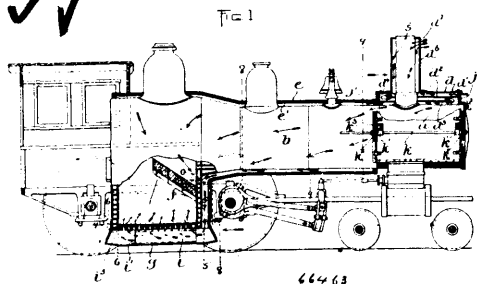


## No. 66,463. Locomotive. (Locomotive.)

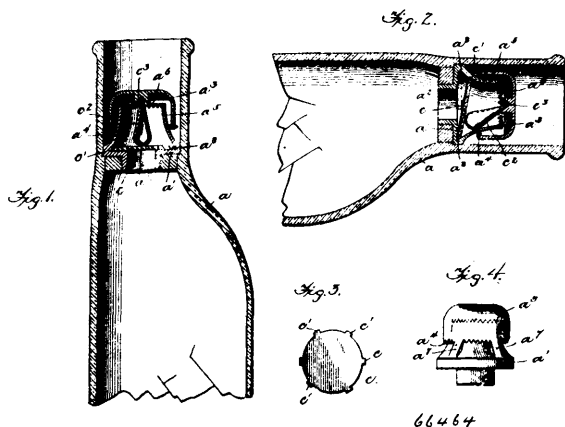


Henry H. Huff, Dorchester, Arthur Dudley Curran, Boston, and Smith Payne Burton, Reading, all in Massachusetts, U.S.A., 2nd March, 1900; 6 years. (Filed 15th February, 1900.)

**Claim.**—1st. A locomotive engine having an air chamber exterior to the smoke arch and adapted to be heated thereby, said chamber being provided with means for preventing the direct passage of air therethrough, an air conducting sheath or jacket surrounding the boiler and connected at one end with the air chamber and at the other end with the fire box, whereby heated air from the said chamber is conducted in a thin stratum along the heated external surface of the boiler and delivered additionally heated to the fire box, and means for varying the admission of air to the said chamber. 2nd. A locomotive engine having an air chamber exterior to the smoke arch, means for connecting said chamber with the fire box, air inlets at the front and rear ends of said chamber, and registers whereby either of said inlets may be closed. 3rd. A locomotive engine having an air chamber exterior to the smoke arch, means for connecting said chamber with the fire box, air inlets at the front and rear ends of said chamber, registers adapted to close said inlets, and means for simultaneously operating the registers, the said inlets and registers being arranged so that when one register is opened the other is closed. 4th. A locomotive engine having an air chamber surrounding the smoke arch and provided with internal horizontal partitions to form a sinuous passage, said passage having an air inlet at its front end, and an air conduit surrounding the boiler and extending from the other end of said passage to the fire box. 5th. A locomotive engine having an externally closed ash pan, means for heating air and conducting it to said inlet, and the longitudinal partitions  $i$ ,  $i$  extending from the forward end of the ash pan partly to the rear end, and a transverse partition  $i^1$  extending across the space between the partitions  $i$ ,  $i$  at the rear end thereof, whereby the space within the ash pan is divided into side conduits  $i^2$ ,  $i^2$ , communicating with a chamber  $i^3$  at the rear of the partition  $i^1$  for uniformly supplying air to all parts of the grate.

## No. 66,464. Non-refillable Bottle.

(Bouteille non réemplissable.)

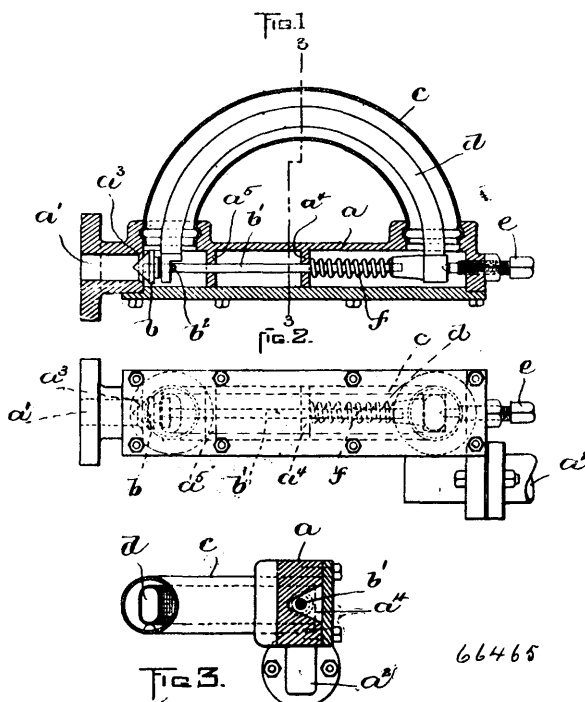


Charles Harris Whitaker, Boston, Massachusetts, and George James Tobin, Plainfield, New Jersey, U.S.A., 2nd March, 1900; 6 years. (Filed 15th February, 1900.)

**Claim.**—1st. An anti-refilling device comprising a valve chamber the bottom of which constitutes a valve seat surrounding a contracted passage, while the surface of the chamber above the valve seat is tapered or dome shaped and co-operates with the valve seat in forming an annular hinge member, a loose valve formed to fit the valve seat and having a diameter slightly less than that of said

annular hinge member, so that the valve slips edgewise on its seat, permitting the automatic engagement of the lower edge of the valve with the lower portion of the said hinge member to form a hinge when the bottle is tipped, and a float co-operating with the valve in said chamber, whereby the valve is closed upon its seat when liquid accumulates in the chamber, the surface of the chamber above the valve seat being formed to permit a limited opening of the valve and to prevent the displacement of the float and valve to an inoperative position. 2nd. An anti-refilling device comprising a head having an orifice and a valve seat surrounding the orifice, a tube or tubular flange surmounting said head and having a tapering surface the lower portion of which co-operates with the valve seat in forming an annular hinge member surrounding the valve seat, the said tube having an outlet at its upper end above the valve seat, a valve formed to fit the valve seat and having a diameter slightly less than that of the valve seat, so that the lower edge of the valve automatically engages the lower portion of the recess as to form a hinge when the bottle is tipped, a float located in the valve chamber, and a dome attached to the exterior of the tube, said dome extending across and below the outlet of the tube. 3rd. An anti-refilling device comprising a head having an orifice and a valve seat surrounding the orifice, a tube or tubular flange surmounting said head and having a tapering surface the lower portion of which co-operates with the valve seat in forming an annular hinge member surrounding the valve seat, the said tube having an outlet at its upper end above the valve seat, a valve formed to fit the valve seat and having a diameter slightly less than that of the valve seat, so that the lower edge of the valve automatically engages the lower portion of the recess to form a hinge when the bottle is tipped, a dome attached to the exterior of the tube and extending across and below the outlet of the tube, said dome having a seat on its under side, and a loose float interposed between the seat and valve, one end of the float being formed to engage the seat. 4th. An anti-refilling device comprising a head having an orifice and a valve seat surrounding the orifice, a tube or tubular flange surmounting said head and having a tapering surface the lower portion of which co-operates with the valve seat in forming an annular hinge member surrounding the valve seat, the said tube having an outlet at its upper end above the valve seat and a series of notches in said upper end, a valve formed to fit the valve seat and having a diameter slightly less than that of the valve seat, so that the lower edge of the valve automatically engages the lower portion of the recess to form a hinge when the bottle is tipped, a float located in the valve chamber, and a dome attached to the exterior of the tube and having a series of notches at its lower end.

## No. 66,465. Steam Trap. (Purge à vapeur.)



Charles Harris Whitaker, Boston, Massachusetts, and Alfred Catlin Whiting, Burlington, Vermont, both in the U.S.A., 2nd March, 1900; 6 years. (Filed 15th February, 1900.)

**Claim.**—1st. A steam trap, comprising an elongated casing having an inlet at one end, an outlet at the other end, a valve seat ur-