A. McKNIGHT.

SOUND PREVENTING MEANS.

APPLICATION FILED DEC. 26, 1912.

1,144,660. Patented June 29, 1915.

Fig. 1.

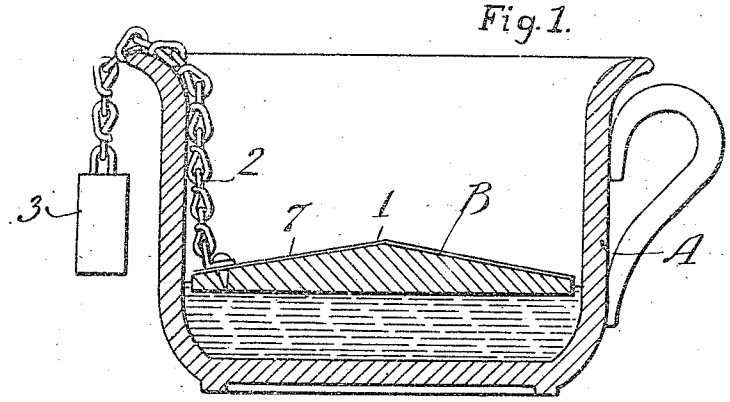
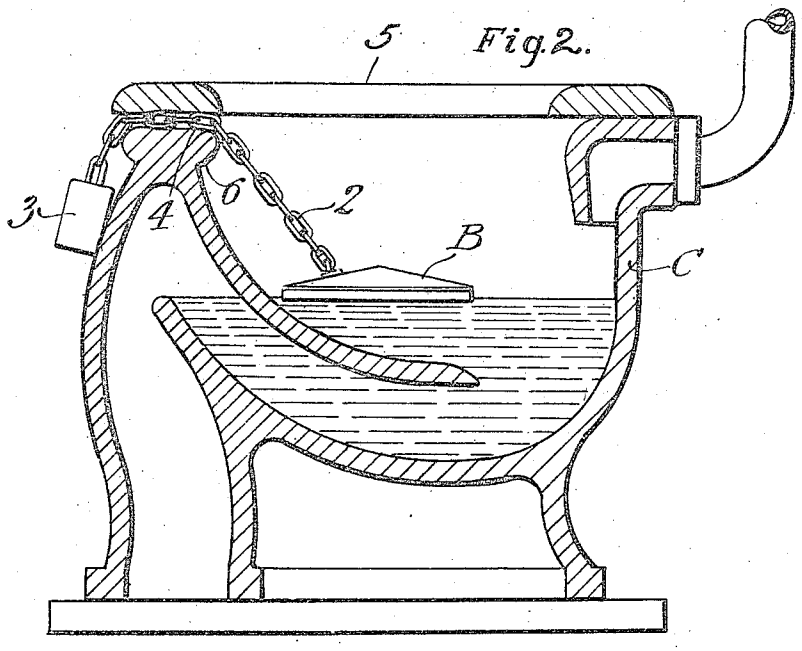


Fig. 2.



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SOUND-PREVENTING MEANS.

1,144,660. Specification of Letters Patent. Patented June 29, 1915.

Application filed December 26, 1912. Serial No. 738,676.

To all whom it may concern:

Be it known that I, ALEXANDER McKNIGHT, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Sound-Preventing Means, of which the following is a specification.

My invention relates to means for practically preventing any sound in the use of chamber vessels and the like, when used as a urinal. The embarrassment and annoyance often caused by the noise incident to the use of such vessels is a matter of common knowledge. Various devices to meet this condition have been proposed, such as specially constructed vessels, or an attachment to be removably secured to the vessel. Such devices have not proved entirely effective as sound deadeners and also being unsanitary or difficult to keep clean, and more or less expensive, have not proved a success.

My invention is designed to overcome the above-noted objections, and to provide a simple, effective, inexpensive and practical device for the purpose indicated.

My invention involves the principle of using a float which is non-resonant, and also free from actual contact with the containing vessel, so that it cannot transmit sound vibrations thereto, and which will also rise with the liquid in the vessel and thereby always remain in proper position, relative to the liquid.

Other objects of the invention will appear hereinafter.

In the accompanying drawings, Figure 1 is a sectional view of a chamber-vessel and a float combined therewith in accordance with the principles of my invention; Fig. 2 is a similar view of the invention adapted to a water-closet.

Referring to Fig. 1, a vessel A which may be of usual and well-known construction, contains a float B which may appropriately be termed a muffler float. The float is preferably in the form of a disk, flat on the bottom, but having a conical or convex upper surface. As shown, the upper face is inclined downward or tapered from the center to the circumference. The vessel A is preferably formed with substantially vertical walls, and the float made of such size as to provide only a slight clearance between it and the walls of the vessel. Thus formed, it serves, in addition to its function as a sound deadener, as a cover for the liquid and reduces the evaporation of the liquid and the escape of odors.

The float may be made of any suitable material, such as wood, cork, sheet metal made into a hollow disk, etc., but I prefer to make it of wood impregnated or coated with some water-proof material. I have found that ordinary pitch is well suited for this purpose, as it is cheap, easily applied, makes an effective liquid-proof coating, is not affected by the urine, and as it forms a smooth, glossy surface to which the liquid will not adhere, is sanitary and easily kept clean. It is applied by dipping the disk of wood in the hot pitch.

The float always remains on the surface of the liquid, and being formed of non-resonant material, a stream of water falling thereon is practically noiseless and runs off the edge of the float into the body of the liquid without splash or noise. For convenience in removing or handling the float, a chain or cord 2 may be attached thereto, and hang over the edge of the vessel. A weight 3 may be secured to the chain if desired, but is not usually required. A covering of water-proof fabric 7 or the like, may be secured to the surface of the float if desired.

In Fig. 2 I have shown my invention adapted to a water-closet C. The chain 2 in this instance extends through the usual space 4 provided by the rubber stops for the cover 5. When the closet is used as a urinal, the float B remains on the surface of the liquid, or the float may be pulled forward by means of the chain, so as to assume an inclined position with the front edge up out of the water. In this position it is adapted for use as a urinal for either sex when seated. In this forward position it does not interfere with the use of the toilet for other purposes. When it is desired to flush the toilet, the chain may be pulled out farther to carry the forward edge of the float up into engagement with the shoulder 6 formed beneath the rim of the bowl and tilt the float about the point 6 as a fulcrum, into a position that will not interfere with the flushing of the closet.

It will be noted that the float B does not require or form a part of any specially constructed vessel or urinal, but is adapted for the forms of vessels in common use.

I wish not to be limited to the particular forms of float and containing vessels herein shown, as the float is adapted to a more general use and various modifications in the form, materials used, and method of manufacture, might be made without departing from the spirit and scope of my invention.

What I claim as new and desire to secure by Letters Patent of the United States is:—

1. The combination of an open vessel forming a urinal, a sound preventing device substantially covering and forming a cover for the liquid in the vessel and free to rise as the liquid in the vessel rises, and means attached to said device adjacent one edge thereof and extending over the edge of the vessel to form a handle for manipulating said device, said means also opposing the downward tilting of said device at the point of attachment of said means.

2. The combination of the urinal vessel, a disk therein forming a sound preventing float on the liquid in the vessel, and free to rise and fall with the liquid in the vessel, a chain attached to the float and extending over the edge of the vessel and a weight attached to the outer end of the chain.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

ALEXANDER McKNIGHT.

Witnesses:

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V. D. MACUMBER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."