Jan. 19, 1937. N. J. RICE 2,067,983

KITCHEN ACCESSORY

Filed Dec. 7, 1934

Fig. 1

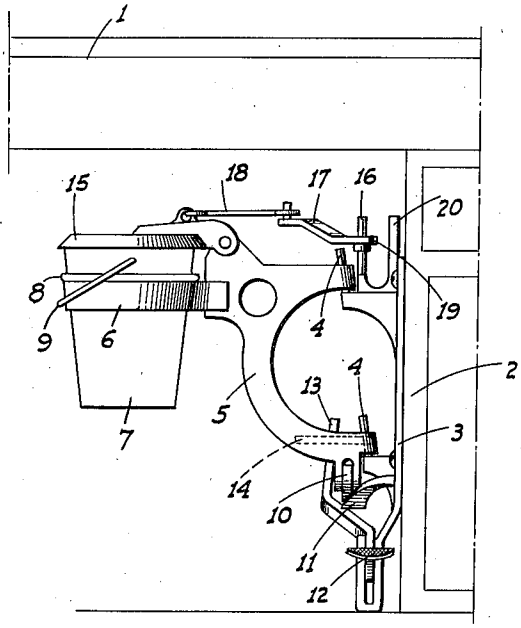


Fig. 2

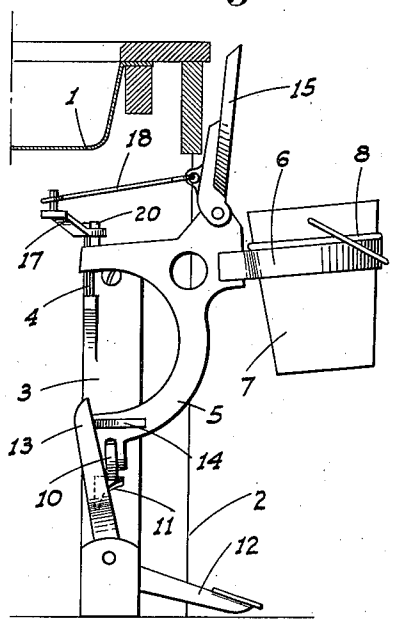


Fig. 3

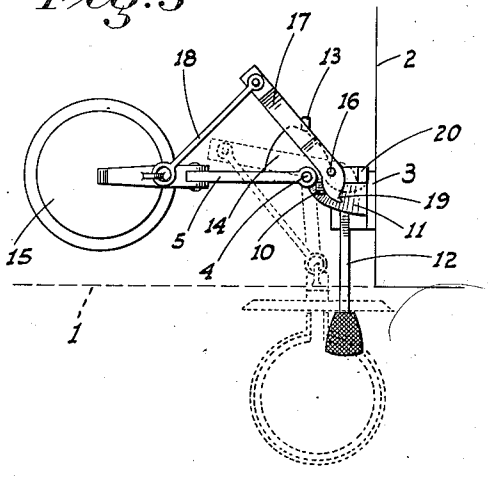
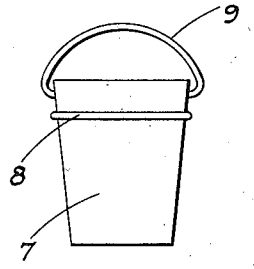


Fig. 4



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Patented Jan. 19, 1937

2,067,983

UNITED STATES PATENT OFFICE

2,067,983

KITCHEN ACCESSORY

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Application December 7, 1934, Serial No. 756,509

3 Claims. (Cl. 248—145)

This invention relates to kitchen accessories and particularly to relatively small garbage pails such as are provided for use in the kitchen to receive the day's garbage, and which are intended to be emptied whenever necessary into the main garbage can on the outside of the premises.

The principal object of my invention is to provide a support for such a pail, arranged so that when not in use, the pail is kept under the sink, and so that with a single foot operation the pail will be moved to an exposed and convenient position in front of the sink.

As a further object, I have provided a cover for the pail separate therefrom and mounted on the support, and arranged so that as long as the pail is under the sink, the cover is in a closed position, but when the pail is moved out, and with such movement, the cover will be automatically raised to allow garbage to be placed in the pail and the latter to be removed for dumping.

The above and other objects are carried out by means of the structure shown in the accompanying drawing, in which:

Fig. 1 is a fragmentary front view of a kitchen sink arrangement, showing my improved pail supporting and manipulating structure mounted in connection with the sink and with the pail in a retracted non-operative position;

Fig. 2 is a fragmentary transverse section of the sink, showing the pail as moved out for filling;

Fig. 3 is a top plan view of the pail supporting structure shown in the same position as in Fig. 1; and

Fig. 4 is a side view of the pail detached.

Referring to the numerals of reference on the drawing, 1 denotes a sink of conventional form, having as usual an open space of considerable size thereunder; a transverse wall 2 at and under the sink at one end forming the limit of the space at the corresponding end.

Secured against the wall adjacent its forward edge is a vertical frame 3, on which are mounted vertically spaced axially aligned pins 4, disposed away from the face of the frame a short distance and preferably having an upwardly diverging slope, and lying in a plane near that of the back edge of the frame.

Turnably and slidably mounted on the pins is a vertical bracket 5 having a horizontal ring 6 rigidly fixed thereon at its outer end and near the top. This ring forms a locating means for the pail 7, which has an annular flange 8 thereabout near the top, which engages the ring and limits the downward movement of the pail. Said pail is provided with a conventional bail 9 whereby it may be conveniently placed in or lifted from the ring.

The bracket at the bottom and near the lower pin 4 is provided with a vertical roller 10, whose axis is radial with said pin. Fixed on the bracket and supporting the roller is a segmental circular track 11 extending helically or spirally with the lower pin 4 as an axis, the forward end of the track being uppermost. It will thus be seen that if the bracket is swung out from under the sink to a position at right angles thereto, said bracket will be lifted somewhat due to the spiral form of the track, and owing to the same feature, the bracket will tend to lower and swing around of itself to its initial position, without the use of springs or the like.

The bracket is thus swung out by means of a pedal lever 12, pivoted on the bracket near the floor. An arm 13 rigid with the lever projects upwardly behind the bracket, and engages a horizontal cam member 14 formed with the bracket adjacent and to one side of the lower pin. In this manner, as the pedal is depressed, the bracket is swung forwardly, exposing the pail for easy filling.

A cover 15 for the pail is pivoted on the bracket adjacent the ring 6 so as to drop by gravity. To automatically lift the cover from the pail as the bracket is swung outwardly, I provide the following device: Pivoted adjacent one end on a pin 16 mounted on the bracket 5 near but back of the upper pin 4 is an arm 17. Loosely connecting the outer end of the arm 17 and the cover in front of its pivot is a link 18, this link being disposed at an angle of substantially 90 degrees to the said arm, in a horizontal plane, when the cover is down and the bracket is in a retracted position under the sink.

As the bracket is swung outwardly, the link and arm retain this relationship for a certain portion of the movement of the bracket, the arm turning on its pivot pin 16. A lug 19 on the pivot end of the arm then brings up against a stop 20 rigid with the bracket. With the further swinging of the bracket therefore, the arm 17 remains stationary, so that the distance from the outer end of the arm 17 to the point of connection of the link with the cover when the latter is closed, is gradually increased. Since the link itself is non-extensible, the result is that the cover is raised, as shown in Fig. 2. The cover never raises to a true vertical position, so that it always retains its tendency to drop to a closed position.

Therefore when the bracket swings back to its normal position under the sink when the pressure on the pedal is withdrawn, the cover will automatically drop, restoring the arm 17 to its original position.

Having thus described my invention,

What I claim is:

1. Means for supporting a pail on a structure having a recess therein comprising a frame adapted to be mounted within said recess, a bracket pivotally mounted on said frame for movement into and out of said recess, means on said bracket for supporting said pail, a cover for the pail pivoted on the bracket, a link connected at one end to the cover in front of its pivot, a horizontal arm pivoted adjacent one end on the frame adjacent the pivotal axis of the bracket, the link being pivoted on the other end of the arm, said arm and link being disposed at an acute angle to each other back of the bracket when the cover is closed, and stop means between the arm and frame to hold the arm against movement when the bracket has been swung outwardly from the recess a certain amount, whereby with a further swinging of the bracket, the distance between said other end of the arm and the point of connection of the link with the cover, when the latter is closed, will be increased to cause the link to pull the cover to a raised position.

2. Means for supporting a pail on a structure having a recess therein comprising a vertically disposed frame adapted to be mounted on said structure within said recess, a pair of axially spaced alined pins mounted on said frame with the axes thereof disposed at an angle with the vertical plane of said frame, a bracket pivotally mounted on said pins for movement from a position within said recess to a position exteriorly thereof, means for supporting said pail on said bracket, a cover for said pail pivotally mounted on said bracket adjacent said pail supporting means, a stud mounted on said frame, a lever pivotally mounted on said stud and movable with said bracket in a path substantially in the plane of movement thereof, a link pivotally secured at one end to said lever and at the other end to said cover, and a stop on said frame engageable by said lever at a position in its path of movement for preventing continued movement of said lever with said bracket whereby said link is tensioned to lift said cover from the pail.

3. Means for supporting a container comprising a vertically disposed support member, a bracket slidably and hingedly mounted on said support member on an inclined axis, container-supporting means carried by the bracket, an inclined cam supported adjacent said bracket in a position to engage and elevate the bracket during swinging movement thereof in one direction, means for positively moving the bracket in said direction, said cam being so constructed and arranged as to return the bracket to its normal position when released by said moving means, a cover pivotally supported by said bracket on a horizontal axis so as to move in a vertical plane, and means actuated by swinging movement of the bracket to raise and lower said cover.

NORMAN J. RICE.