



FIG. 1

CABINET WITH SLOPED FLOOR

BACKGROUND OF THE INVENTION

[0001] This invention relates broadly to the art of sinks, and more particularly to a sink cabinet having features designed to warn homeowners of water leaks in the sink plumbing enclosed by the cabinet.

[0002] It is common practice to construct sink assemblies having enclosed cabinets positioned below the sink bowls. In this type of sink assembly, the sink cabinet supports the sink bowl and encloses the sink bowl plumbing. Such sink assemblies have been found to be more aesthetically pleasing than "bare" sink bowls and have also had the practical advantage of using what would otherwise be wasted space below the sink bowls. However, such structures magnify problems that were previously not significant.

[0003] One problem involved with the above described sink assemblies is that water often gets into the enclosures below the sink bowls and causes damage. There are various sources of water infiltration. For example, water often leaks through the cabinet tops around the sink bowls and other openings in the cabinets. Also, the water supply and drain pipes of a sink bowl may develop leaks. Further, condensation often takes place on the sink bowl and/or the water supply and drain pipes in the cabinet enclosure. This water problem is enhanced by a lack of visibility for sink users of the enclosed spaces under the sink. Water damage often occurs without users realizing that water is accumulating below the sink bowl. Such water damage includes mildew, rotting of the cabinet base, damage to the building floor, and damage to articles stored in the cabinets below the sink. Thus, it may be seen that there is a need for a sink cabinet that warns users of water leaks. Preferably, such a cabinet would warn users of leaks as soon as the leaks develop and would further provide an indication of the severity of the leaks. Such a cabinet should also remove most of the water leakage to prevent the accumulation of water within the cabinet.

SUMMARY OF THE INVENTION

[0004] The present invention provides a sink assembly having a sink bowl supported by a cabinet, wherein the cabinet encloses the sink water supply and drain pipes. The cabinet includes front opening doors and a floor that slopes downwardly towards the doors. Water leaking inside the cabinet strikes the sloped floor and flows down the floor and exits the cabinet in front of the doors. By this means, leaking water is prevented from accumulating within the cabinet. Rather, the water accumulates in front of the cabinet where it may be noticed by a sink user. Further, large leaks tend to create large accumulations of water, while small leaks create small accumulations, thus a user is provided with an immediate visual indication of the magnitude of the leak. These and other features of the invention will become more apparent from the following detailed description of the invention, when taken in conjunction with the accompanying exemplary drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] FIG. 1 is perspective view of a sink assembly having a cabinet with a sloped floor in accordance with the principles of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0006] FIG. 1 depicts a sink assembly 10 including a cabinet 12, a sink bowl 14, a water faucet 16 disposed adjacent to the sink bowl, and a sink bowl drain 18. Typically, the cabinet is supported by a floor 28, and in turn supports the sink bowl and the water faucet in cutouts 28 and 30 respectively, which extend through a top panel 26 of the cabinet 12. The sink bowl extends through the cutout 28 into the interior of the cabinet where the bowl is connected to the drain. The drain in turn connects to the house or building sewage system (not shown) by means known to those skilled in the art. In addition, the water faucet is typically connected to hot and cold water supply pipes or plumbing 17. Such plumbing typically includes hot and cold water shutoff valves which are enclosed within the cabinet. Hot and cold water supply plumbing is known to those skilled in the art.

[0007] The cabinet of the present invention further includes a housing 20, a pair of front opening doors 24, the top panel 26, and a floor 22 which slopes upwardly from the doors. The floor slopes upwardly at an angle "I," as shown in FIG. 1. Preferably, the floor should have sufficient slope to allow water to rapidly run down the floor, yet the degree of slope should also be sufficiently moderate so as to allow ordinary household items such as containers of cleansers and similar items typically stored under sinks to be stored without the items falling over. In this respect, it has been found that a degree of slope within a range of about 0.5 to about 5 degrees is generally satisfactory, with a slope of 1/8 inch of vertical height for every 12 inches of depth being particularly preferred. It should also be noted that although a pair of front opening doors are described in the exemplary embodiment, those skilled in the art will understand that a front panel, a single door, inwardly opening doors, or sliding doors, among others are equally suitable. Those skilled in the art will also understand that the cabinet of the present invention may be expanded to include multiple sink bowls, which are common in commercial buildings and some homes. The invention may be further expanded to include cabinets containing hoses, nozzles, and the like.

[0008] The sink assembly having a cabinet with a sloping floor overcomes certain shortcomings of the prior art. The sloped floor causes water from any sort of leak to run out of, and accumulate in front of, the cabinet. Thus, a user is immediately provided with a visual indication of the leak. In addition, the user may judge the size of the leak and thus the severity of the problem by the volume of water accumulated in front of the cabinet. As can be seen, the sloping floor prevents potential water damage to both the cabinet and the floorboards or other structure supporting the cabinet. It will also be appreciated that the sink assembly described herein is relatively uncomplicated in structure, and does not add any appreciable cost to the production of sink assemblies. While only the presently preferred embodiments have been described in detail, as will be apparent to those skilled in the art, modifications and improvements may be made to the system and method disclosed herein without departing from the scope of the invention. Accordingly, it is not intended that the invention be limited except by the appended claims.

What is claimed is:

1. A sink assembly for use in a building comprising:
 - a cabinet for enclosing a sink bowl, the cabinet including a housing having a top panel, a front panel, and a floor sloping upwardly from the front panel;
 - a sink bowl, the sink bowl being disposed within the top panel and being connected to a drain, wherein the drain is enclosed within the cabinet;
 - a water faucet located to provide water to the sink bowl, wherein the water faucet is connected to water supply plumbing;
 wherein, water leaking from the sink bowl, drain, faucet, or faucet plumbing runs down the sloping cabinet floor and out the front panel of the cabinet thereby alerting a user to the leak.
2. The sink bowl assembly of claim 1, wherein the front panel is a door.
3. The sink bowl assembly of claim 1, wherein the door is a front opening door.
4. The sink bowl assembly of claim 1, wherein the front panel is a plurality of front opening doors.
6. The sink bowl assembly of claim 1, wherein the floor has a slope within the range of about 0.5 to about 5 degrees.
7. The sink bowl assembly of claim 1, wherein the floor has a slope of $\frac{1}{8}$ of vertical height for every 12 inches of depth.
8. The sink bowl assembly of claim 1, wherein the floor has a slope greater than zero degrees.

9. A sink assembly for use in a building comprising:
 - a cabinet for supporting a plurality of sink bowls from a floor, the cabinet including a housing having a top panel, a front panel, and a floor sloping upwardly from the front panel;
 - a plurality of sink bowls, the sink bowls being disposed within the top panel and being connected to a drain, wherein the drain is enclosed within the cabinet;
 - a plurality of water faucets, each faucet being disposed on the cabinet and adjacent to one of the sink bowls, wherein each water faucet is connected to water supply plumbing, the plumbing being enclosed within the cabinet;
 wherein, water leaking from the sink bowls, drains, faucets, or faucet plumbing runs down the sloping cabinet floor and out the front panel of the cabinet thereby alerting a user to the leak.
10. The sink bowl assembly of claim 9, wherein the front panel is a door.
11. The sink bowl assembly of claim 9, wherein the door is a front opening door.
12. The sink bowl assembly of claim 9, wherein the front panel is a plurality of front opening doors.
13. The sink bowl assembly of claim 9, wherein the floor has a slope within the range of about 0.5 to about 5 degrees.
14. The sink bowl assembly of claim 9, wherein the floor has a slope of $\frac{1}{8}$ of vertical height for every 12 inches of depth.
15. The sink bowl assembly of claim 9, wherein the floor has a slope greater than zero degrees.

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