

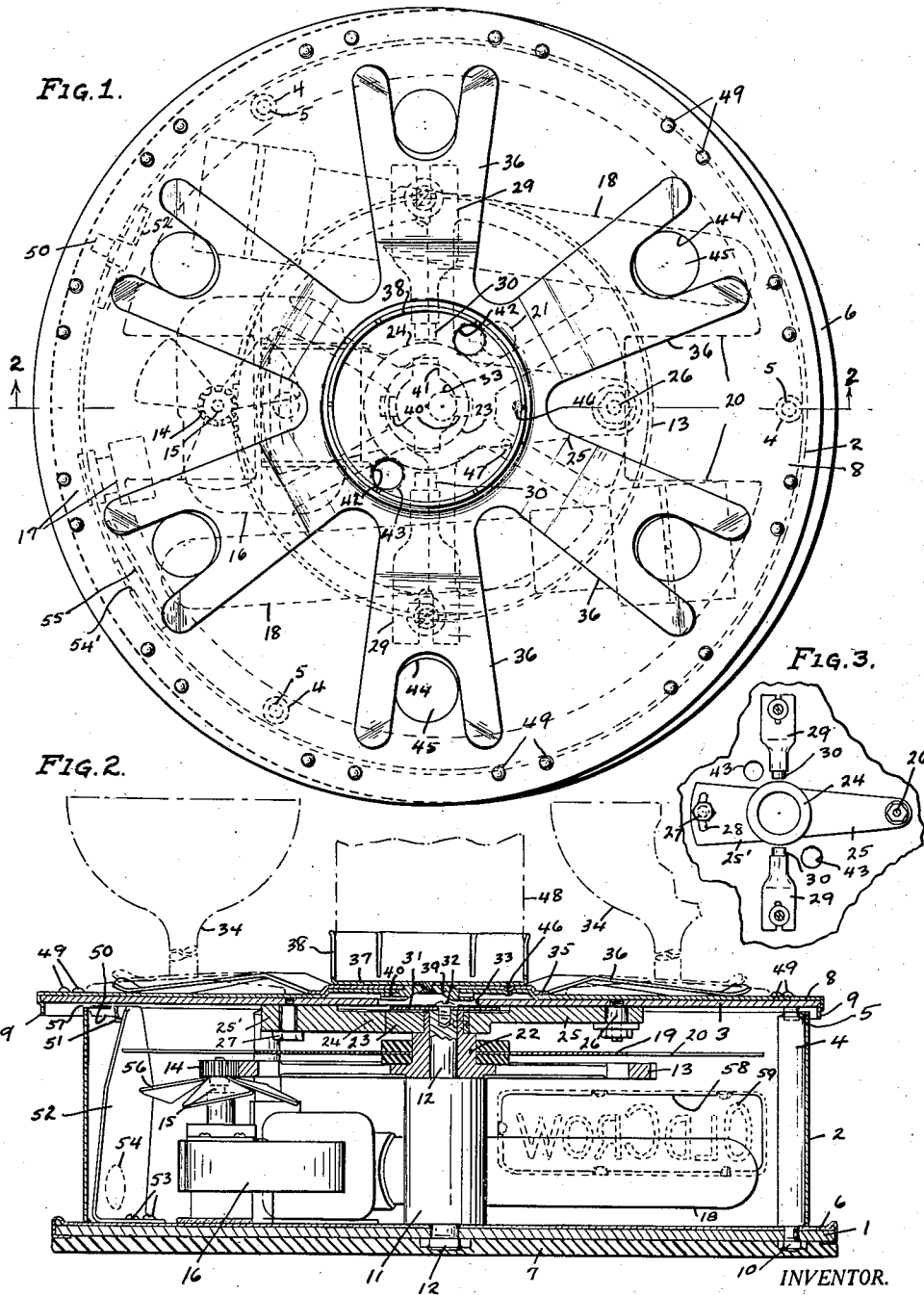
May 3, 1938.

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2,115,753

COCKTAIL MIXER AND GLASS COOLER

Filed Feb. 3, 1936



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2,115,753

COCKTAIL MIXER AND GLASS COOLER

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Application February 3, 1936, Serial No. 62,106

15 Claims. (Cl. 259—54)

This invention relates to mechanical devices for shaking the ice around the inside of cocktail glasses for chilling the glasses preparatory to serving the drinks. The principal object of the present invention is to effect improvements in the type of apparatus shown and described in my co-pending patent application filed December 23, 1935, under Serial No. 55,880.

A particular feature of the present improvement is that the glasses being cooled slowly revolve with the table while being oscillated to shake the ice around inside the glasses. Another feature is the shaking or mixing of the cocktail itself by the apparatus while the glasses are cooling. Other features and advantages of the construction will appear in the following description and accompanying drawing.

In the drawing Fig. 1 is a plan view of my improved cocktail glass shaker.

Fig. 2 is a vertical cross section of the device as taken along the line 2—2 of Fig. 1.

Fig. 3 is a reduced size bottom plan view of the central portion of the upper plate showing the pivoted and movable cam bearing or eccentric strap.

Briefly described the device consists of a low casing, the top of which forms a small table to receive a half dozen cocktail glasses (depending on the size of the device) and which will slowly revolve the glasses bodily with the top plate of the casing while at the same time give them all a rather violent oscillatory motion so as to cause lumps of ice placed in them to swing around the walls of the glasses, in the manner done manually by a bartender, so as to cool the glasses before serving the cocktails. While the glasses are thus oscillating colored lights shine up from below the glasses to impart a very beautiful effect, and at the same time a shaker of the cocktail mixture, or a bottle of the beverage or a shaker full of the same, may also occupy a position on the little table to be similarly illuminated, and a cut-out transparent sign along the front wall of the casing is illuminated from within to advertise the beverage being displayed on top and dispensed.

In the drawing the casing comprises a circular main base plate 1 with a cylindrical sheet metal wall 2 and a main top plate 3 loosely or slidably supported on three or more marginal posts 4 preferably each having a felt button insert 5 to hold oil and avoid noise.

The main bottom plate 1 is preferably covered on top with a thin sheet of stainless steel or other bright metal 6 crimped over the edges of plate 1, and on the bottom is cemented a heavy piece of rubber or felt 7. The main top plate 3 is also covered with a thin sheet of stainless steel or other bright metal 8 crimped over the edge of disk 3 and forming a downwardly extending flange 9.

Marginal posts 4 are secured to the bottom plate 1 as by nuts 10 screwed on reduced portions of the posts, and a relatively large central post or pedestal 11 is similarly formed and secured in place as by a nut 12. The upper end of the pedestal 11 is reduced in diameter as at 12 to form a stub shaft upon which a large horizontally disposed spur gear 13 is revolvably mounted. Gear 13 is driven by means of a small fiber pinion 14 carried on the vertical shaft 15 of a small electric motor 16 suitably wired for extraneous supply of electric energy and controlled through means of a small switch 17 mounted in the wall of the casing, the electric wiring not being shown on the drawing as presenting nothing novel, though within the casing also connected in the electric circuit are a couple of elongated electric globes 18. Above the large gear 13 and mounted on its hub 22 is a thin metal disk 19 forming a shield to prevent the light of the lamps 18 striking upward except through certain notches 20 and holes 21 as the disk revolves when the motor is running.

The hub 22 of the gear is reduced in diameter at its upper end and secured to it is an eccentric disk 23 operating within an eccentric strap 24 which is part of a lever 25 pivoted at 26 to the upper plate 3 and also stabilized by a retaining screw or rivet 27 working freely through an arcuate slot 28 in an extension 25' of lever 25 on the opposite side of eccentric strap 24, while at 90° to a line through points 26 and 27 are a couple of bumpers or stops 29 fitted with fiber buttons 30 spaced outwardly a short distance (about $\frac{1}{16}$ " in practice) from the perimeter of eccentric strap 24 so as to permit it to swing back and forth between the bumpers on its pivotal connection 26 to plate 3. The bumpers 29 may be omitted if slot 28 is of the correct length, but the bumpers may be adjustably mounted as indicated to permit adjusting of the permissible movement of the eccentric strap. Above the eccentric and strap is a retainer disk 31 secured to the upper end of hub 22 by a screw 32 which is accessible through a central hole 33 in the upper plate, and which arrangement prevents the upper plate from being lifted off.

To hold the cocktail glasses 34 on the table during the oscillation of the table or upper plate, I provide a thin spring metal spider 35 formed with a half dozen forked arms 36 each of which resiliently engages over the base of a glass as shown in Fig. 2 when pushed under the forked arms. This spider is removably held in place by means of another or small central disk 37 having an upwardly extending split spring rim 38 adapted to hold a cocktail shaking receptacle 48 upright, and which central disk is of sheet metal and carries a hub 39 provided with two or more latch arms or lugs 40 which are passed through notches 41 in the edge of central hole 33 in a

centrally raised portion of plate 8 to engage below it when the central disk is turned slightly to lock both spider and disk 37 in place.

Small central disk 37 has a couple of holes 42 through it to coincide with holes 43 in the upper plate 8 and holes 21 in disk 19 so as to pass shafts of light upward through a glass cocktail shaker or a bottle when held within the rim of the central disk 37.

Upper plates 3 and 8 have holes through them at 44 between the arms of spider forks 36. Each set is glazed with a flush disk 45 of colored glass to cause a shaft of colored light to strike upward as the notches 20 of disk 19 pass under the glass disks, and consequently shine upward through the glasses as they go around in operation of the machine.

The spider is center-punched or provided with a little locating tit at 46 to match a suitable hole or indentation directly under it in plate 8 so as to align the spider arms with respect to colored glass disks 45, or the device 46 may be superimposed over another small hole 47 in plate 8 to turn the spider $\frac{1}{6}$ th of a revolution from the position shown in Fig. 1 so that when solid metal "glasses" are used, as may sometimes be the case for cocktails, they will not obstruct the colored lights from disks 45 but the lights will then shine up between the metal glasses and illuminate their outer sides.

When the spider is in either position the glasses are prevented from accidentally working out of the spider arms by the provision of small raised stops 49 formed on the top plate 8 but over which the glasses may be forcibly pushed or pulled.

To cause the upper plates 3 and 8 to slowly rotate bodily as well as oscillate through the rotation of eccentric 23, a bumper is provided to work against the inner edge of flange 9. This bumper is a leather finger 50 projecting outwardly through an opening 51 in the wall 2 of the casing and which finger is secured at its inner end to a flat spring steel arm 52 or bracket in turn secured at its lower end as at 53 to the bottom plate of the casing. One or more similar vent holes, 54, are provided and similarly shielded as at 55, though but one bumper, 50, only is used. A small fan 56 on the motor shaft insures circulation of air from the lower vents for discharge around the clearance space 57 between the casing wall and main top plate 3.

Another feature of the device is an elongated transparency sign window 58 formed in the casing wall suitably arranged with marginal groove or equivalent to hold any desired transparency sign as at 59 for illumination from within the casing, and which may have advertising relation to the beverage being shaken on top of the table.

In operation the motor is started with the switch 17 to revolve the cam or eccentric 23 and which would ordinarily tend to give the upper plate a circular oscillatory motion equal in diameter to the throw of the eccentric (in practice about $\frac{3}{8}$ of an inch being found sufficient). However, since the eccentric strap is itself free to move in one direction between the stops 30, the effective throw is reduced in that direction but not in the direction at right angles thereto, hence the resulting oscillatory movement of the plate or table at every point is substantially elliptical, though with rather sudden departures from the curve at the moments when the eccentric strap flops over from one stop 30 to the other, thus imparting a series of slight jerks to the oscillatory movement which tend to throw the ice cubes in the glasses against and

around their side walls, as well as to thoroughly shake the cocktail mixture in the cocktail shaker. A practical or satisfactory speed of oscillation for the purpose has been found to be about 240 rotations of the eccentric per minute.

As the table or top plate oscillates, its lower flange 9 bumps against the resiliently mounted leather finger or bumper 50 every time the plate moves over toward it, and the result is a slow bodily turning of the table and the glasses and shaker carried thereby. The motion is thought due to putting excessive frictional pressure on one side of the eccentric at the intervals of contact with finger 50, but it is noted that while the device is thus operating if a finger of one's hand or a bumper is held at a point exterior to rim 9 so that the outside surface thereof bumps the finger at the opposite intervals that the general rotation of the table is reversed in direction, but just why has not been determined.

Having thus described my improved apparatus, it will be seen to comprise a mechanism of considerable practical as well as advertising utility.

I claim:

1. In an apparatus of the character described, a casing having a bottom and side walls, a top plate covering said casing, means supporting said top plate clear of said casing for bodily movement in a horizontal plane, means for holding drinking glasses upon the top plate, an electric motor within the casing, a gear train from the motor, an eccentric operated by the gear train, and means transmitting motion from said eccentric to said top plate arranged and adapted to cause the plate to be oscillated in a horizontal direction in a generally elliptical path of travel.

2. In the construction specified in claim 1, said plate being provided with a series of openings therethrough and a colored glass set in each of said openings with its upper surface substantially flush with the upper surface of said plate to pass colored rays upwardly from said lamp, and a notched disk rotatably mounted within said casing and connected with said motor to be rotated thereby, said disk arranged and adapted to periodically interrupt the light from said lamp upon rotation of the disk.

3. In a cocktail glass shaker, a table upon which the glasses are placed, means supporting said table for lateral movement, an eccentric disk rotatably supported adjacent the underside of said table, a strap embracing said eccentric carried by the under-side of the table, power-actuated means under said table revolving said eccentric disk, and means adapted to permit bodily lateral movement of said strap relative to said table whereby the effective motion of the table is substantially elliptical.

4. In the construction specified in claim 1, said means for holding drinking glasses comprising a spider of sheet metal having a plurality of resilient arms each formed to press downward upon the base of a glass.

5. In the construction specified in claim 1, said means for holding drinking glasses comprising a spider of sheet metal having a plurality of resilient arms each formed to press downward upon the base of a glass, and means securing said spider to the table for quick removal to facilitate cleaning the table.

6. Apparatus for cooling drinking glasses, with ice, comprising a device having a horizontal table-like top, means for holding a plurality of drinking glasses in upright position on said table-like top, and in laterally spaced relation for movement with

the top, means for moving said table-like top bodily laterally in edgewise direction in a generally oscillatory manner in an arcuate path of travel of a uniform size for each successive oscillation of the top in said path for causing the glasses to simultaneously move laterally in generally similar separate, individual arcuate paths of travel and at a speed of travel whereby a lump of ice placed in each glass will swing around the lateral inner sides of the glass.

7. Apparatus for cooling drinking glasses with ice, comprising a device having a table-like top, means for holding a plurality of stem-type drinking glasses upon said table-like top comprising forked, resilient clamps respectively engaging the bases of the glasses, said clamps being arranged and adapted to yieldably urge the bases of the glasses downwardly against said table-like top for movement of the glasses therewith, means for moving said table-like top bodily laterally in a generally oscillatory manner in an arcuate path of travel of a substantially uniform size for each successive oscillation of the top in said path for causing the glasses to simultaneously move laterally in similar, separate, individual, arcuate paths of travel, and at a speed of travel whereby a lump of ice placed in each glass will swing around the inner lateral sides of the glass.

8. Apparatus of the character described comprising a horizontal table, means for firmly holding a plurality of drinking glasses and a cocktail shaker upright in substantially fixed pre-determined laterally spaced relation on said table for movement therewith, means for moving said table bodily laterally in edgewise direction in a generally oscillatory manner in an arcuate path of travel of a uniform size for each successive oscillation of the top in said path for causing the glasses and shaker to move laterally in separate, individual paths of travel and at a speed of travel whereby a lump of ice placed within each glass and material within the shaker will respectively circulate around the insides of the glass and shaker.

9. Apparatus of the character described comprising a table, means for firmly holding a plurality of drinking glasses and a cocktail shaker upright in substantially fixed, predetermined, laterally spaced relation on said table for movement therewith, means for moving said table bodily laterally in a generally oscillatory manner in an arcuate path of travel for causing the glasses and shaker to move laterally in separate, individual, similar-sized paths of travel and for rotating said table at a speed of travel slower than the speed of travel of the table in its aforesaid arcuate path of travel during the lateral movement of the table in said arcuate path of travel, whereby a lump of ice placed within each glass and material within the shaker, will respectively circulate around the insides of the glasses and shaker, and the glasses will simultaneously move around the axis of rotation of the table, while said glasses are moving in their respective separate arcuate paths of travel.

10. Apparatus for cooling drinking glasses with ice comprising means for supporting a plurality of drinking glasses upright in laterally spaced relation, means for moving the glasses simultaneously in a horizontal plane in a generally oscillatory manner in separate, individual, substantially similar-sized arcuate paths of travel at a

speed of travel whereby a lump of ice placed in each glass will swing around the inner lateral sides of the glass, and means for bodily revolving the supported glasses as a unit around a single axis during the oscillatory movement of the glasses in their respective paths of travel.

11. In apparatus of the character described, a horizontally disposed table top, means arranged and adapted for holding a plurality of drinking glasses and the like thereon in laterally spaced relation for movement with said top, means for continuously moving said top bodily, laterally, in a generally oscillatory manner in an arcuate path of travel, a stationary bumper below said table, means carried by said table arranged and adapted to engage said bumper during each oscillatory movement of the table for causing a slight jarring of said table top during each oscillation thereof, and means for supporting said table horizontal during oscillation thereof.

12. In a construction as defined in claim 11, said means for supporting said table comprising a plurality of supporting members arranged and adapted to slidably engage the under side of the top at spaced points therearound adjacent the margins thereof for bodily sliding of the table therein in its arcuate path of travel.

13. In a construction as defined in claim 11, the means for continuously moving said table top including an eccentric cam separate from the table and a cam strap carried by the table rotatably receiving the cam thereon, and means for revolving said cam.

14. In apparatus of the character described, a horizontally disposed table top, means arranged and adapted for holding a plurality of drinking glasses and the like thereon in laterally spaced relation for movement with the top, means for moving said top bodily, laterally in a generally oscillatory manner in an arcuate path of travel without appreciable rotation of the top relative to its vertical axis during each oscillation thereof, a casing below said table top enclosing the means for moving the top, said casing having vertical walls terminating in free edges spaced below the top, said top having a flange depending from around the edges thereof outwardly of the sides of the casing and extending in laterally overlapping relation to the upper margins of the walls of the casing, said flanges and upper margin of the walls adjacent thereto being spaced apart an appreciable distance to permit the top to oscillate laterally relative to the casing in all directions, and means for slidably supporting said top for oscillation thereon.

15. In apparatus of the character described, a horizontally disposed table top, means movable with the top arranged and adapted for removably holding a container over the center of the table and for removably holding other containers at opposite sides of the center of the top, means for moving said top bodily laterally in a generally oscillatory manner in an arcuate path of travel for causing containers held by said first mentioned means to move in independent, separate similar sized arcuate paths of travel, the means for moving said table being connected therewith at a point below the center of the table, and means slidably supporting said table at spaced points adjacent its edges for sliding of the table top thereon during oscillation thereof.

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