A tandem bucket holder or tandem container holder that is constructed to receive and hold two containers such as two five-gallon buckets. The holder or caddy allows for the independent movement of the buckets or containers from an upright holding position to a tilted-pouring position by manual manipulation. The hand-actuated bucket pouring device includes a support frame. Pivotal mounted to the frame are tandem bucket holders. The bucket holders are designed to receive and hold buckets or containers. A handle extends from each bucket holder. The bucket holders are independently pivoted from an upright composition holding position to a tilted pouring position using the handles.
DUAL BUCKET HOLDER

FIELD OF THE INVENTION

The present invention relates to an aid for pouring a two-part mixture by manual operation. The aid receives two buckets or two containers wherein the containers are maintained in an upright position in caddies and moved from an upright non-pouring position to a tilted pouring position allowing for the mixture of their contents.

BACKGROUND OF THE INVENTION

Adhesives and mold making formulations are generally comprised of a resin component and a catalyst or hardener component. The two components are kept in separate containers and mixed together just before application. Often the resin and the catalyst are mixed in a 1:1 ratio. Two-part mixes, such as two-part latex rubber mold compounds, two-part plastic mixes and for instance epoxies, are widely used in construction projects for various applications such as setting studs or anchors in preformed holes in concrete or masonry, or used as a joint filler in highway construction projects. In addition such mixes are used by ornamental shops, sculpture studios, model and mold making and pattern shops.

Generally, for use on most commercial or large artistic projects, large doses of such mixes are required. One application may consume the entire contents of many small, hand held cartridges. For larger applications, two five gallon buckets each holding one part of the two part mix are poured into a mixing reservoir or container. It is, therefore, an advantage to have a dispensing apparatus that can hold and dispense a large quantity of the two-part mixes.

Currently there is no convenient device for the small shop owner to simultaneously hold two five gallon buckets and allow for the mixing of their contents in facile manner. As noted the ratio of components must be mixed in 1:1 ratio. The buckets are heavy, approximately forty pounds per fill bucket and thus the man-handling of these buckets, including shaking, stirring and dispensing accurate volumes or weights, is difficult or next to impossible without spilling the components. All of these activities are physically demanding. Mixtures are frequently botched and thus must be disposed.

U.S. Pat. Nos. 5,316,248 and 5,527,009 to Allen each disclose a hand-actuated bucket holder that receives a five-gallon bucket. The holder allows one to move a single bucket or container from an upright support position to a tilted-pouring position. The hand-actuated bucket pouring device of the '248 patent is stand mounted and the device of the '009 patent is wall-mounted.

Neither reference discloses a device having dual bucket caddy for dispensing and allowing for the shaking, stirring, pouring and accurate mixing of a two-component mix.

SUMMARY AND OBJECTS OF THE INVENTION

The present invention relates to a tandem bucket holder or tandem container holder that is constructed to receive and hold two containers such as two five-gallon buckets. The holder allows for the independent movement of the buckets or containers from an upright holding position to a tilted-pouring position by manual manipulation.

Structurally, the hand-actuated bucket pouring device of the present invention includes a support frame. Pivotedly mounted to the frame are tandem bucket caddies. The bucket caddies are designed to receive and hold a bucket or container or the like. A handle extends from each bucket caddy. The bucket caddies are each independently tiltable or pivoted from an upright holding position to a tilted pouring position using the handle.

It is therefore an object of the present invention to provide a simple hand-actuated tandem bucket pouring device, for assiting in combining a two-part composition.

Other objects and advantages of the present invention will become apparent and obvious from a study of the following description and the accompanying drawings which are merely illustrative of such invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front view of the bucket holder of the present invention without the buckets.

FIG. 2 is a side view in perspective of the bucket holder holding two buckets with one of the buckets being tilted in the pouring position.

FIG. 3 is a perspective view of a bucket caddy of the invention.

DETAILED DESCRIPTION OF THE INVENTION

Specifically, the device or holder 10 includes parallel legs 12, each connected to, at mid way of their length, on a side face thereof, by a bottom framing member 14 positioned normal to the legs. The legs are spaced approximately thirty-four inches apart and themselves are twenty-four inches long. Framing member 14 maintains the legs 12 in a spaced apart position. Projecting upwardly from the top face of each leg, from substantially the center of a portion of each leg are side framing members 16. All of the above mentioned framing members and members named infra can be made from 11 gauge rectangular 1x2 steel tubing. These members are parallel to one another and are maintained spaced apart by an upper framing member 18 that is parallel to and just slightly longer than bottom framing member 14. Upper framing member 18 is the last piece framing member attached in fabricating the device. It connects and supports the side framing members 16 approximately at about 5/8ths the length of the side members 16.

Positioned normal to both the upper framing member 18 and the bottom framing member 14 and connected to both is a middle framing 20 member substantially equal in length to the two side framing members 16 and parallel thereto.

At the top points 22 of each side member 16 and middle framing member 20 are welded, rounded, hollow metal receiving tubes 24 and 28 for receiving caddy or pivot pins 26. The receiving tube 28 on the middle framing member 20 (FIG. 1) is approximately double the length of the side receiving tubes 24.

Two bucket caddies 30 are provided for device 10. The bucket caddies are substantially the same, both com-
posed of a U-shaped framing member 32 and an O-ring 34. In view of the similarity between the two bucket caddies 30, the description of a single caddy supported by monoframing shown in phantom lines of FIG. 3, will satisfy the description of its neighbor caddy in a dual framing device. The U-shaped members 32 have a base member 33 and at least two spaced apart upwardly projecting opposing arms 35. The length of base member 33 is substantially equal in length to the diameter of O-ring 34. The bottom rim of O-ring 34 is welded to the top of arms 35 of U-shaped member 32 at points that if connected would define the diameters of the O-rings 34. Thus, arms 35 are fashioned to opposite poles of O-rings 34. Welded to the side surface of O-rings 34 at locations above O-ring 34/arm 35 connections, and projecting from the side surface of O-ring 34 and parallel to the base members 33 are pivot or caddy pins 26. These base members 33 of caddies 30 are positioned about waist-high level (a person of average height) or the standard distance of a counter top—about forty-two inches as measured from feet 12.

[0018] Connected to the back side surfaces (the outside surface) of O-rings 34 are L-shaped levers or handles 36 for tilting bucket caddies 30. As shown in FIG. 2, handles 36 are L-shaped so that they can be eccentrically mounted to the back outside surface of an O-ring of each bucket caddy 30. In addition, handles 36 are preferably located on the outside face of an O-ring mid-way between the two poles of the O-ring, or approximately ninety degrees removed from each arm 32 of a bucket caddy 30. Handles 36 again are eccentrically mounted adding weight to the back-end of the caddy shifting the center of gravity to the back end of a caddy so that caddies 30 are maintained in the upright position and self-righting when not holding a bucket. Handles 36 are made from round steel bar and are approximately 23-26 inches in length.

[0019] Positioned on handles 36 are sliding, rotatable stop members 38 each having a threaded set pin or set screw 40. Turning the set screw 40 counterclockwise will of course set stop member 38 which can be positioned above and on the rim 41 of bucket 43 (see FIG. 2) and can hold the bucket 43 within caddy 30 when a caddy is tilted as shown in FIG. 2.

[0020] Caddy pins 26 of bucket caddies 30 are slightly smaller in diameter than the inside diameter of the receiving tubes. Pins 26 are slipped into the receiving tubes 24 and 28. This is accomplished by spreading or splaying side and middle framing members 16 and 20 to allow for pin 26 insertion. Thereafter the upper framing member 18 is welded across the front of middle framing member 20 and the front of side framing members 16. Pins 26 of course rotate within the receiving members 24 and 28 allowing for bucket caddies 30 to be independently pivoted.

[0021] An additional feature of device 10 includes welded stop members 50 positioned at the distal sides, relative to middle framing member 20, of U-frame member 32. Stop members 50 engage the upper framing member 18 to prevent bucket caddies 30 from swinging beyond a desired position.

[0022] As shown in FIG. 2, five gallon buckets 43 with their contents are supported by the bucket caddies 30. The device simultaneously holds two five gallon buckets, and each caddy as above noted is independently tiltable relative to the other caddy.

[0023] The depth of U-shaped caddies 30 is greater or deeper than \( \frac{1}{2} \) the length of a five gallon bucket. This depth of caddies 30 and the positioning of the pivot pins 26 at O-ring 34 (defining the top of caddies 30) positions the pivot pins very near the center of mass of the buckets. This center of mass positioning, along with handles 36 providing significant weight to the back of the bucket caddies and the entire mass of the device 10 allows for vigorously shaking of mounted the buckets 43 in the device 10, and for the tipping and pouring of the buckets 43 with very little physical effort.

[0024] In addition, by virtue of positioning handles 36 on the back center of O-rings 34 of caddies 30, and by virtue of the weight of handles 36 of caddies 30, in combination with stop members 50, the caddies are maintained in the upright position. A single handle is approximately one third the weight of the caddy it is mounted to. This weight (or weight range) ensures that caddies 30 are self-righting when the buckets are withdrawn.

[0025] Device 10 weighing over twenty-five pounds thus facilitates the mixing and pouring of heavy two-part mixes mixtures.

[0026] Those skilled in the art will recognize that this invention may be embodied in other species than illustrated without departing from the spirit and scope of the essentials of this invention. The foregoing discussion is therefore to be considered illustrative and not restrictive. The scope of the invention is only limited by the appended claims. For instance, one of ordinary skill in the art will appreciate that a single bucket holder can be constructed using a single bucket caddy shown in FIG. 3.

PARTS LIST

[0027] device or holder 10
[0028] parallel legs 12,
[0029] bottom framing member 14
[0030] side framing members 16.
[0031] upper framing member 18
[0032] middle framing 20
[0033] At the top points of each side member 22.
[0034] hollow metal tubes 24 and 28 for receiving
[0035] caddy or pivot pins 26
[0036] Two bucket caddies 30
[0037] The U-shaped members 32
[0038] a base member 33
[0039] O-ring 34
[0040] upwardly projecting opposing arms 35.
[0041] the handles 36 are sliding,
[0042] rotatable stop members 38
[0043] a threaded set pin or set screw 40
[0044] rim 41 of bucket
[0045] bucket 43
[0046] stop members 50
What is claimed is:

1. A tandem bucket holder comprising:
   a framing member comprising: a) at least two horizontally positioned and spaced apart legs, b) a bottom cross member maintaining the space between the legs, c) a pair of side vertical framing members, each side vertical framing member separately attached to one of the legs, d) a mid-vertical framing member attached to the bottom cross member and positioned an equidistance from each of the side framing members; and e) tandem bucket caddies mounted pivotally and independently relative to one another and between each side framing member and the mid-vertical framing member.

2. The tandem bucket holder of claim 1 further comprising a handle attached to each bucket caddy.

3. The bucket holder of claim 2 wherein the handles are affixed to the backs or sides of the bucket caddies.

4. The tandem bucket holder of claim 1 wherein each of the three vertical framing members has attached thereto a receiving tube.

5. The tandem bucket holder of claim 4 wherein each bucket caddy has two opposed mounting pins, each pin being received within one of the three receiving tubes on the vertical framing members.

6. A bucket caddy comprising: a) a U-shaped frame having a base member and at least two spaced apart upwardly projecting arms, and b) an O-ring having a diameter substantially equal in length to the base of the U-shaped frame and affixed at opposite poles thereof to the arms of U-shaped frame.

7. The bucket caddy of claim 6, further comprising a handle attached to an outside face of the O-ring.

8. The bucket caddy according to claim 7 wherein the handle is mounted on the outside face of the O-ring mid-way between the two poles of the O-ring.

9. The bucket caddy according to claim 7 further comprising two mounted pins projecting from the outside face of the ring, poles apart and parallel to the base member of the U-shaped frame.

10. A tandem bucket holder comprising:
   a) a framing member comprising at least two horizontally positioned and spaced apart legs, a bottom cross member maintaining the space between the legs, a pair of side vertical framing members, each side framing member separately attached to one of the legs, a mid-vertical framing member attached to the bottom cross member and positioned an equidistance from and parallel to each of the side framing members;
   b) tandem bucket caddies mounted pivotally and independently relative to one another and between each side framing member and the mid-vertical framing member; and
   c) wherein each bucket caddy comprises 1) a U-shaped frame having a base member and at least two spaced apart upwardly projecting arms, and 2) an O-ring having a diameter substantially equal in length to the base of the U-shaped frame and affixed at opposite poles thereof to the arms of U-shaped frame.

11. The tandem bucket holder of claim 10, wherein each bucket caddy further comprises a handle attached to an outside face of each the O-ring.

12. The tandem bucket holder of claim 11 wherein the handle of each bucket caddy is mounted on the outside face of the O-ring mid-way between the two poles of the O-ring.

13. The tandem bucket holder of claim 10 wherein each bucket caddy further comprises two mounting pins projecting from the outside face of the O-rings, and being spaced poles apart and parallel to the base member of the U-shaped frame.

14. The tandem bucket holder of claim 13 wherein each vertical framing member has attached thereto a receiving tube for receiving the mounting pins of each bucket caddy.