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ABSTRACT

~~TITLE:-~~ A CLOG FREE EASY DRAIN SINK APPARATUS

A Clog Free Easy Drain Sink apparatus (100) is redesign to the existing kitchen sink. The existing sink have poor water filter mechanism and techniques through which the user has to face difficulties cleaning it and also visual of the dirt and clogged water. The Clog Free Easy Drain Sink apparatus (100) removes clogged waste inside the kitchen sink (2a) by collecting it and cleaning without having any direct hand contact characterized in that no filter in sink area (3a) is performed and the treatment is done further (3c) attached to the sink itself (3b) which filters the waste and the clogged water (3c) which is sent further (3d) through joinery (3e). Also, the waste water that keeps on piling up after the clog no longer remains and retains inside the sink (2a), thus no dirty water visible to the user.

[FIGURE 3]

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[FIGURE 3]

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FORM 2

THE PATENTS ACT, 1970
(39 of 1970)

&

COMPLETE SPECIFICATION
(See section 10 and rule 13)

A CLOG FREE EASY DRAIN SINK APPARATUS

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The following specification particularly describes and ascertains the nature of this invention and the manner in which it has to be performed:

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1. DESIGN DESCRIPTION

1. Field of invention

The design and working of a “kitchen sink” at any place in an Indian scenario is such that it is mostly used for washing utensils and washing hands. In the current design of sinks, the water outlet has very fine/sub-fine holes/pores meant to filter out water from the mixed food particles which eventually gets stuck in that outlet and even a very small volume clogs the sink drain. This clogging eventually results in accumulation of water inside the sink area which goes on increasing with regular water usage over it. Now, as per the observations made, such a clogged sink firstly, gives a very poor view and sense of hygiene to the user due to which he/she avoids using it. Secondly, when it comes to cleaning such a clogged sink, the user/cleaner has to go down and reach the outlet holes and mostly with the use of his/her bare hands or sometimes with the help of some hand tool. He/she has to take out the particles trapped and clogged over there manually and during this course, he/she has to get his/her hands wet and dirty by going through the water and reaching the outlet.

2. Description of related art

No specific design/engineering intervention exists in the market specifically in the Indian scenario. However, some interventions have been done overseas but that involves electronic setup and thus their costing goes really high.

The present invention is an effective and economical apparatus for effective cleaning of the kitchen sink. This design allows the user to clean the trapped waste inside the sink without making any physical contact with it and also does not allow the clogged water to appear inside the sink area as its rise in level is controlled and has been put under check.

2. BRIEF DESCRIPTION

Construction

Fig.1 shows the ~~entire~~ clog free easy drain sink apparatus in an orthographic

Commented [P1]: Support found in original title and preamble of originally filed claims.

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view which has all the parts assembled and put together.

Fig. 2 shows the existing part of the kitchen sink (2a) that has been used and put as it is, except for the cleaning filter within it in Fig. (2a). Fig. and a bottom part (2b) shows the designed apparatus that is simply fixed at the bottom of kitchen sink (2a).

Fig. 3 illustrates the designated demarcations given to each of the parts through which Fig. 4 and Fig. 5 can be well explained as the both show how the parts fit into each other. As shown in Fig. 3, the bottom part (2a) is assembly of a receptacle (3b), a jar (3c), an outlet connector (3d) and a hose (3e). The receptacle (3b) is envisaged to be made of, but not limited to, plastic or a metal. Further, the jar (3c) is made of a plastic or any transparent material such as glass. Additionally, the hose is made of a flexible material. As per Fig. 4 & 5, the receptacle (3b) fits through internal thread locking at the an outlet of the kitchen sink (23a) which itself has tapered design at its bottom end. Part-The jar (3c) is adapted to be received and sits inside the receptacle (3b) as it has on a base of the receptacle (3b) for it and also they are provided with sufficient clearance for easy handling and usage which can also be seen in Fig. 6. The jar (3c) has the a cleaning filter (3f) at its base which was earlier in the sink itself in the existing design. Also, the jar (3c) has a secondary outlet (3g) at one fourth height from the base which goes into the a slot (3h) provided in the receptacle (3b), the purpose of which is to facilitate joining of the jar (3c) to the hose (3e) and also provided necessary clearance that may be required during for fitting the device and its usage. The hose (3e) is further connected to a primary outlet (3d) which fits to the receptacle (3b) through inner threading.

Working

Fig. 2 shows two sections of the design clog free easy drain sink apparatus (100) (hereinafter referred to as "the sink apparatus"), in which all of the water related operations are carried in the kitchen sink (2a) and the entire water cleaning and filtration along with garbage collection and its removal is carried out in bottom part (2b). The existing design of kitchen sink which is exactly similar to the kitchen sink (2a) except that in the new present design the cleaning filter has been completely removed and thus the water and waste is are let completely through it to the jar (3c). As the jar (3c) consists of the cleaning filter (3f) at its base which is resting over the receptacle (3b), so the water is filtered here and the residual waste is collected at the bottom of the jar (3c). As the waste increases and the cleaning filter (3f) gets clogged, waste water starts filling in the jar (3c). The waste water will only be

Commented [P2]: Support found in figures 1-6 and through description. Amendments include assigning names to the components denoted by numerals and/or numerals to the components shown in the drawings and referred in the description.

Commented [P3]: Support found in originally filed claim 3:

3. The Clog Free Easy Drain Sink as claimed in claim. 1, wherein the fixture (3b) directly attached beneath the sink (3a) is a holder for the filter jug (3c) of either plastic or metal as material and is also a connecting channel for the water coming as dirty and then getting filtered and passing further on through final exit (3d). This fixture (3b) holds the part which filters garbage and stores clogged water (3c), which has the secondary outlet for water at one third of its height from the bottom. Also, the fixed attachment to the sink (3b) has a slot on its other end opposite to which the removable part (3c) comes inside and this slot is long enough to allow the part (3c) enough clearance while removing and putting it back inside the system. This part (3c) is to be of plastic material but transparent for the user to see through and have regulation over garbage disposal.

Commented [P4]: Support found in originally filed claim 4:

4. The Clog Free Easy Drain Sink as claimed in claim. 1, wherein the fixture (3c) filters the water and redirects the excessive clogged water to the final outlet (3d), uses a medium (3e) to transport water which is of flexible material as it has to be detached each time the filtering fixture (3c) is to be removed from the setup for cleaning.

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allowed to rise and fill till the point of secondary outlet (3g) provided in ~~it~~ the jar (3c) as after that ~~it~~ the waste water exits from the ~~same~~ secondary outlet (3g). Now, the hose (3e) connects the jar (3c) to the primary outlet (3d) which is the final outlet to the drain. The hose (3e) lets the excessive dirty water which is filling inside the jar (3c) to the primary outlet (3d) which finally ~~lets~~ drains the waste water ~~it~~ out. This resultantly prevents any water dirty/clean to fill inside the ~~visible and used~~ kitchen sink (2a) area that is commonly used and is visible.



Fig. : Designed setup and its actual fixture

Cleaning clogged garbage: Figure 7 illustrates the bottom part 2(b) of the sink apparatus (100), in accordance with an embodiment of the present invention. As the jar (3c) has a jug shaped structure with attached handle, the user just has to remove the hose (3e) from the terminal of the jar (3c) and then cleaning the left over water along with either simply sliding off the dirt from the cleaning filter (3f) or washing it in running water. Thus, no hand contact is made in any form to the dirt.

Commented [P5]: The above figure has been moved to the draft of drawings.