

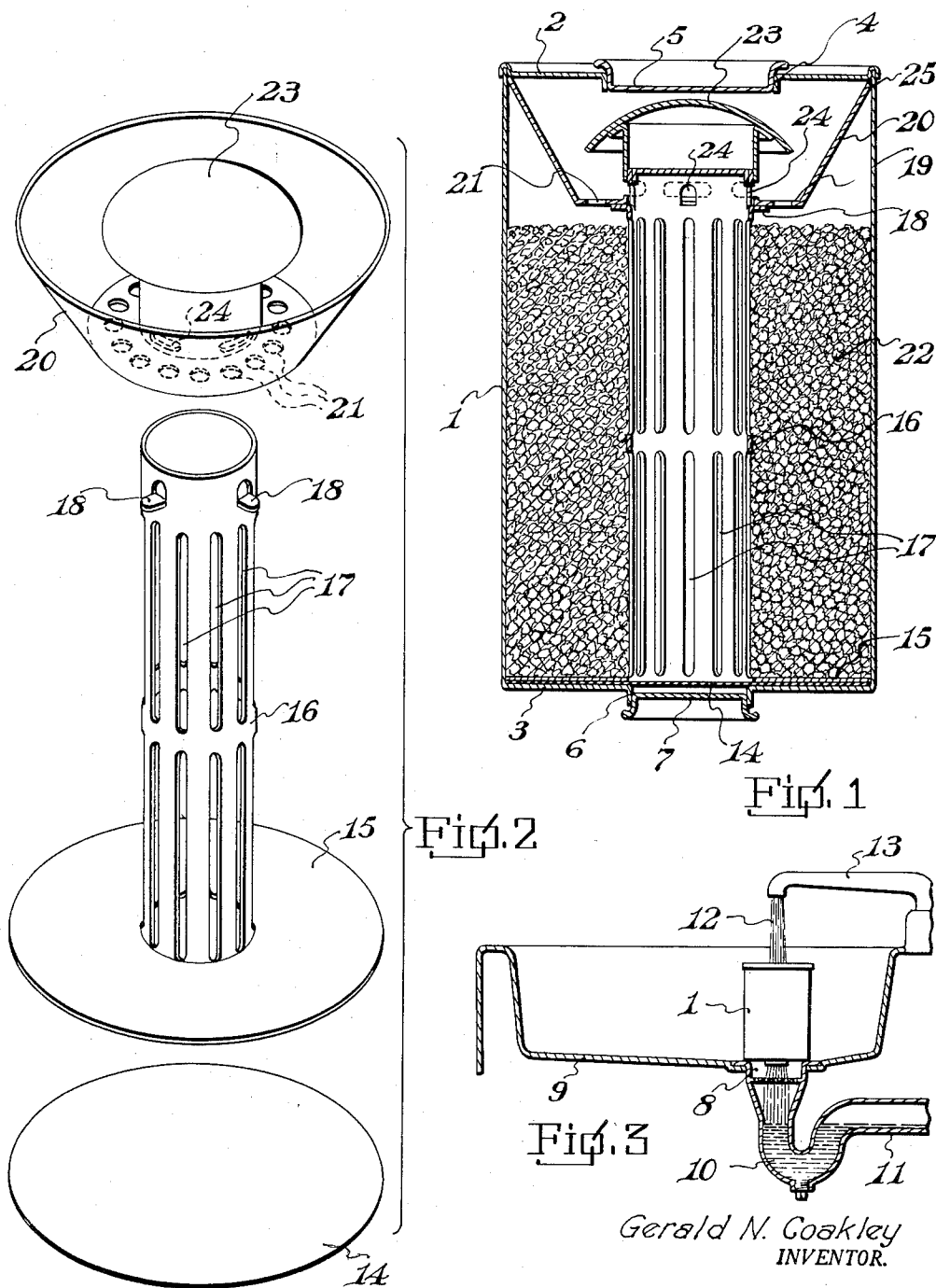
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DRAIN PIPE SOLVENT DISPENSER

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DRAIN PIPE SOLVENT DISPENSER

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The invention relates to solvent containers and dispensers of a type adapted to be disposed over a drain opening, for instance a sink, and constructed in a manner whereby water may be passed therethrough and through the granular chemical solvent in the dispenser so the drain pipe may be cleaned of grease and other foreign matter, incident to the chemical action of the solvent.

A further object is to provide a solvent container, in which container the granular solvent may be vended, and the container constructed in a manner whereby it can be utilized for liquefying the granular chemical solvent so the liquefied solvent can be directed through a drain pipe without danger of burning the hands of the operator, or marring the finish on sink drain boards, etc.

A further object is to provide a solvent dispensing container comprising a body having a water receiving open in the upper end of the body, and a discharge opening at the lower end of the body, and an apertured tubular member within the body on the axis thereof, and adapted to be surrounded by a granular solvent, and means for deflecting water outwardly and downwardly into the granular solvent for liquefying the solvent, so the liquefied solvent will pass downwardly through a drain pipe. Also to provide a frangible closure disc at the lower end of the body for preventing loss of fine particles of solvent until the frangible member is fractured incident to the liquid solvent engaging the frangible member. The frangible member is preferably formed from a porous paper.

With the above and other objects in view the invention resides in the combination and arrangement of parts as hereinafter set forth, shown in the drawing, described and claimed, it being understood that changes in the precise embodiment of the invention may be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawing:

Figure 1 is a vertical transverse sectional view through the dispensing device.

Figure 2 is a collective detail perspective view of the interior parts of the dispensing device, showing them in position to be assembled.

Figure 3 is a vertical transverse sectional view through a conventional form of sink and trap, showing the device in position for use.

Referring to the drawing, the numeral 1 designates the cylindrical body of the dispenser formed of sheet metal, 2 the top of the container and dispenser, and 3 the bottom. The top 2 is provided with a filling and water receiving opening 4, normally closed during shipping and non-use by a friction closure 5. The lower end of the device is provided with a discharge opening 6 having a friction closure 7. Both closures 5 and 7 are removed when the dispenser is placed in position over the drain opening 8 of the sink 9, for discharging liquid chemical solvent through the trap 10 and discharge pipe

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11, clearly shown in Figure 3. Water 12 is supplied through the faucet 13 of the sink equipment.

Disposed in the bottom of the body 1 is a weak paper disc 14, easily dissolves or fractures when wet, and resting on the upper side of the disc 14 is the annular flange 15 carried by the lower end of the slotted tube 16. The slots of the tube are designated by the numeral 17. The tube 16 is axially disposed and preferably formed integral with the flange 15, and extends upwardly and terminates below the top 2 of the container.

Resting on struck-out lugs 18 carried by the upper end of the tube 16 is the lower end 19 of an inverted frusto conically shaped member 20. The lower end 19 is provided with circumferentially arranged apertures 21, through which apertures, water, entering through the opening 4, passes downwardly and percolates through the granular solvent 22. The liquefied solvent passes through the slots 17, disintegrating the paper disc 14, and from this point the liquid solvent passes through the trap 10 and drain pipe 11 for disintegrating grease and foreign matter.

Disposed on the upper end of the tubular member 16, directly below the opening 4 is a deflecting dome 23, which dome deflects the incoming water outwardly, so the water will pass downwardly circumferentially in the member 20, and through the aperture 21. It will be noted that water will also pass through the apertures 24 above the bottom 19 of the member 20 so it will quickly reach and wet the frangible paper 14.

In assembling the device the closure 7 is placed in position, and the paper disc 14 placed in the bottom of the can; following this, the tubular member 16 is placed in the can and the granular solvent poured around the tubular member. The frusto conically shaped member 20 is then placed in position in the upper end of the can on the lugs 18, and then the deflecting dome 23 is placed in position over the upper end of the tubular member 16. Following this operation, the top 2 is placed on the can and crimped into position. It will be noted that the upper end of the member 20 engages the top and sides of the body at 25, thereby forming a rigid structure, and one wherein the tubular member is maintained in axial relation at all times; following this, closures 5 and 7 are placed in position and the dispenser is then ready for storage and shipment purposes. After a drain clearing operation the dispenser can be discarded if desired.

From the above it will be seen that a chemical dispenser is provided which can be easily placed over a drain opening, and the chemical dissolved and discharged into the drain in a manner whereby it will not come into contact with the hands of the operator, nor damage the sink, drain boards or adjacent parts, and one which eliminates the possibility of the chemical solidifying in the traps or waste lines of the plumbing.

The invention having been set forth what is claimed as new and useful is:

1. As an article of manufacture, a combined solvent container and dispensing device adapted to be seated vertically over a drain opening in a sink or the like and in which device a granular solvent is contained to be liquefied and discharged through the drain opening, said device comprising a body member having a chamber therein for housing the granular solvent, said body member having upper and lower ends the lower ends of said body member having a discharge opening, the upper end of said body member having a water receiving opening, a perforated tubular member disposed within the chamber of the body member and around which the granular solvent is disposed, a water disintegratable disc closing the discharge opening at the lower end of the tubular member, a dished member carried by the upper end of

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the tubular member and having an imperforate upwardly and outwardly extending side wall that engages the body member and overlies the solvent and having a perforated bottom extending radially from tubular member with the perforations thereof surrounding the tubular member and a deflecting dome overlying and closing off the upper end of the perforated tubular member below the water receiving opening and forming means whereby water is deflected circumferentially outwardly onto the bottom of the dished member,

2. A device as set forth in claim 1 wherein the bottom of the dished member rests on struck-out lugs carried by the upper end of the tubular member, said struck-out lugs forming water openings through the upper end

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of the tubular member above the bottom of the dished member.

3. A device as set forth in claim 1, wherein said lower end of the body member has a depending rim surrounding the discharge opening and a closure frictionally fitted in said rim and a closure removably seated in the water receiving opening in the upper end.

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