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Alldredge

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[54] **APPARATUS FOR ENCLOSING A COIN-OPERATED PIN BALL MACHINE OR THE LIKE**

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[52] **U.S. Cl.** ..... **273/121 R,** 109/1 R, 312/100

[51] **Int. Cl.** **A63d 5/00**

[58] **Field of Search** ..... 273/119 R, 119 A, 119 B, 273/121 R, 121 D, 121 E; 109/24, 1 R; 312/100, 210; 248/203; 194/1 R, 1 A, 1 B

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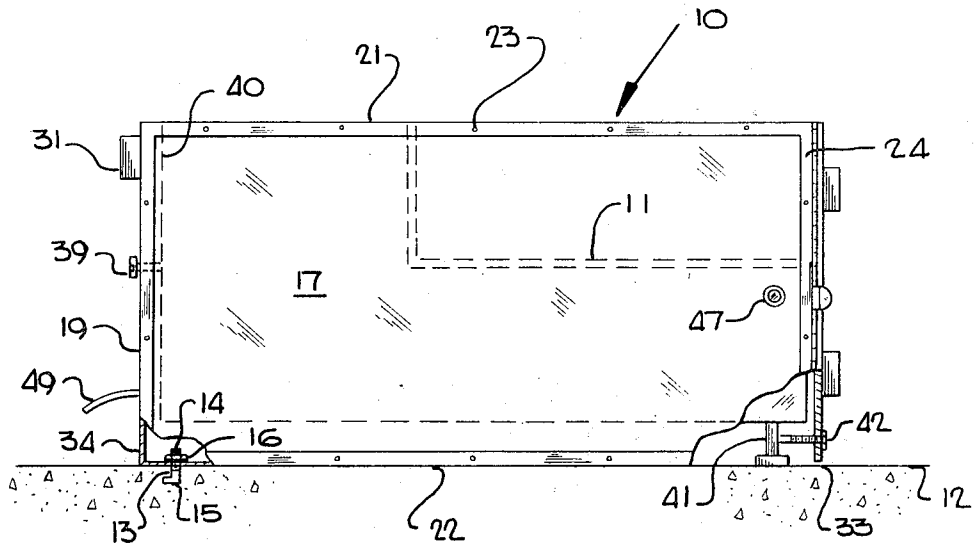
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Assistant Examiner—Arnold W. Kramer
Attorney, Agent, or Firm—Mark C. Jacobs

[57] **ABSTRACT**

Apparatus for enclosing a coin-operated pin ball machine including a rear wall closing off the rear wall of the machine and side walls closing off the side walls thereof. The machine is closed off at the front by a hinged top wall which overlaps a hinged bottom wall so that the top wall must be unlocked before access can be had to the bottom wall. The bottom wall includes suitable openings therein for providing access to the various operating controls of the machine. In this manner, the machine is completely enclosed and the enclosure therefore may be bolted to a supporting surface with the machine kept out-of-doors, if desired, with access to the controls readily available and vandalism thereof prevented.

9 Claims, 5 Drawing Figures



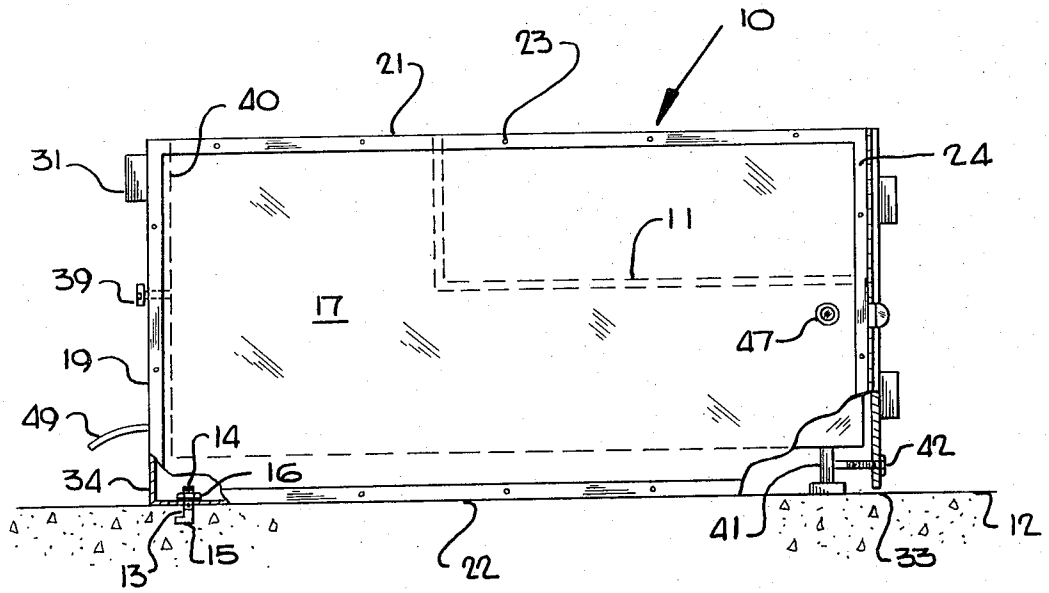


FIG - 1

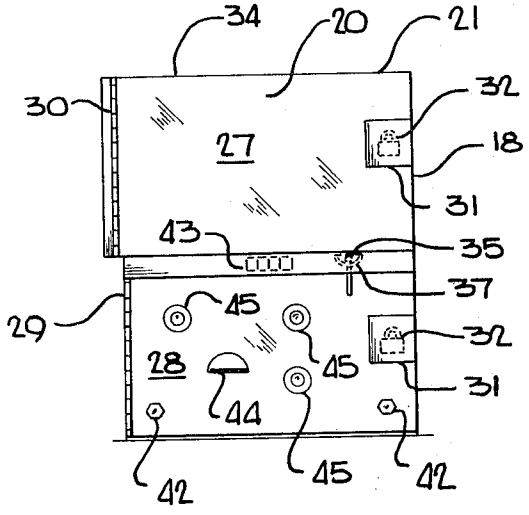


FIG - 2

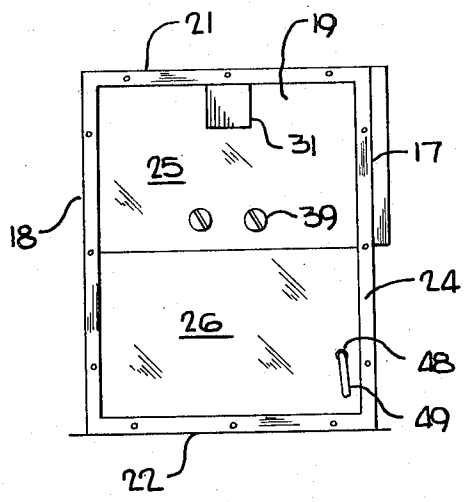


FIG - 3

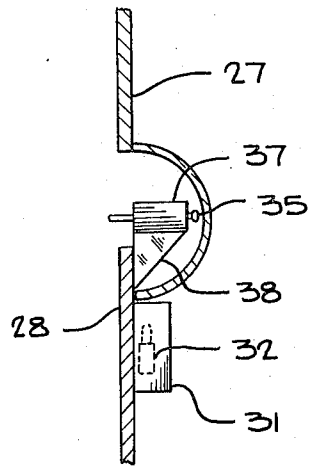

27
37
35
38
28
32
31

FIG. 4

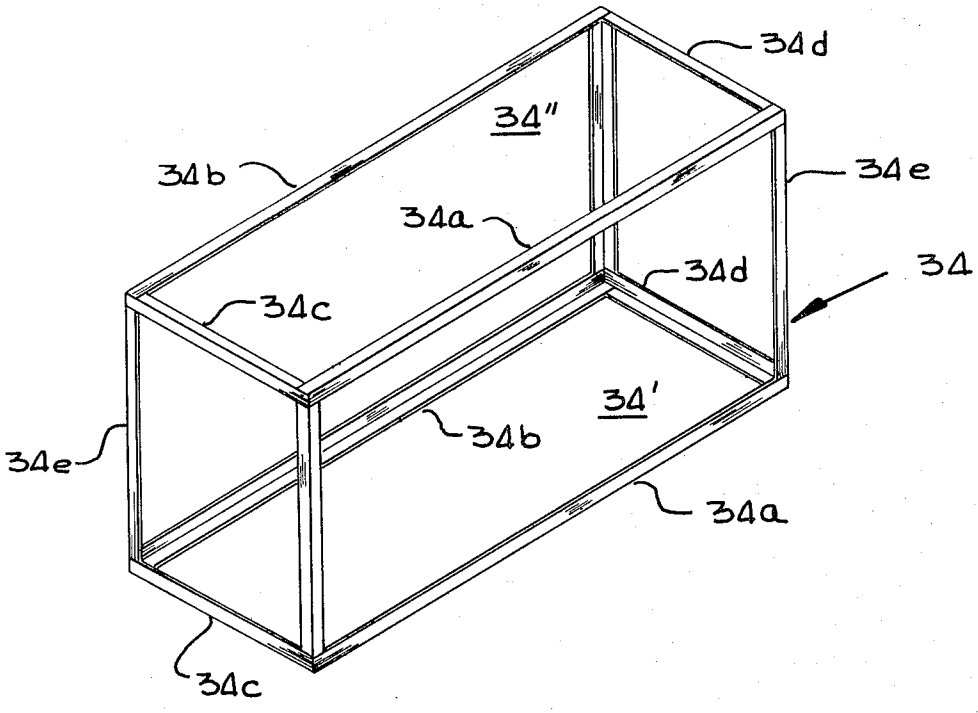

34d
34"
34b
34e
34a
34d
34
34c
34'
34b
34e
34a
34c

FIG. 5

APPARATUS FOR ENCLOSING A COIN-OPERATED PIN BALL MACHINE OR THE LIKE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates to enclosures; and, more particularly, to apparatus for enclosing coin-operated pin ball machines or the like.

2. Description of the Prior Art

The use of pin ball machines or the like as a recreational activity has always been popular. However, generally such machines are used inside the place of business. This results in the users thereof, generally boys and girls of teenage or the like, gathering around the machine or machines. This is noisy and interferes with the ordinary course of business of the establishment which may not revolve around pin ball machines per se. Further, if a thief or burglar breaks into the store, he can break into the machine and steal the contents thereof unobserved.

Thus, it is desirable to have such machines outside of the store where the users cannot interfere with the customers of the store. Also, it is difficult to break into such machine when it is outside of the store and in full view of the public. However, when such machines are permanently kept outside, a certain amount of protection should be provided.

SUMMARY OF THE INVENTION

It is an object of this invention to provide apparatus for enclosing coin-operated pin ball machines or the like.

It is a further object of this invention to provide an enclosure for a pin ball machine or the like which secures the machine in place but permits readily conversion to use thereof.

These and other objects are preferably accomplished by providing apparatus for enclosing such machines including a rear wall closing off the rear wall of the machine and side walls closing off the side walls thereof. The machine is closed off at the front by a hinged top wall which overlaps a hinged bottom wall so that the top wall must be unlocked before access can be had to the bottom wall. The bottom wall includes suitable openings therein for providing access to the various operating controls of the machine. In this manner, the machine is completely enclosed and the enclosure therefore may be bolted to a supporting surface with the machine kept out-of-doors, if desired, with access to the controls readily available and vandalism thereof prevented.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a vertical side view of apparatus in accordance with my invention showing a coin-operated pin ball machine in dotted lines enclosed therein;

FIG. 2 is a front view of the apparatus of FIG. 1;

FIG. 3 is a rear view of the apparatus of FIG. 1;

FIG. 4 is a detailed side view of a portion of the apparatus of FIG. 1; and

FIG. 5 is a perspective view of the frame of the apparatus of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1 of the drawing, an enclosure **10** in accordance with my invention is shown enclosing therein a conventional coin-operated pin ball machine **11**. Although my enclosure **10** will be described hereinbelow with respect to a particular type of pin ball machine, the concepts are adaptable to any pin ball machine with modifications as will be discussed. The enclosure **10** is adapted to be bolted to a supporting surface, such as a concrete pavement **12**. This may be accomplished by drilling holes in the concrete and inserting bolts **13** therein with the threaded shafts **14** extending out and upwardly therefrom. The heads **15** are thus trapped in the concrete after filling the drilled holes with cement.

These shafts **14** extend through suitable apertures in enclosure **10** and are retained thereto by washers and nuts **16** threaded thereon. Any suitable number of bolting arrangements may be provided.

Enclosure **10** includes a pair of side walls **17** and **18** secured to a rear wall **19** and a front wall **20**. Top and bottom walls **21** and **22** may also be provided, if desired, but are not necessary to my invention. Bolts **13** would thus extend through the angle irons forming the base of frame **34** (see FIG. 5). Thus, frame **34** would include spaced elongated members **34***a*, **34***b*, interconnected to spaced elongated members **34***c*, **34***d*, forming base **34**. Frame **34** would also include a top wall **34''** formed in like manner and interconnected at the corners to base **34''** by upright members **34***e*. Finally, suitable screws or bolts **23** may be used to secure the various walls to frame **34**.

Each side wall **17** and **18** may be comprised of one or more pieces or panels with angle irons **24** extending along the edges thereof permitting walls **17** and **18** to be secured to frame **34**. Although walls **17** and **18** may be of wood, such as plywood, they may also be of metal, if desired, and this is true of all the remaining walls. Metal is preferred for reasons of security but wood may also be used in one or more wall sections.

Rear wall **19** (FIG. 3) may, for example, include a top panel **25** of metal and a bottom panel **26** of wood with border angle irons **24**. Front wall **20** (FIG. 2) may include a top panel **27**, of wood or metal, and a bottom panel **28**, preferably of metal, also bordered by suitable angle irons **24**. However, as shown in FIG. **2**, a hinge **29**, such as a piano hinge or similar "hidden" hinge may be provided along one side edge of bottom panel **28**. A like hinge **30** may also be provided along one side edge of top panel **27**.

Thus, front wall **20** may be comprised of two panels or front doors **27, 28** — similar to "dutch" doors with the doors **27, 28** hinging at hinges **29, 30**. Of course, the position of hinges **29, 30** may be oppositely mounted so that one door opens one way and one door opens the other way. Each door **27, 28** includes a lock box or cover **31** (see also FIG. **4**) covering a padlock **32** or the like so that doors **27, 28** may be locked in place. This is for protection thereof. As shown in FIG. **4**, top door **27** overlaps bottom door **28** so that top door **27** must be unlocked first before bottom door **28** can be unlocked (the coin box for machine **11** is located under bottom door **28**). Although locks are necessary for front doors **27, 28**, all the doors or walls may

include suitable lock covers **31** for protection against breakin (see end wall **19** in FIG. **3**, for example).

Stiffening means (not shown) may also be associated with each door for additional protection. Further, the lower end **33** of front door **28** (see FIG. **1**) may be raised above pavement surface **12** to compensate for variations in the pavement surface **12**, such as highcenters thereof. The hinges **29, 30** run the full length of the doors **27, 28** and are welded or otherwise secured to the frame **34**. This makes it impossible to open doors **27, 28** at the hinged sides.

Back door **19** may include a door panel **25** covering the upper half of the back of machine **11** and bottom panel **26** may be of iron or the like and welded to frame **34** (plywood may also be used but solid iron is preferred for security reasons). Any bolts or nuts **23** that can be reached may be spot-welded, if desired, to frame **34**.

Referring once again to FIGS. **2** and **3**, the shooter or plunger **35** of machine **11** is shown. In order to prevent vandalism of plunger **35**, as by pulling it out and standing on it, door **28** may include a suitable opening **36** therein for receiving plunger **35** extending therethrough and an arcuately-shaped guard **37** welded or otherwise secured to door **28** and encircling plunger **35**. As seen in FIG. **2**, guard **37** forms a trough for plunger **35** to travel therein and it is impossible to bend plunger or shooter **35**. Guard **37** may be of suitable metal, such as one-half of a generally cylindrical pipe section. A flange plate **38** may be secured to the bottom of guard **37** and wall **28** for strengthening purposes.

As shown in FIGS. **1** and **3**, one or more adjusting screws **39** may be provided extending through door **25** and into abutting engagement with the rear wall **40** of machine **11**. These screws **39** bear against the rear wall **40** to prevent movement of machine **11** and can be adjusted accordingly. Also as shown in FIG. **1**, the front legs **41** of machine **11** rest on pavement surface **12**. Adjusting screws or lug nuts **42** may be associated with bottom door **28** to engage front legs **41** and secure the machine **11** in position on surface **12**. With the front door **28** holding the front of machine **11** and the adjustable screws **39** holding snug against the back or rear wall **40** of machine **11**, machine **11** is held fast and cannot be tilted. This feature is important so that the scoring of machine **11** cannot be altered by shaking machine **11** as is well known in the pin ball art.

Lug nuts **42** may be bolted or otherwise secured to legs **41**. Thus, interchangable front doors **20** may be necessary depending on the particular type of pin ball machine **11**. Also, a suitable alarm system with means for deactivating the same may be associated with one or more of the doors in case someone tried to open the same. Lower door **28**, as shown in FIG. **2**, includes suitable openings therein for the various controls for operating machine **11**. Thus, opening **43** may be provided for receiving coins and opening **44** may be provided for a coin return. A plurality of suitable openings **45** may also be provided for various replay buttons, reject buttons, actuating buttons, etc. Openings **47** may also be provided in side walls **17, 18** for flipper buttons or the like. It can readily be seen that, by substituting a door similar to door **28** having openings therein related to the placement of the various controls of the machine, any conventional pin ball machine may be enclosed in the teachings of my invention. Also, bottom rear wall **26** may have an aperture or opening **48** therein for receiving a plug cord **49** for plugging machine **11** into a suitable source of power.

The bottom door **28**, as shown in FIG. **2**, thus completely encloses the vault portion of machine **11** so access thereto cannot be had. Locks **32** secure the doors **27, 28** in place by suitable engagement with means or hasps provided on machine **11**. If desired, key locks may also be provided in each cover **31** so even covers **31** cannot be easily removed. Also, if desired, conventional levelling means, such as shims or adjustable legs, may be associated with enclosure **10** for levelling the same. As discussed above, any suitable materials may be used for enclosure **10**. If metal is not used, any wood portions should preferably be weather-proof so enclosure **10** can be used out-of-doors. Metal is also preferred for fire safety — of course, any wood may be fire-proofed, if desired.

Handles (not shown) may also be provided on enclosure **10** to assist in carrying the same. Suitable bolting means may be used for bolts or screws **23** so that enclosure **10** can only be assembled from the inside thereof. For example, right hand carriage bolts may be used.

Service calls would be negligible with the use of my enclosure **10** since vandalism is prevented. This would result in considerable savings in such calls and repairs. Rear door **19** may be of lesser density material than the rest of enclosure **10** since this door **19** is often removed to service machine **11**.

One-eighth inch thick, **12** guage iron may be used along with ⅜ inch thick all-weather plywood for enclosure **10**. With normal care and maintenance, enclosure **10** will last extremely long, such as 15 or 20 years or so. Although a top wall **21** and a bottom wall **22** have been disclosed, obviously such walls may be eliminated. Only side walls **17, 18** and front walls **27, 28** and rear wall **19** are necessary (bolted or otherwise secured to frame **34**) to carry out my invention. It can be seen from the foregoing that I have described apparatus for enclosing a conventional coin-operated pin ball machine whereby the playing surfaces thereof can be opened to view merely by unlocking top door **27** with all operating controls thereof accessible to the user while protecting the operating contros themselves and the coin retaining means. The apparatus cannot be vandalised and thus can be left outside eliminating traffic and noise problems.

It is to be understood that to render the apparatus more suitable for shipment, as by rail or truck, that the frame corners and doors can be bolted or otherwise attached at the point of assembly. Thus the invention is capable of being welded, riveted, bolted, or glued together, or any combination thereof, as may be desired, in any permutation of subsections.

I claim as my invention:

1. Apparatus for enclosing a coin-operated pin ball machine wherein said machine has a generally vertical rear wall, a pair of side walls, a generally horizontal playing surface and a generally vertical scoring surface and a generally vertical operating surface extending downwardly from said playing surface, said machine having leg members for supporting said machine on a support surface and said operating surface having a plurality of operating controls for controlling said pin ball machine, said apparatus comprising:

an enclosure including a generally rectangular frame enclosing said machine, a rear wall closing off the

rear wall of said machine operatively connected to said frame, a pair of side walls closing off the side walls of said machine operatively connected to said frame, and a front wall closing off both the vertical scoring surface of said machine and said operating surface thereof, said front wall including a first upper wall portion hingedly connected along one vertical edge thereof to said frame and securely and removably fastened to said frame on the side opposite said hinged edge, and a lower wall portion hingedly connected along one vertical edge thereof to said frame and securely and removably fastened to said frame on the side opposite said last-mentioned hinged edge, said upper wall portion having a lower edge overlapping an upper edge of said lower wall portion and said lower wall portion having a plurality of openings therein providing access to the operating controls of said pin ball machine.

2. The apparatus of claim 1 including means associated with both said enclosure and at least some of said leg members for securing said enclosure thereto.

3. The apparatus of claim 1 including means associated with said enclosure for securing said enclosure to said support surface.

4. The apparatus of claim 1 including means associated with both said enclosure and said machine for maintaining said machine in a substantially steady relationship with respect to said support surface.

5. The apparatus of claim 1 wherein said operating controls of said machine includes a plunger extending generally outwardly from said operating surface; one of said plurality of openings in said lower wall portion receiving said plunger therethrough, and guard means operatively connected to said lower wall portion and encircling said plunger for guarding said plunger.

6. The apparatus of claim 1 wherein said upper and lower wall portions are securely and removably fastened to said frame by lock means associated with both said frame and said upper and lower wall portions for locking said upper and lower wall portions to said frame, and cover means associated with each of said lock means for covering each of said lock means.

7. The apparatus of claim 1 wherein said machine includes a flipper button associated with each side wall thereof and the side walls of each of said side walls of said enclosure include apertures therein providing access to each of said flipper buttons.

8. An enclosure for enclosing a coin-operated pin ball machine or the like comprising:

a first pair of spaced elongated members interconnected to a second pair of elongated members forming a generally rectangular base, a second pair of spaced elongated members generally of the same length as said first pair interconnected to a second pair of elongated members forming a generally rectangular top wall of substantially the same length and width as said base, and at least four upright members securely fastened at each corner of both said base and said top wall thereby forming a generally-rectangularly box-like frame;

a pair of side walls closing off each vertical side wall of said frame;

an end wall closing off the end wall of said frame; and

a front wall closing off the front wall of said frame, said front wall including a first upper wall portion hingedly connected along one vertical edge thereof to one of the front upright members of said frame, and a lower wall portion hingedly connected along one vertical edge thereof to one of the front upright members of said frame, said upper wall portion having a lower edge overlapping an upper edge of said lower wall portion and said lower wall portion having a plurality of openings therein providing access to the interior of said frame.

9. The enclosure of claim 1 wherein said frame includes means associated with both said frame and all of said side walls, said end wall and said front wall for securing all of said side walls, said end wall and said front wall to said frame in a manner whereby access to said means is provided only from the interior of said enclosure.

* * * * *