Nov. 19, 1957 A. SELMER 2,813,771

GARBAGE DISPOSAL UNIT

Filed June 24, 1955 2 Sheets-Sheet 1

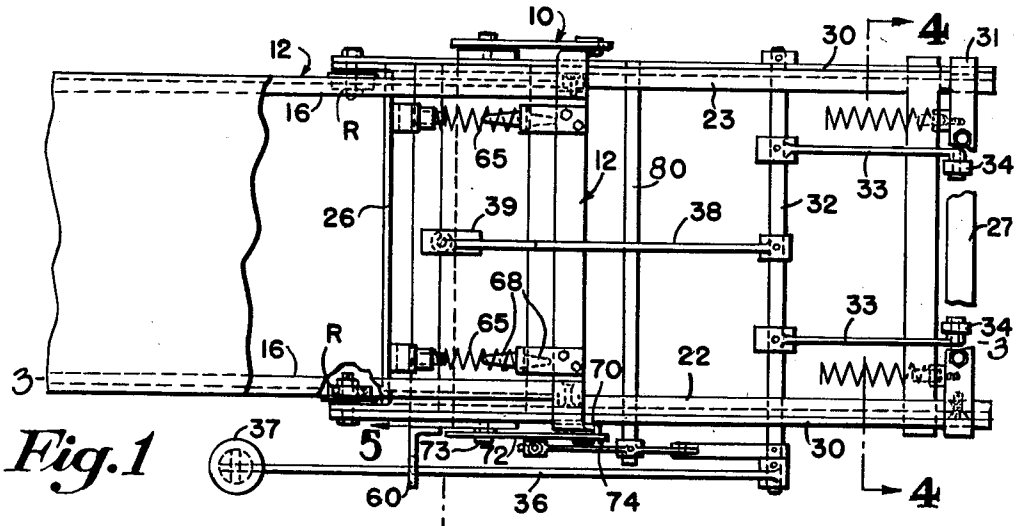


Fig. 1

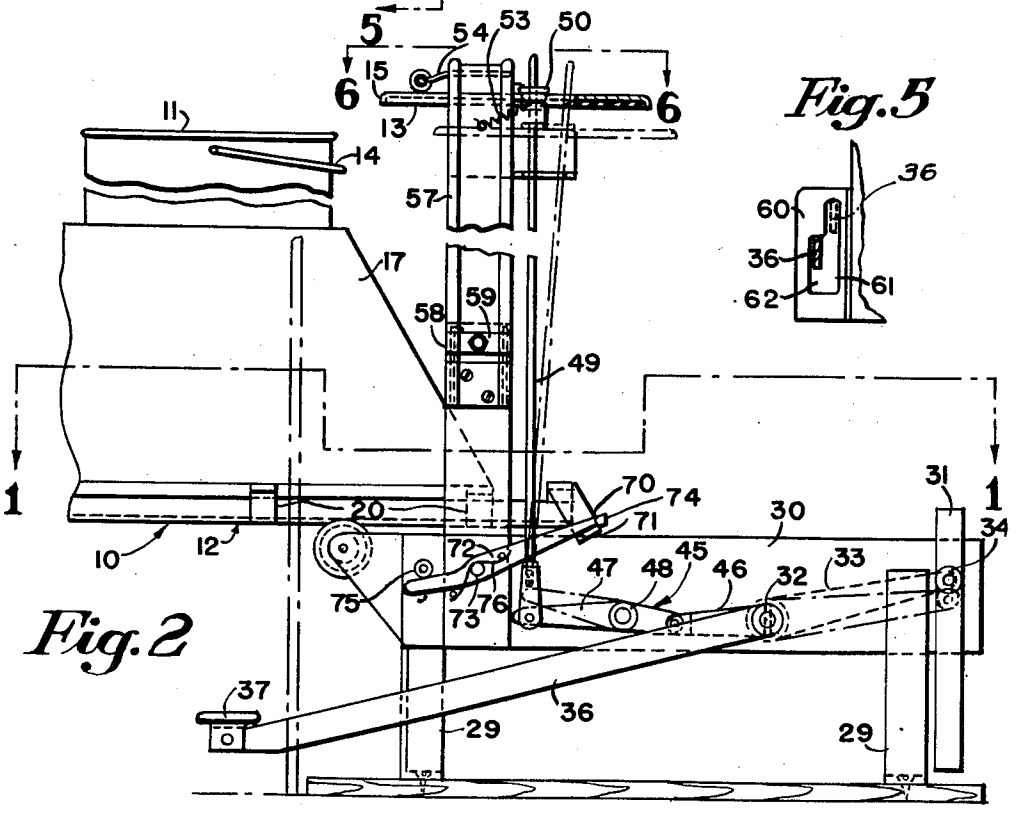


Fig. 2

Fig. 5

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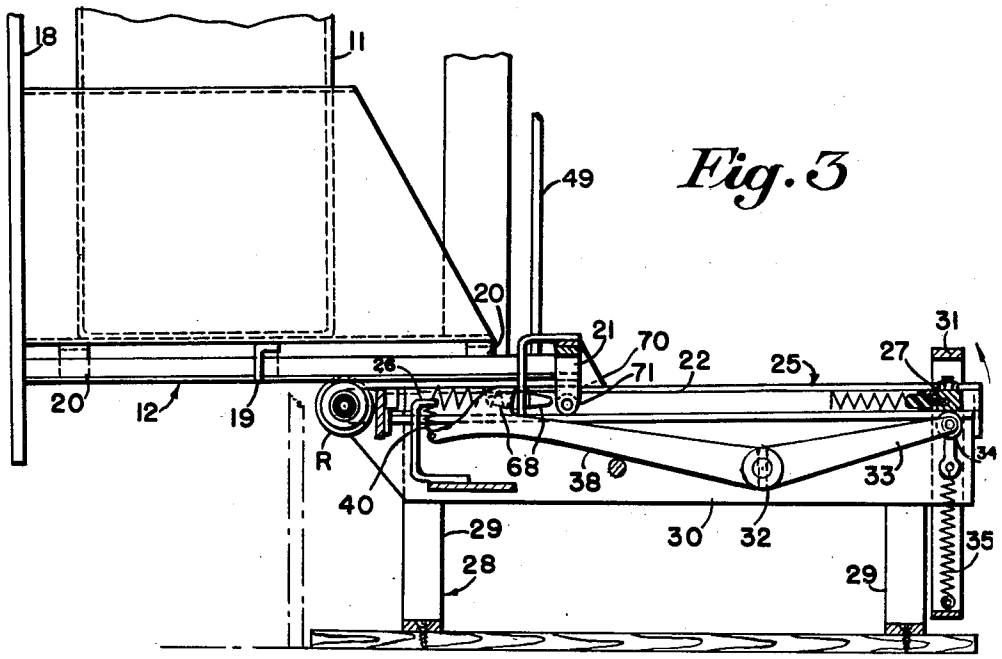


Fig. 3

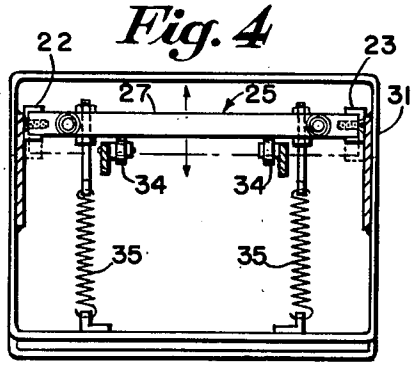


Fig. 4

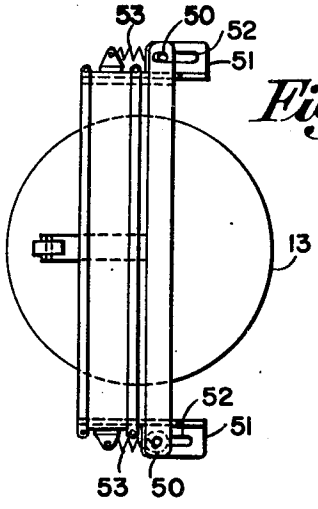


Fig. 6

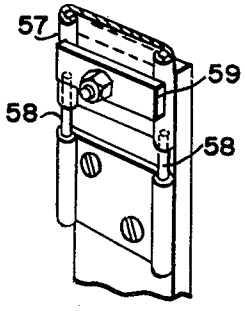


Fig. 7

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GARBAGE DISPOSAL UNIT

Alois Selmer, Bronx, N. Y.

Application June 24, 1955, Serial No. 517,823

5 Claims. (Cl. 312—270)

This invention relates to an improved garbage disposal unit, more particularly a garbage disposal unit which though maintained out of sight and in a sealed condition, is readily available for the deposit of garbage, with a minimum of effort on the part of the user.

A variety of situations exist wherein garbage or other refuse must be disposed of. Thus, in the average home in the preparation of foods or the like means must be provided to facilitate disposal of garbage. These means should be readily hidden so as not to be esthetically unpleasant and should preferably be provided with means for eliminating the escape of offensive odors. As in the case of all apparatus, it is desirable to have same readily operable with a minimum of effort. It is further desirable where such apparatus is provided, that such apparatus, particularly the garbage contacting portion thereof be readily cleanable. In addition to the above cited household use, garbage disposal problems arise in laboratories, medical and dental offices, and a plethora of other conventionally encountered situations. In all of these sitations, as noted, it is desirable where possible to provide means for the reception of wastes wherein said means are concealed from view, and are still readily accessible. These means should further preclude the passage of odors from the waste to the surrounding areas.

It is with the above problems in mind that the present construction has been evolved, a construction providing apparatus for the reception of refuse, said apparatus being readily concealed from view, providing an odor-tight container for said refuse, and readily accessible for use.

It is accordingly a primary object of this invention to provide an improved garbage disposal unit.

A further object of this invention is to provide apparatus for the reception of waste material wherein said apparatus is readily concealable from view.

An additional object of this invention is to provide an improved waste receptacle which is sealed when not in use to preclude the passage of odors from any waste contained therein.

It is also an object of this invention to provide an improved garbage disposal unit, the waste retaining portion of which is readily cleanable.

Another object of this invention is to provide a novel garbage disposal construction which may readily be disposed between a garbage receiving position and garbage storing position.

A further object of this invention is to provide an improved garbage disposal unit of a sturdy construction, requiring minimal maintenance and of a highly efficient nature.

These and other objects of the invention which will become apparent from the following disclosure and claims are achieved by provision of a mounting structure having a platform pivotally supported thereon. A slideway is provided on said platform and a carriage is slidably arranged on said platform. Supported on this slidable carriage is a waste receiving receptacle, having a top

opening. Extending upwardly from the mounting structure is a vertical support movably mounting a cover for said container. A lever operated linkage is coupled to said platform and said cover member to permit same to be moved, whereby the container is made accessible for the disposal of garbage or other waste material therein.

The specific constructional features of the novel garbage disposal unit, and their mode of operation will be made most manifest and particularly pointed out in conjunction with the accompanying drawings, wherein:

Figure 1 represents a top plan view looking down at the carriage from a plane immediately above said carriage.

Figure 2 is a side elevational view of the novel construction illustrating the lever operated linkage and its mode of functioning.

Figure 3 is a cross-sectional view taken on line 3—3 of Figure 1.

Figure 4 is a cross-sectional view taken on line 4—4 of Figure 1.

Figure 5 is a detail view taken on line 5—5 of Figure 1 illustrating a preferred form of operating lever lock.

Figure 6 is a detail top plan view on line 6—6 of Figure 2 illustrating the container closure mount.

Figure 7 is a detail view of a removable interlock provided in the closure supporting structure.

Referring now more particularly to the drawings, like numerals in the various figures will be taken to designate like parts.

The novel garbage disposal unit **10**, as illustrated in the drawings, comprises a receptacle or container **11** supported for movement on a carriage **12**. The container **11** may be made of any desirable shape, whether rectangular or circular in cross section. The top of said container is, however, open and is provided with a closure lid **13** adapted to seal the container **11**. As best seen in Figure 2, the preferred embodiment employs a cylindrical container, circular in cross section provided with bale **14** to facilitate handling of said container in the removal thereof from carriage **12**. Closure **13** is provided with a lip **15** engaging the periphery of the container **11** to insure a tight fit between the closure and the container. The carriage **12**, as best seen in Figures 1–3, comprises a substantially horizontally extending rectangular frame **16** having a container gripping chamber **17** with a front wall piece **18** secured thereto in front of the container **11**. The carriage is additionally provided with a downwardly extending pawl engaging stop **19** and guide pieces **20** secured on said frame **16**, as best seen in Figure 3. Wheel legs **21** support the rear end of the carriage **12**.

The carriage **12** and the container **11** are mounted for sliding on wheel legs **21**, the wheels of which ride in slideways **22** and **23** arranged on either side of said carriage.

Platform **25**, as seen in Figures 1–4 comprises an open rectangular frame having cross pieces **26** and **27** at the front and rear portion of said platform, respectively. Slideways or tracks **22** and **23** comprising channel members are positioned facing inwardly at the sides of said platform **25**. The platform **25** is pivotally mounted on a supporting structure **28**.

The supporting structure **28** comprises legs **29** adapted for securement to a floor, as best seen in Figures 2 and 3. Side plates **30** extend between said legs **29** encompassing platform **25** therebetween. A vertically positioned rectangular frame **31** is fixed at the rear end of said support surrounding cross piece **27** of the tiltable platform **25**, as seen in Figures 3 and 4. A pivot bar **32** is pivotally supported between side walls **30** of the support, as seen in Figure 1. Elevating links **33** are secured to bar **32** to have the remote end thereof raised as bar **32** is pivoted in a counterclockwise direction, as viewed in Figures 1–3. An anti-friction roll **34** is secured to the free end of elevating

link 33. The roll is in contact with cross bar 27 of platform 25, as seen in Figure 3. Spring 35 extending between the bottom of frame 31 and cross bar 27 biases platform 25 into contact with roll 34.

Pivot bar 32 is caused to pivot in a counterclockwise direction by means of operating lever 36 having a treadle 37 secured at the free end thereof and engaged at its other end with pivot bar 32. A pawl link 38 having pawl 39 at the end thereof is secured at one end to pivot bar 32 and has a spring 40 biasing link 38 in an upward direction to engage the rear portion of the carriage in its extended position and to engage the front portion of the carriage when in its closed retracted position.

Lid operating linkage 45, comprising links 46 secured to pivot rod 80 and engaging link 47 fulcruming about fulcrum 48 engages the lower end of lid rod 49 which pass through slidable collars 50 supported on either end of lid 13 and engaging same. The collars 50 are mounted for sliding, as seen in Figures 2 and 6, in a top piece 51 having a slot 52 on either side of lid 13. Springs 53 bias collars 50 to the position shown in Figure 2. Separable vertical struts 57 support top piece 51. The separable construction of struts 57 is most clearly seen in Figure 7, wherein it will be observed that coupling pins 58 are arranged at a mid-point of said strut for locking engagement by means of lock bar 59 to secure said strut in assembled relationship.

A locking element 60, as best seen in Figure 5, having a slot 61 with an offset portion 62, is provided for securing operating lever 36 in either of two positions as will become hereinafter more apparent.

Springs 65 at the forward end of platform 25, on cross piece 26, and springs 66 on rear cross piece 27, engage bumpers 68 on the rear portion of carriage 12.

A tail piece 70 is also provided at one side on the rear of carriage 12. This tail piece is in the shape of an L having an outwardly extending portion (see Figures 2 and 3) which engages a pawl 72 pivoted on strut plate 57 of the supporting structure 28, at 73 at hook 74 (see Figures 1 and 2). Stop 75 limits motion of pawl 72 and a spring 76 on pivot 73 biases the pawl away from the stop.

Operation

In operation when it is desired to provide a means for the disposal of refuse, it merely becomes necessary to provide an apparatus, such as heretofore disclosed, mounted in any suitable recess, be it a wall, cabinet, sink compartment, or the like. Support 28 is secured in a horizontal plane on the base of said recess with wall piece 18 arranged at the front portion of the cabinet in place of the door or as flushed with any wall where mounted. Treadle 37 stands forwardly of said wall to be available for manipulation.

In the closed position of the garbage disposal unit, treadle 36 will be in the upper position illustrated by dotted lines in Figure 5. Depressing the treadle causes operating lever 36 to rotate pivot bar 32, elevating the rear end of platform 25 by means of elevating links 33. The forward inclination of platform 25 causes carriage 12 to slide outwardly thereon over rollers R on the support 28 and the wheel legs 21, as seen in Figure 3. The rotation of pivot bar 32 causes pawl 39 to be disengaged from the carriage 12 to permit the aforesaid outward sliding of said carriage. It also functions, as best seen in Figure 2, to elevate lid rod 49 through links 46 and 47 to remove lid 13 against the biasing of closure clamp 54. In the outward position of the carriage, tail piece 70 is engaged by pawl hook 74.

Where it is desired to maintain the waste receptacle 11 exposed in the position illustrated in Figure 2, lever 36 is shifted laterally into offset portion 62, as illustrated in Figure 5. In normal operation, lever 36 is not shifted laterally and release of pressure from treadle 37 causes a return of platform 25 to its normal rearwardly inclined position, as illustrated in dotted lines of Figure 3, under the biasing action of spring 35, whereby carriage 12 will return to its retracted position and lid 13 will be seated thereon to securely seal same. Tail piece 70 is released from pawl hook 74 as a result of the rearward tilting of platform 25 which lowers tail piece 70 below the lowermost portion of pawl hook 74.

It will thus be observed that a novel, unobtrusive garbage disposal unit has been provided, which is readily operable and which may readily be dismantled for cleaning. The unit serves to securely maintain weight sealed off from the outer area.

The above disclosure has been given by way of illustration and elucidation and not by way of limitation, and it is desired to protect all embodiments of the herein disclosed inventive concept within the scope of the appended claims.

What is claimed is:

1. A garbage disposal unit adapted for hidden installation in a wall or cabinet, said unit comprising: a tiltable slideway; a carriage slidably mounted on said slideway; a refuse container on said carriage, said container open at the top; a closure removably positioned over said container; a linkage, means connecting said linkage with said slideway and said closure; and a lever operating said linkage to tilt said slideway and raise or lower said closure.

2. A garbage disposal unit adapted for hidden installation in a wall or cabinet, said unit comprising: a tiltable slideway; a carriage slidably mounted on said slideway; a refuse container on said carriage; a pawl mounted beneath said carriage adapted to engage either a front or rear portion thereof; a linkage, means connecting said linkage with said pawl and said slideway; and a lever operating said linkage to tilt said slideway and release said carriage for sliding thereon.

3. A garbage disposal unit adapted for hidden installation in a wall or cabinet, said unit comprising: a tiltable slideway; a spring coupled to the rear of said slideway biasing same downwardly; a carriage slidably mounted on said slideway; a refuse container on said carriage; an elevating linkage beneath the rear of said slideway; and a lever coupled to said linkage and adapted to raise the rear of said slideway to cause said carriage to slide outwardly from over same.

4. A garbage disposal unit adapted for hidden installation in a wall or cabinet, said unit comprising: a tiltable slideway; a spring coupled to the rear of said slideway biasing same downwardly; a carriage slidably mounted on said slideway; a refuse container on said carriage, said container open at the top; a closure removably positioned over said container; a linkage, means connecting said linkage with said slideway and said closure; and a lever operating said linkage to tilt said slideway and raise or lower said closure.

5. A garbage disposal unit adapted for hidden installation in a wall or cabinet, said unit comprising: a tiltable slideway; a spring coupled to the rear of said slideway biasing same downwardly; a carriage slidably mounted on said slideway; a refuse container on said carriage, said container open at the top; a closure removably positioned over said container; a pawl mounted beneath said carriage adapted to engage either a front or rear portion thereof; a linkage, means connecting said linkage with said pawl, closure and slideway; and a lever operating said linkage to release said carriage, tilt said slideway, and raise said closure.

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