THE

# HARTFORD GLASS WATER-CLOSET,

HAVING ALL THE

Working Parts Incased in a Metallic Shell,

COMBINED WITH

Two Positive, Automatic, Air-Tight, Brass Check-Valves,
Backed by Two Water-Traps always Hermetically
Sealing the Closet Trap beneath the Glass
Bowl, and Perfectly Excluding all Smell,
Sewer Gas, and Malarious Disease.

The blown opaque glass never crazes, is non-absorbent, perfectly smooth, and covers the whole interior and keeps it clean and sweet. The Metallic air-tight check-valves operated by gravity can not stand open or yield to pressure in the sewer. The momentum of a long unbroken column of rapidly moving water of uniform size perfectly removes all deposits. Only clean water remains in any part. It can be safely located in any bed-room. It is sweet as a wash-bowl after months of constant use. Sanitarists pronounce it perfect in every respect.

MANUFACTURED BY

The Hartford Sanitary Plumbing Co., OFFICE NO. 72 MARKET STREET, HARTFORD, CONN.

POST-OFFICE BOX 514.

108 BEEKMAN ST. 262

Col. George E. Waring, Jr., who is authority in sanitary matters, says of Pan Closets, in an article in Scribner's Magazine for May, 1881, on the Sanitary Condition of New York, -after alluding to defects in its sewerage and drainage:-"The cardinal fault of all, not even surpassed by the unventilated soil pipe, is the Pan Closet. It probably is not, but it might certainly be, the invention of the devil. It consists of an earthenware bowl, closed at the bottom by a copper pan, arranged to hold water to a certain depth in the bowl. Seen from above, it has a most cleanly and innocent appearance. Immediately below the copper pan there is a chamber of horrors, known to the trade as a 'container'; and a container indeed it is! It contains what it pretends to remove, until no other utensil of human economy is one-half so foul. This container becomes splashed, and soiled, and coated, and furred with an accumulation of feecal matter and urine, which the mere tilting of the pan with its cupful of water is powerless to remove, and much of which remains in adhesion to the iron until wasted away by the slow process of a foul and dangerous decomposition, made still more foul and dangerous by the entire absence of fresh air. In this container, day and night, year in and year out, this decomposition is ever going The gases produced penetrate and infect, and escape from the sealing water of the pan, and the bacteria originating in fermentation in the sewer and soil pipe, spreading through the foul contents of the unflushed trap, find a fresh field for their activity in the coating of the container. When the pan is thrown down, after use, the pent-up gases escape through the seat, with a stifling whiff familiar to all who have been subjected to it—as who in a modern city has not been? The movement of the pan is actuated by a spindle which passes through the iron wall of the container, which often has sufficient windage for the constant escape of the contained air. The bowl is attached to the container by a scating of putty, which in time becomes corroded and leaky. These closets generally getting their supply of water by the operation of a valve, and an escape being needed for the leakage of this valve, a hole for its passage is made through the wall of the container, and this furnishes another means for the unobstructed escape of foul odors. It is radically unfit to be used within the walls of any dwelling house."

THE

## HARTFORD SANITARY PLUMBING CO'S

PATENT

# Glass Water-Closet,

WITH

WATER AND METALLIC CHECK-VALVE TRAPS COMBINED.

#### A PERFECT

Protection from Sewage Diseases.

Excels every other Water-Closet made in this or any other Country in Neatness, Safety for Health, Sweetness, and Perfect Construction and Operation.

MANUFACTORY AND OFFICE,
72 MARKET STREET,

HARTFORD, CONN.
POST-OFFICE BOX 514.



Fig. 1.—Side view.

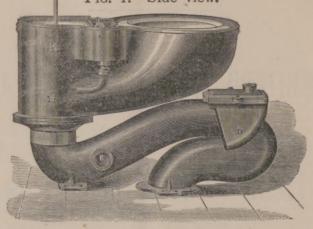


Fig. 2.—Top view.

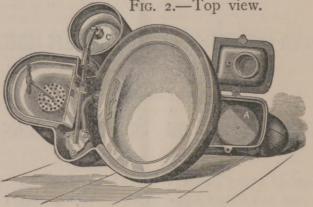
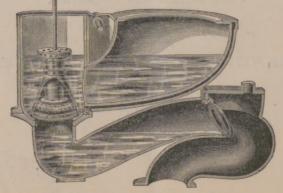


Fig 3.—Sectional view.



See Page 10 for other cuts.

#### THE HARTFORD GLASS WATER CLOSET

WITH

### Metal Check-Valves combined with Water-Traps TO EXCLUDE SEWER GASES.

This water closet shows the following decisive advantages over others at a glance.

1. The whole exposed interior of the closet, consisting of the bowl, stand pipe, float-tank and float, are made of blown opaque glass of the best quality. Glass lining is impervious to moisture, uric acid, or any of the oxides of the metals and pipes composing the closet or supply pipes. Nothing in or about the water-closet affects the glass, and the smooth surface prevents any adherence of filth. Hence all the exposed parts are always perfectly sweet, never discolor, and require no scouring.

All porcelain and earthern closets, or linings, craze or glaze-crack, so that the porous interior soon absorbs the uric acid and coloring from deposits and pipes, and emits noisome smells, and exhibits a disgusting appearance which cannot be remedied.

2. It has a perfect metallic casing for every part. If any of the interior parts are broken, leaky, or fail to operate no damage can result to the premises. A good watercloset will still remain for use.

3. There are two brass air-tight check valves, one in the principal trap beneath the closet, and the other in the plunger or overflow, acting by force of gravity, and combined with good water traps back of them, to prevent sewer or other gases passing through the water-closet. Both check valves must remain shut when the closet is not operated, never open more than is necessary, and when they are open, the water filling the traps back of the check valves perfectly seals the passage to the sewer. It is impossible for any pressure in the sewer to force sewer gas through this closet. The greater such pressure, the tighter these valves will necessarily be. The highest tides may flow back into the sewer; the heaviest gales blow into the sewer's mouth; floods may fill the sewer full; obstructions may partially or wholly choke the sewer; but no sewer gas, or deadly malaria, can pass these faithful guardians. No typhus fever, contagious disease, or need of a physician will enter a home by these doors. No foul smells in the apartments where these check valves guard will shame, annoy, or kill the occupants.

The best water traps in other closets resist deadly sewer gas with the mere pressure of a column of water one and a half inches high. How slight this is, can be easily tested by immersing a tube in water that depth, and blowing through it, while all sewers are liable to have greater pressures from the above mentioned causes daily pressing upon every trap connected with them. Hence the bad smells near the street inlets in Boston, New York, and other cities, where the sewers are filled with the tides which rise from four to six feet, and force the gas through the traps into the streets twice a day, and if into the streets more surely into the dwellings adjoining the street. Tides, winds, great rains, exhaust steam, and obstructions, constantly do this with ordinary water traps. Besides water absorbs sewer gas and thus communicates the gas through the closet into the

house, unless metallic valves are also used. No labor spent on such plumbing, no neatness or caution, can protect the life and health of the occupants of any building having such water-closets and traps.

The strong, air-tight, automatic, metallic check valves first introduced into this closet, are the only preventive known, and these are absolutely sure under all conditions.

- 4. The glass bowl is kept constantly filled with clean water by an automatic supply valve, and the foecal matter, falling into the water, cannot come in contact with the surface of the bowl and adhere to it before it is emptied.
- 5. This water-closet thoroughly empties the contents of the bowl, trap, and all connected parts through the check valve into the sewer, every time the discharge valve is raised.

From the mouth of the bowl to the entrance of the sewer, the parts are of uniform size, and the column of water therein moves out as a solid mass with great momentum, followed by a fresh supply of perfectly clean water.

The open trunks, and offsets of varying size between the bowl and traps of other closets prevent this. The bottoms of the pan valves and the upper portions of the traps and trunks, although constantly spattered with disgusting filth, are never washed clean, and much of their surface not washed at all. The small rill from the supply valve trickles around and over the solid matters without washing them out, because it has not sufficient momentum, and the body of flowing water does not fill the passage.

The entire exposed surface of every part of this watercloset is thoroughly scoured, as well as emptied, of every particle of impurity by the momentum of its uniformsized, and long column of rapidly moving water, every time the discharge valve is raised. The whole contents enter the sewer in less than four seconds, and clean water replaces them. Not a particle of foecal matter is found in the trap after the bowl is emptied.

6. There is neither empty trunk nor air-space beneath the bowl of this water-closet and above the water-trap, in which filth can ferment and discharge noisome smells into the apartment when the closet is operated. By connecting the side outlet of the bowl directly on to the end of the water-trap, nearly level with the water in it, this nuisance is perfectly avoided. Clean water excludes all air from the interior. If any fermentation could take place in the trap, the least resistance would be toward the sewer through the check valve, and not into the room.

In other closets having an air space beneath, the least resistance when the closet pan or valve is opened to operate the closet is upward through the closet into the apartment. No housekeeper can keep any bath-room or apartment sweet with such a filthy contrivance. Hence the great cry for ventilation, large rooms for water-closets, and avoidance of adjoining apartments.

The glass closet corrects this evil completely, needs no ventilation, can stand in any sleeping-room with perfect safety to health, and will be as free from any effluvia and as sweet as any article of furniture.

7. Hence this water-closet is more economical of space than any other closet. It can be set in a close closet in the interior of a house, if desired, without objection. Adjacent apartments will not be prejudiced by its location. This is an important advantage.

Other closets must be constantly scoured and ventilated, and are then a nuisance to the neighboring rooms.

8. The automatic supply-valve used in this closet will

not cause any hammering in the water-pipes under any pressure. Many other closets are very objectionable on this account.

- 9. The supply-valve and other working parts of this closet being inclosed in a perfect metallic shell, if any leak or breakage occurs, no damage can result to the apartment, or ceilings, furniture, or stocks of goods beneath. In buildings containing stores filled with valuable stocks of goods, or in expensive dwellings richly furnished and frescoed, this superiority should be well considered. Often such damage amounts to large sums.
- the floor, and on raising the seat above them is perfectly accessible to discover and correct any difficulty in their working. By pulling the plunger out of its stand-pipe, and raising the cap at the other end of the trap, the entire interior is exposed to view and within easy reach of the hand. A screw-driver is the only tool needed to effect any repair or remove any obstruction. A child could correct any difficulty. All traps beneath the floor should be removed before setting this closet.

The nasty hopper closets with traps beneath the floor can be repaired only by expensive plumbers, and by removing all adjacent wood-work, and are always reeking with filth.

The traps in the Hartford water-closets after being used for months are found as clean and sweet as when new.

11. The water-closet and trap beneath with the check valve form integral parts of each other, and are constructed and sold together so that no labor or expense are required except to set the closet in its place. They are thoroughly tested before leaving the manufactory, and unless injured in transportation or setting are guaranteed to work well.

The metallic shells are thoroughly painted before the glass lining is set to prevent corrosion. The glass is set in a non-hardening cement, impervious to water, to allow for contraction of the shell without breaking the glass. The seats of the discharge valve and all the packings are made of pure rubber without sulphur, and will last for long periods and retain their elasticity. Every motion of the different parts, the check valves, the discharge valve, float, trip, and main valve-seat is positive and without friction to wear out the packings. The plunger is nickel plated and rests upon a brass seat. No portion of the whole apparatus can corrode and stain other portions. No other closet introduced into this country equals this in nice workmanship and material.

- 12. It is not only the best made, the safest for health, the neatest, the best operating water-closet ever constructed, but it is the most economical to purchase. It is centered so that it can be set in place of any other water-closet where a changed is desired. The expense is all included in the original purchase and first setting. No extra parts are required to complete it for operation. No repairs for years should be necessary with fair usage. No sickness can come from its faulty operation, no premises or property damaged by its failure to do its duty. The house-keeper and every member of a family will feel proud of its neatness, and the daily use of this nice piece of sanitary furniture will be an indispensable luxury.
- 13. For public buildings, halls, hotels, manufactories, depots, and other places where there is great and promiscuous use, this water-closet and connected trap surpass all other water-closets in every essential particular. The great space and expensive ventilation others require to make the foul smells they emit bearable; the extra attendance necessary to keep them clean and make them operate; the ex-

pensive plumbing repairs from faulty construction and leakage, and the inaccessibility of the traps to remove obstruction, are wholly avoided by the use of these waterclosets. It acts automatically except the raising of the discharge valve, and therefore cannot be abused by violent use. Every part has a positive movement without friction, and cannot wear out. All the excreta are deposited in water without contact with the surface of the closet, and. when the discharge valve is opened, they, with all the foul water in both bowl and trap, are completely discharged into the sewer, and only clean water ever remains in any part of this water-closet. The entire interior surface of the trap is not only washed but scoured by each operation of the closet. There is greater economy in the use of water than where a constant stream of water is permitted to run while the closet is being used. The metallic casing removes all danger from leakage or breakage of any minor part. And the accessibility of all parts permits immediate discovery and removal of any obstruction without damage or expense. They operate without noise, and do not prejudice any other apartments. But more than all, they can be located in any apartment without offense, and be safe for the occupant's health.

- 14. Two sizes of water closets are made. One has a glass bowl 14 inches by 112 inches, the other 16 inches by 12 inches in diameter.
- 15. A new arrangement for sprinkling or bathing the afflicted parts of those suffering from piles, chafing, &c., is furnished with the closet when desired.

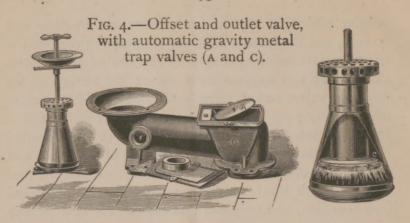


Fig. 5.—Sectional view of feed-valve.

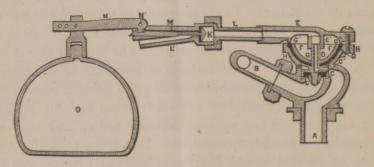
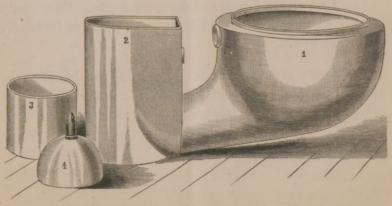


Fig. 6.—Glass parts.



1-Bowl. 2-Stand pipe. 3-Tank. 4-Float.

This closet and trap, thoroughly tested and ready to set, with full instructions for doing it, will be shipped, upon request, to any party from a Jobber or the Factory when any plumber is unable to exhibit or furnish them to his customers.

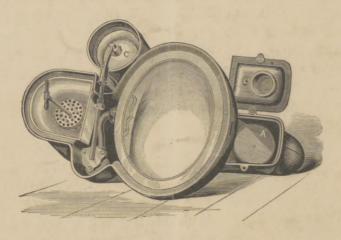
SEND FOR PRICE LIST.

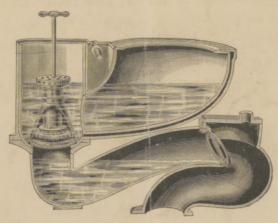
#### THE HARTFORD SANITARY PLUMBING CO'8

PATENT

## GLASS WATER-CLOSET,

With Combined Water and Metallic Check-Valve Traps.





All interested persons are requested to call at the Factory, or any Agent's Show Rooms, and examine the above Water-Closet in operation. Agents in all the principal Cities.