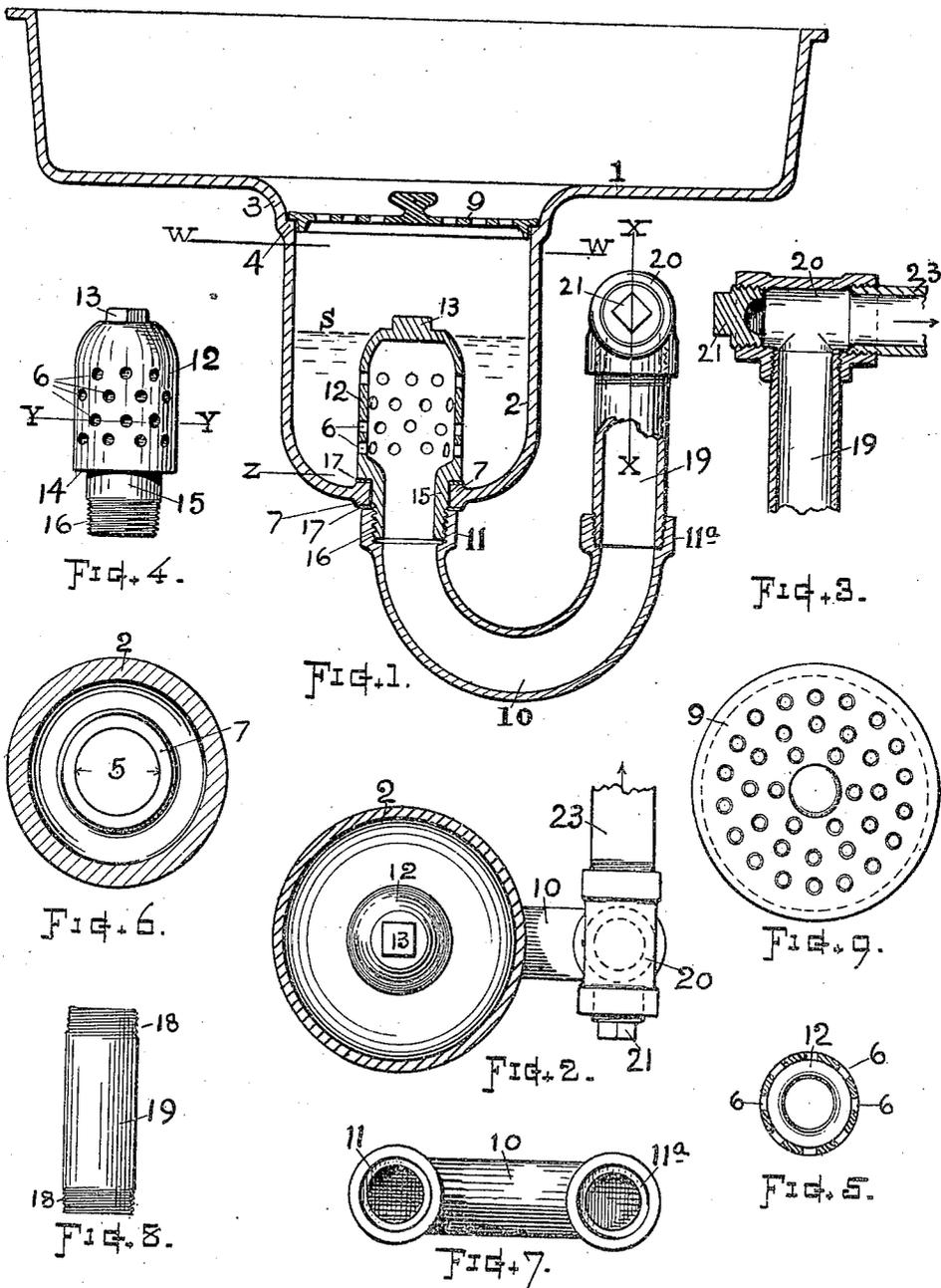


T. H. HALL.
 TRAP FOR KITCHEN SINKS.
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Patented June 7, 1910.



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TRAP FOR KITCHEN-SINKS.

960,901.

Specification of Letters Patent.

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Application filed October 23, 1909. Serial No. 524,149.

To all whom it may concern:

Be it known that I, THOMAS H. HALL, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improved Trap for Kitchen-Sinks, of which the following is a specification, reference being made therein to the accompanying drawings.

My invention relates to the improved construction and peculiar organization of members forming the trap in combination with a kitchen sink; the objects being to provide a construction that is simple and economical for manufacture; convenient for instalment in any situation; efficient and durable for service, and easily accessible for care and cleaning when in use. Also, in which the seal is exposed and not liable to be affected by undiscoverable leakage. These objects I attain by a mechanism of the peculiar construction shown in the drawings, wherein—

Figure 1 represents a central vertical section of my improved kitchen-sink trap. Fig. 2 is a horizontal section or plan at line W W on Fig. 1. Fig. 3 is a vertical section of the waste-connecting tee-head at line X X. Fig. 4 is a separate side view of the dome member. Fig. 5 is a cross section of the dome at line Y Y on Fig. 4. Fig. 6 is a horizontal section of the bottom of the catch-basin at line Z on Fig. 1. Fig. 7 is a separate plan view of the tubular U-shaped bottom-member. Fig. 8 is a side view of the tubular up-take member; and Fig. 9 is a plan view of the removable primary strainer.

Referring to the drawings, the numeral 1 indicates the body of a kitchen sink made of metal or cast-iron, and provided with a well or catch-basin 2 depending from the bottom thereof and firmly attached thereto, preferably by being cast integral with the sink bottom. The top of the catch-basin is open to the interior of the sink, with a downward incline or curve 3 and an offset ledge 4 about the opening; while its bottom is inwardly curved and provided with a non-threaded opening 5 therethrough, and preferably reinforced at the outer and inner sides of the casting with annular bearing facets 7 approximately parallel with each other, or which may be dressed off accurately parallel if so desired.

The numeral 9 indicates a perforated

disk-shaped strainer that is seated and supported upon the ledge 4; fitting and filling the open top of the catch-basin, but free to be lifted off and replaced at will.

10 indicates a semicircular or U-shaped pipe or tubular member having internally threaded hubs, 11 and 11^a, at its respective ends; and 12 indicates a hollow dome-shaped member, (hereinafter called the dome) the height of which equals about one half the depth of the catch-basin, more or less, and its diameter some three fifths, more or less, of the internal diameter of the cylindrical catch-basin. Said dome is laterally perforated, the holes 6 being through its sides only and at some distance down from its top end, which is closed or solid, and furnished with a wrench-engaging means or nut 13 thereon. The lower end of this dome 12 is provided with an annular shoulder 14 and a tubular nipple or projection 15 adapted to extend out through the bottom opening 5 and fitted with a screw-thread 16 to screw into the hub 11 of the U-shaped member 10.

An upright tubular member 19, threaded at its ends 18, is secured in the outer hub 11^a of the U-shaped member 10 and extends up outside the catch-basin to about the level of the head of the dome; and is there provided at its top end with a tee-head 20 secured thereon. A removable screw-plug 21 is arranged in one end of said tee as a stopper, and the discharge or waste-pipe 23 is connected with the other end of the tee, and may lead in any required direction.

The parts including the semicircular tubular member 10, up-take 19, tee-head 20 and plug 21 can be made up and handled as a single piece; such parts being of stock forms render the construction simple and inexpensive.

When setting up the sink and assembling the parts, the tubular end 15 of the dome is passed down through the non-threaded opening 5 and screwed into the end of the U-shaped member 10; said dome serving as a bolt to clamp the bottom of the catch-basin 2 firmly and rigidly between the shoulder 14 and end of the U-shaped member, as indicated in Fig. 1; the interior of the dome communicating with the semicircular tube and thence through the up-take to the head and exit. Suitable annular packing gaskets 17 may be used at the joint if desired. The

seal of the trap is at the level of the tee-head, or as indicated by the water level S on Fig. 1.

By connecting the U-shaped member 10 and dome 12 to the bottom of the well 2 in the manner described, the parts can, with equal facility and convenience, be assembled so that the outlet will stand at any point of the compass in relation to the position of the sink; thus accommodating the mechanism to any situation ordinarily occurring in the installation of kitchen sinks in different buildings and places of use, and with waste pipes leading in any direction. By removing the unattached strainer 9 ready access is afforded for applying a wrench to the dome-nut 13 when setting up; or, when in use, for cleaning out the catch-basin or removing grease that collects along the water-level; while the permanent strainer or dome 12 prevents any obstructive thing passing through the trap, even if the disk strainer is accidentally or purposely left out.

The construction of the trap is of such character that any leakage that could destroy the seal would at once be discovered.

I am aware that different kinds of traps, combined with sinks, have heretofore been patented, in which a depending catch-basin forms one of the elements; it will therefore be understood that I do not broadly claim a sink-trap irrespective of its construction and manner of combination.

What I claim and desire to secure by Letters Patent, is:—

1. A trap for kitchen sinks, comprising a catch-basin attached to the bottom of the sink, a central hollow dome standing up within said catch-basin and having lateral

perforations through its sides and closed at its top, a U-shaped tubular member beneath the basin, one end thereof connected with said dome, a vertical up-take tube united with the opposite end of said U-shaped member and provided with a tee-head upon its top end above the level of the perforations in the dome, said tee-head having a removable plug in one end thereof, and its other end adapted for the attachment of a waste-pipe thereto.

2. In a combined kitchen sink and trap, the combination as described, of the sink body having a catch-basin thereon, said catch-basin provided with a non-threaded opening through its bottom, a removable strainer loosely supported within the upper part of the basin, a laterally perforated hollow dome having a closed top with wrench engaging means thereon, and an annular shoulder and tubular downwardly projecting lower end nipple passing through the non-threaded bottom opening of the basin, a semi-circular or U-shaped tubular member having one of its ends threaded to the downwardly projecting end of the dome beneath a catch-basin, the up-take tube threaded to the opposite end of said U-shaped member, a waste-connecting tee-head attached to the top end of the up-take, approximately level with the top of the dome, and provided with a removable threaded stop-plug in one end of the tee.

Witness my hand this twenty first day of October, 1909.

THOMAS H. HALL.

Witnesses:

CHAS. H. BURLEIGH,
A. G. DAVIS.