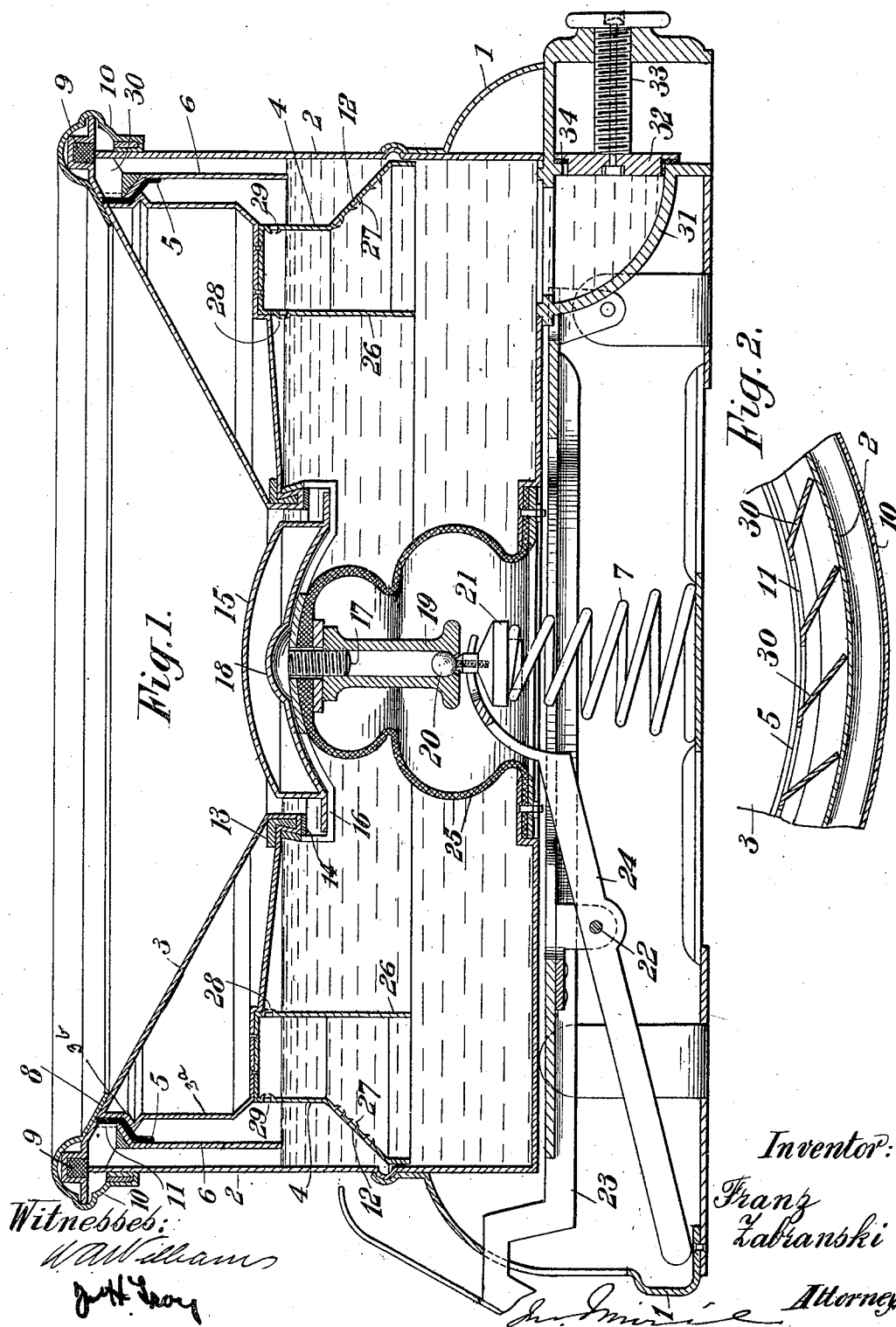


SPIITTOON.

999,537.

Patented Aug. 1, 1911.



UNITED STATES PATENT OFFICE.

FRANZ ZABRANSKI, OF VIENNA, AUSTRIA-HUNGARY.

SPITTOON.

999,537.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANZ ZABRANSKI, a subject of the Emperor of Austria-Hungary, and resident of Vienna, Austria-Hungary, have invented certain new and useful Improvements in Spittoons, of which the following is a specification.

This invention relates to improvements in spittoons.

The object of the invention is to provide means for flushing the surface of the funnel of the spittoon, the water for the flushing operation being in a casing surrounding the funnel.

A further object of the invention is to provide means for flushing a spittoon with water contained in a tank, and to separate the foreign matter in such manner that when the water is successively used it will not be impregnated with the foreign substances.

The invention also relates to the specific details of construction and arrangement of parts which will be hereinafter described and particularly pointed out in the claims.

In the drawings: Figure 1 is a vertical sectional view of my improved spittoon. Fig. 2 is a detail horizontal section taken through the upper portion of the casing to illustrate the water exit openings and the deflecting partitions adjacent thereto.

The numeral 1, indicates a hollow base on which is supported an outer casing 2, adapted to contain water or other antiseptic solution. The bottom of the casing is formed with a centrally disposed opening through which extends a collapsible element 25. On the upper end of the collapsible element fits a spider 16, from the center of which depends a screw 17 passing through the end of the element 25 and engaging a nut 19 threaded to engage the threaded stem 17. The nut 19, is hollow throughout its length and at its bottom it is formed with an opening with an annular inturned flange to form a seat for a ball 20 from the lower end of which depends a threaded stem which engages a threaded opening in a beveled disk 21. A projection on the bottom of the disk 21, forms a seat for the upper end of a coil spring 7, which rests on the bottom of the base 1.

An operating lever 23 is pivoted to a standard mounted in the base 1, and is provided with ears through which extends a pivot 22. On the pivot 22, is mounted a lever 24, the outer end of which abuts against the bottom of the base 1, while its inner end

is bifurcated and fits over the top of the disk 21. The outer end of the operating lever 23 extends through an opening in the base 1, for convenience.

On the upper end of the outer casing 2, is an annular plate formed with a recess to receive packing 9, which engages the edge of the casing 2, and extends inwardly to form a support for an inwardly extended overlapping flange 8, which fits over the annular ring on the upper edge of the casing 2, and its inner end is bent inwardly as at 10, to fit snugly the outer surface of the outer casing 2.

Depending from the inner end of the flange in which the packing 9, is mounted, is a depending partition or flange 6, formed at its upper end with a series of openings 11, adjacent which are tangentially arranged deflectors 30. The flange 6 is spaced from the walls of the outer casing 2 to form a passage for the liquid contained in the outer casing to the exit openings 11, during the operation of flushing the spittoon.

A hollow funnel 3 is mounted in the outer casing and within the depending flange or partition 6. The hollow funnel 3 is provided with a central opening, a bottom, side walls 3^a, and an upper inclined top which leads to the centrally disposed opening. Near the upper portion of the outer wall 3^a, of the funnel is a rib or bead 3^b, and a packing 5 located adjacent the upper portion of the partition 6, to normally close the openings 11 therein. The inwardly extended overlapping flange 8, overlaps the upper edge of the top 3 of the funnel and forms a deflector for the water passing through the openings 11, during the flushing operation.

A stiffening ring 13, is located at the inner end of the hollow funnel adjacent the centrally disposed opening to strengthen the parts, and below the ring is a valve seat. On the bottom of the hollow funnel and near the outer edge of the same are inner and outer depending flanges 26 and 4. The outer flange 4 flares outwardly and its lower edge fits snugly against the inner wall of the outer casing 2, and near the bottom of the hollow funnel are openings 29, having inwardly projecting deflectors, and in the flared portion of said flange are other openings 12, which are likewise provided on the inner side with deflectors 27. The depending flange 26 is provided near its upper edge adjacent the bottom of the hollow fun-

nel with a series of openings 28, which are provided on their inner sides with deflectors. The object of providing the openings with the deflectors is to prevent the free passage of foreign substances when the water is set in motion in the operation of flushing the funnel. The openings 28, and 29, serve to permit the air to freely pass, while the openings 12, permit of the passage of the water, and at the same time restrict the passage of foreign substance contained in the water.

Supported by the spider 16, is a float valve 15, having a central portion 18, which receives the head of the threaded stem 17. At the lower end of the float valve 15, is an annular flange which coöperates with a packing ring 14, secured on the bottom of the hollow funnel adjacent the central opening therein.

In operation, liquid is placed in the outer casing 2, as shown in Fig. 1, and when it is desired to flush the funnel of the spittoon, the lever 23 is depressed, which operates on the lever 24 and causes the upper end of said lever 24, to press down the beveled disk 21. This operation compresses the collapsible element 25, and pulls down the hollow funnel 3, to uncover the openings 11. When the hollow funnel 3, is pulled down, it creates a pressure on the water and forces the latter through the passageway formed between the outer casing 2, and the depending flange or partition 6, and out through the openings 11. The water passes through the openings 11 and by means of the tangentially arranged deflectors 30, is thrown out against the overhanging flange in a series of spiral streams and onto the upper surface of the funnel. As the funnel is lowered and the water is forced down the upper surface of the same, the float valve will fit snugly against the packing 14, and hold the water in the funnel, together with the foreign substances collected therein. Upon release of the lever 23, the spring returns the collapsible element to its normal position, which through the connections described, forces the funnel to its normal position, closing the openings 11, and opening the valve 15, and permitting the water and foreign matter accumulated in the funnel to pass through the opening and into the volume of water contained in the tank. The air confined in the tank below the funnel in the various operations passes through the openings 28 and 29, to avoid unnecessary compression and retarding of the operation of the spittoon.

By reason of the depending flanges 4 and 26, the foreign matter accumulated in the previous flushing operations and delivered into the casing is confined by the flanges and cannot escape through the openings 11, in the subsequent operations. The foreign

substances usually rise to the top, and by reason of the projections adjacent the openings 28, are prevented from finding their way through said openings. If the foreign substances should be heavier than the water, and tend to fall to the bottom, they cannot pass the partition 4, for the reason that the projections 27 surrounding the openings 12 would prevent their escape when the water is agitated during the depressing action of the funnel.

The bottom of the outer casing 2, is formed with an exit pipe 31, which opens at one side of the casing, and fitting therein is a plug 32 having a washer 34 to form a tight joint when the plug is in position. Swiveled to the plug 32, is a screw 33, engaging a threaded opening in an extension projecting through the base 1, and provided at its outer end with a finger operating piece. By this means when it is desired to empty the casing 2, after the flushing operation has been carried on a number of times, the operator may by operating the screw, discharge the water without liability of contact with the germs or other foreign substances likely to be in the liquid.

Claims.

1. In a spittoon, the combination with an outer casing adapted to contain liquid, a hollow collapsible element mounted in the outer casing, means for collapsing the hollow collapsible element, a frame secured to the collapsible element, a float valve supported by the frame, a funnel supported on the frame and provided with an opening to receive the float valve, a depending flange secured to the funnel, an overhanging flange secured to the outer casing, and overlapping the edges of the funnel, a flange depending from the overhanging flange and provided with openings, said latter flange being spaced from the outer casing and the lower portion of the depending flange on the funnel, the upper end of said depending flange on the funnel fitting snugly against the upper portion of the flange depending from the overhanging flange and closing the openings therein when the valve is in normal position, whereby when the collapsible element is operated funnel will be lowered and force the liquid through the openings in the depending flange and flush the surface of the funnel and the float valve will rise and close the central opening in said funnel.

2. In a spittoon the combination of an outer casing adapted to contain liquid, a depending flange formed with openings near its upper end and extending within and spaced from the walls of the outer casing, a funnel provided with a central opening and inner and outer depending flanges which extend below the depending flange on the outer casing, the outer flange on the funnel fitting snugly the upper part of the

depending flange on the outer casing adjacent the openings to normally close the same, said inner and outer depending flanges having vent openings above the level of the liquid in the outer casing, a float valve operating in the central opening in the funnel, means for normally supporting the float valve in its open position, and means for moving the funnel down in the outer casing to create pressure on the liquid and force same through the openings in the depending flange to flush the surface of the funnel and cause the float valve to rise and close the central opening in the funnel.

3. In a spittoon, the combination of an outer casing adapted to contain liquid, a base on the bottom of the outer casing, a hollow collapsible element mounted in the outer casing, a spring mounted under the collapsible element to normally distend the latter, a swivel connection between the spring and the hollow collapsible element, a pivoted lever having one end located above the spring and its opposite end in contact with the base, a second lever pivoted in the base, a pivotal connection between the two levers, a funnel mounted in the outer casing and provided with a central opening, a float valve located in the central opening, and above the collapsible element, and means between the funnel and the outer casing to force the liquid in the outer casing over the surface of the funnel and operate the valve to close the central opening in the funnel when the second mentioned lever is operated.

4. In a spittoon, the combination of an outer casing adapted to contain liquid, a collapsible element mounted in the outer casing, means for collapsing the collapsible element, a frame secured above the collapsible element, a hollow funnel supported on the frame, said funnel having a centrally disposed opening, a washer surrounding the bottom of the opening, a float valve operating in the opening and having a flange adapted to seat against the washer, inner and outer flanges depending from the hollow funnel, said flanges having vent openings

above the normal level of the liquid in the outer casing, the lower edge of the outer flange fitting closely the walls of the outer casing and is formed with openings, a flange extending from the outer casing and overlapping the upper edge of the hollow funnel, a depending flange extending from the overlapping flange and into and spaced from the walls of the outer casing, the upper portion of the said depending flange having openings which are normally closed by the upper portion of the outer flange on the hollow funnel.

5. In a spittoon, the combination of an outer casing adapted to contain liquid, and formed with an outlet opening an overhanging flange at the upper edge of the outer casing, a flange depending from the overhanging flange, said depending flange having openings and is spaced from the walls of the outer casing, a series of tangentially arranged deflectors adjacent the openings, a funnel formed with a centrally disposed opening and a depending flange, the upper portion of the latter depending flange normally closing the aforesaid openings and the lower edge fitting snugly the walls of the outer casing, the said depending flange having vent openings above the level of the bottom of the flange depending from the overhanging flange, a float valve operating in the centrally disposed opening in the funnel, a frame below the float valve and depending from the funnel, a collapsible element secured to the frame and the bottom of the outer casing, a stem depending in the collapsible element, a spring engaging the stem for normally holding the collapsible element in distended position, a lever for collapsing the collapsible element, a plug closing the outlet opening, and a screw for operating the plug.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

FRANZ ZABRANSKI.

Witnesses:

ADA MARIA BERGER,

AUGUST FUGGER.