. 372,063.

Patented Oct. 25, 1887.



WITNESSES

Fletcher White
W. S. McKinney

INVENTOR

John A. Davis
B. C. Converse

Attorney

UNITED STATES PATENT OFFICE.

JOHN A. DAVIS, OF SPRINGFIELD, OHIO.

CHAMBER-VESSEL.

SPECIFICATION forming part of Letters Patent No. 372,063, dated October 25, 1887.

Application filed February 19, 1887. Serial No. 228,151. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. DAVIS, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Chamber-Vessels; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in chamber-vessels; and it consists in certain improvements in that part called the "diaphragm," as will be hereinafter fully set forth and described in the specification, and more particularly pointed out in the claims.

My invention relates to that class of chamber-vessels in which a urinal-diaphragm is inserted into and made a part of said chamber-vessel for rendering the latter noiseless, it being adapted for the use of both sexes.

Figure 1 is a top view of a chamber-vessel having my improved diaphragm therein. Fig. 2 is a vertical section of the same with the diaphragm shown entire.

A represents the chamber-vessel, and B² the diaphragm, which latter is attached by one edge throughout its entire length to the inner wall of the vessel A. It tapers in width from the part which forms its upper or receiving end to its lower or discharge end, which latter narrows almost to a point. The upper end is formed into a shallow dish-like part and extends from one side to about the center of the vessel A. At this point it curves reversely toward the attached side, and then again forward and downward. Its general form is that of a flat spiral, decreasing in width from its upper to its lower end, and bent edgewise to fit the inner wall of the chamber-vessel, to which it is securely attached. Its larger part at the receiving end occupies about one-fourth the cavity of the vessel, or a little more than that. Its length, width, and pitch may be varied. It is somewhat concave or dished on the upper surface and its free edge is made highest, so as to cause the stream issued upon it to be deflected toward the wall on the side to which

it is attached. This attachment extends from end to end. The discharge end is a little above the bottom of the vessel. A slight fillet is put in next the wall of the vessel to strengthen the attachment and take out the angle by filling it.

In the process of manufacture the diaphragm is molded, and when sufficiently dry to sustain its form is inserted into the chamber-vessel after the latter has been made, and before entirely dry. Care is taken to wet the surface where it is to be attached and to have the edge (which latter should be thicker than the body part) well covered with thin wet clay, so as to insure its complete attachment. It is then filleted along the edge next the wall of the vessel and the fillet concaved, when it is ready for the kiln.

The handle C may be placed on that side of the chamber-vessel most convenient for pouring out the contents.

I claim as my invention—

1. In a chamber-vessel, a diaphragm of spiral form attached to the inner wall by one edge, extending inwardly therefrom, and depressed next said attached edge to form a conduit close to said inner wall, substantially as and for the purpose set forth.

2. In a chamber-vessel, the inclined volute or spiral plate diaphragm attached by one edge throughout its length, having a broad receiving upper end, and tapering from the latter to the discharge end, substantially as hereinbefore set forth.

3. In a chamber-vessel, the improved spiral-shaped diaphragm B², having a heavy rounded bead on its top end, the latter extending from one side to about the middle of said chamber-vessel and curved toward the wall of the latter, thereby lessening its width from thence to its discharge end, said diaphragm being highest on its free edge to direct the stream of urine around near the wall of said vessel, substantially as and for the purpose hereinbefore set forth.

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

JOHN A. DAVIS.

Witnesses:

FLETCHER WHITE,
B. C. CONVERSE.