This invention relates to new and useful improvements in an automatic cocktail shaker.

The invention has for an object the construction of a cocktail shaker which is characterized by the fact that it is composed of a standard with track elements, a receptacle holder adapted to be slidably mounted on the track elements and connected with a reciprocating mechanism mounted on said standard.

It is proposed to so construct the device that the receptacle holder is capable of receiving and holding a glass or similar container.

As a further object of this invention it is proposed to provide a novel mechanism for holding the receptacle in position.

Still further the invention contemplates to provide a construction which permits two glasses set with their open ends one within the other to be mounted upon the receptacle holder and shaken.

Still further the invention proposes a novel arrangement for holding the glasses in position on the receptacle holder. It is proposed to characterize the holding mechanism by the fact that the parts pass a certain dead center and so lock themselves in position in the holding condition.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:—

Fig. 1 is a perspective view of an automatic cocktail shaker constructed according to this invention.

Fig. 2 is a front elevational view of the standard and reciprocating mechanism per se.

Fig. 3 is a side elevational view of the receptacle holder, this view being an elevational view looking from the left hand side of Fig. 4.

Fig. 4 is a side elevational view of Fig. 3.

Fig. 5 is a plan view of Fig. 4.

Fig. 6 is a horizontal sectional view taken on the line 6—6 of Fig. 1.

Fig. 7 is a fragmentary horizontal sectional view taken on the line 7—1 of Fig. 4.

Fig. 8 is a fragmentary sectional view taken on the line 8—8 of Fig. 4.

Fig. 9 is a side elevational view similar to Fig. 4, but illustrating a modified form of the invention.

Fig. 10 is a horizontal sectional view taken on the line 10—10 of Fig. 9.

Fig. 11 is a fragmentary side elevational view of Fig. 9.

Fig. 12 is a fragmentary elevational view of a clamp portion, this view being shown as though looking in the direction of the line 12—12 of Fig. 11.

The automatic cocktail shaker, according to this invention, comprises a standard 10 having track elements 11 mounted thereon. A receptacle holder 12 is adapted to slidably engage the track elements and is connected with a reciprocating mechanism consisting of an electric motor 13 attached on the standard 10, a crank element 14 driven by the motor, and a rod 15 connected between the crank element and the receptacle.

The standard 10 comprises a base portion 16 upon with a bracket 16 is secured. This bracket is formed with an opening 16 extending from the bottom slightly above the center. The track elements 11 are secured along the sides of this opening. The receptacle holder comprises an arm element 17 to one side of which there is secured a complementary track element 18. This complementary track element engages the tracks 11 as clearly shown in Fig. 6. The parts are thus slidably connected together.

A stud 19 projects from the arm 17. The rod 15 is secured at its upper end pivotally upon the stud. A base cup 20 is secured upon the arm 18 and is adapted to receive a glass or other receptacle, indicated by the dot and dash lines 21. A bar 22 is pivotally mounted upon the top of the arm 17 by a pinte 23. This bar supports a top cup 24 adapted to engage over the top of the receptacle 21. A mechanism is provided for releasably clamping the arm 24 in a lowered position.

The mechanism mentioned in the previous paragraph consists of a handle 25 pivotally mounted by a pinte 26 in an off-set position on the arm 22. A rod 27 extends through the arm 22 and against a portion of the handle 25 and is arranged so that when the handle is moved upwards the rod is forced inwards. The end of the rod projects from the arm 25 and engages a bridge element 28 which extends transversely, and engages against the upper end of a pair of springs 29 which are secured at their lower ends by screws 30 on the arm 17. A lever 31 is pivotally mounted by a pin 32 at its bottom end on a post 33 attached on the arm 17. This lever 31 extends upwards and is fixedly connected with the bridge 28 which freely rests against the rod 27.

Intermediate of the lever 31 there is a latch 34.
element 34 which is pivotally connected therewith by a pin 36. This latch element extends through a small opening in the arm 47 and its front end is adapted to engage a knob 38 formed in a rod 37. This rod is slidably mounted through a bracket 38 attached on the arm 17. The lower end of the rod 37 is provided with a top element 39. The upper end is pivotally connected by a pin 40 with the arm 52.

In Fig. 4 the receptacle holder is shown in the act of holding the receptacle 21. In this condition the receptacle holder is connected with the reciprocating mechanism and the drink contained in the receptacle may be mixed. To remove the receptacle it is merely necessary that the handle 25 be moved upwards so that it presses in the rod 27 which forces back the lever 31, which in turn draws the latch element 34 rearwards and frees the rod 37. The arm 22 is now free to be lifted upwards as indicated by the dot and dash lines. Then the receptacle 21 may be removed.

In Figs. 9 and 10 a modified form of the invention has been disclosed which is characterized by the fact that the receptacle holder is capable of holding a pair of receptacles 21a and 21b having their open ends inter-engaged with each other. The receptacle 21b is rested on the cup 20' which is secured on the arm 17'. This arm 17' is provided with a track element 18' to which the screw 19' is connected. At the upper end of the arm 17 there is a cup element 24' which is connected with an arm 45 of bell shape.

A pin 46 pivotally connects the arm 45 at its center upon the arm 17. The other end 45a of the arm 45 extends downwards and is provided with a pin 48 which engages in a slot 49 formed in the vertical arm of an L-shaped lever 50. This L-shaped lever is pivotally mounted by a pin 51 intermediate of its ends. The other end of the L-shaped lever is provided with a pin 52 engaging a slot 53 in an arm 54 which is pivotally supported by a pin 55 upon a bracket 51. The arm 54 connects with a gripping element 56 adapted to engage the upper portion of the receptacle 21a. A stop element 59 is formed on the arm 17 and has a front face 60 of resilient material such as soft sheet rubber.

In Fig. 9 the receptacle holder is shown in its operative position holding the receptacles 21a and 21b in position. In this condition of the device the pin 48 is past its dead center against the bottom of the slot 49 so that the parts are locked. The ends 45a of the arm 45 and the end of the lever 50 engage against the resilient material 60 which acts as a stop to prevent the parts from moving too far past the dead center. The receptacles may be removed by manually forcing the cup 24' upwards to the dot and dash position. This automatically forces the pin 48 against the bottom of the slot 49 past the dead center and then the bell crank 50 pivots clockwise. The holding element 59 pivots to a raised position as indicated by the dot and dash lines. The receptacles are now free to be removed. The receptacles may be again held in position by merely forcing the cup element 24' back to its original position.

In Figs. 11 and 12 another modified form of the invention has been disclosed which distinguishes in several respects from the form of the invention shown in Figs. 9 and 10. According to this form of the invention there is an arm 17a from the upper end of which there is supported a top cup 24' connected with an arm 45' pivotally mounted in the arm 47 and its front end is adapted to engage a knob 38 formed in a slot 49' of a bell shaped lever consisting of the arm 50' pivotally supported by a pin 51' and having an extended end 58' which supports a clamp element 59' formed with an open side 58' (see Fig. 12) so that the receptacle 21a may be forced from its grip.

In Fig. 11 the cup 24' is shown holding the receptacle 21a in position. To release the receptacle it is necessary that the cup 24' be moved upwards to the dot and dash position. This immediately pivots the pin 48' from its dead center position anti-clockwise and pivots the bell crank 50' clockwise. This moves the clamp 58' downwards to grip the receptacle 21a. Thus the receptacles are held from accidental spilling.

The receptacle 21a may easily be forced from the glass 58'.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. In an automatic cocktail shaker, a standard, a reciprocating mechanism on said standard, an arm slidably mounted on said standard and connected with said reciprocal mechanism and having a base cup for receiving a glass or the like, a bar pivotally mounted on top of said arm and having a top cup for engaging on top of said glass or the like, and a mechanism for releasably clamping said arm in a lowered operative position, comprising a handle pivotally mounted on said bar, a rod slidably through the bar and movable by moving said handle, a pivotally mounted lever having a bridge portion engaging said rod, resilient means urging said bridge portion against the rod, a bolt element connected with said lever and slidably mounted through said arm, and a keeper rod connected with said arm and slidably supported and engaged by said bolt element.

2. In an automatic cocktail shaker, a standard, a reciprocating mechanism on said standard, an arm slidably mounted on said standard and connected with said reciprocating mechanism and having a base cup for receiving a glass or the like, a bar pivotally mounted on top of said arm and having a top cup for engaging on top of said glass or the like, and a mechanism for releasably clamping said arm in a lowered operative position, comprising a handle pivotally mounted on said bar, a rod slidable through the bar and movable by moving said handle, a pivotally mounted lever having a bridge portion engaging said rod, resilient means urging said bridge portion against the rod, a bolt element connected with said lever and slidably mounted through said arm, and a keeper rod connected with said arm and slidably supported and engaged by said bolt element, said resilient means comprising a pair of springs mounted on a stationary portion and engaging said bridge.

PAUL PANKOTAN.