

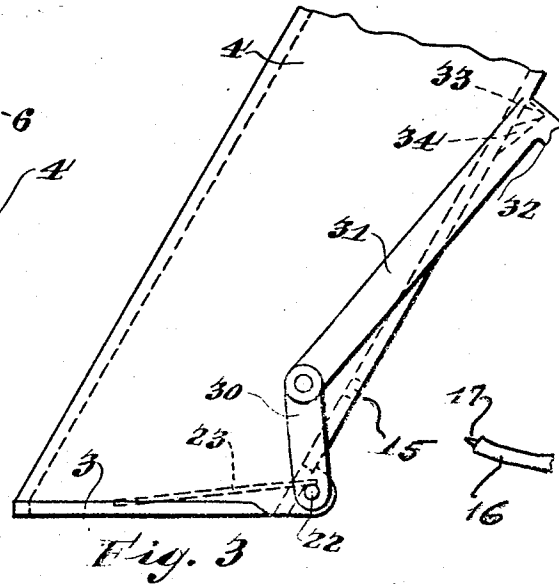
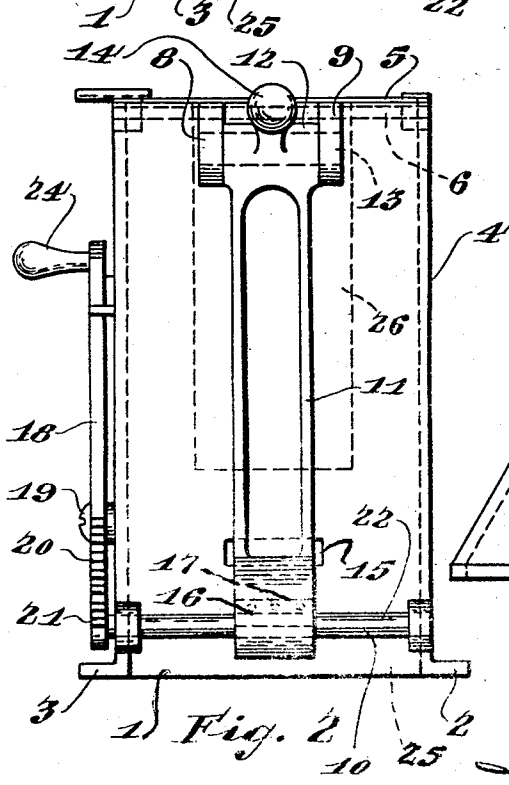
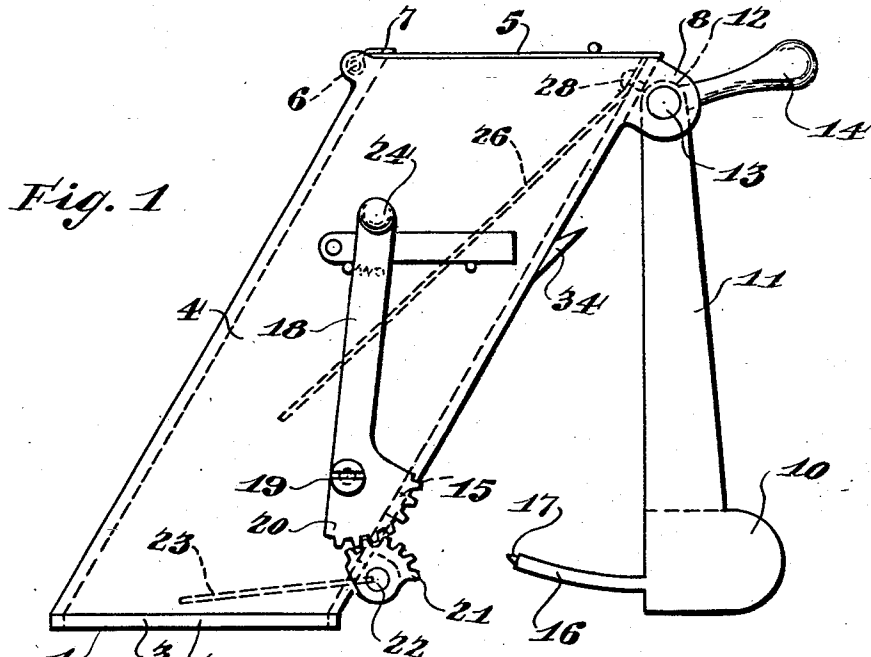
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M. LEHR

2,235,712

BOTTLE CRUSHING APPARATUS

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INVENTOR
Michael Lehr

INVENTOR

B'

BY
Frank Keifer
ATTORNEY

ATTORNEY

UNITED STATES PATENT OFFICE

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BOTTLE CRUSHING APPARATUS

Michael Lehr, Rochester, N. Y., assignor of one-half to Norman Lehr, Leicester, N. Y.

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1 Claim. (Cl. 83—93)

It is a well known fact that popular brands of manufactured goods are dispensed in bottles and after the bottle is empty and the label is still on it, it is filled by the retail dealer with an inferior grade of the same kind of goods, and the goods are dispensed from the bottle, misleading the public to believe that they are getting the high grade product when in fact they are getting an imitation and an inferior product. This pertains more especially to high grade alcoholic drinks. As to such goods, the law requires that the bottles be broken or destroyed so that they cannot be refilled and used over again, for the purpose of deceiving the public.

The object of my invention is to provide an apparatus which can be cheaply made and by which empty bottles can be easily, quickly, and safely broken, without any danger to the operator.

Another object of the invention is to provide a device by which the bottle is broken by a hammer-like blow.

Another object of the invention is to completely enclose the bottle, so that the operator is protected from flying pieces of glass.

Another object of the invention is to provide a casing or housing, the bottom of which stands horizontal on a table or similar support, but the superstructure is inclined to the bottom at an acute angle.

Another object of the invention is to provide a hammer or hammer-like device that is supported from the top of the housing and swings freely therefrom outside of the housing, so that it can swing and gain acceleration outside of the housing.

These and other objects of the invention will be illustrated in the drawing, described in the specification, and pointed out in the claim at the end thereof.

In the drawing:

Figure 1 is a side elevation of the device.

Figure 2 is a front elevation of the device, looking at it from the right in Figure 1.

Figure 3 is a side elevation of the device showing a modified form of the connections for operating the plate or bottom 23.

In the drawing like reference numerals indicate like parts.

In the drawing reference numeral 1 indicates the base of the housing having flanges 2 and 3 thereon projecting outside of the housing, by which flanges it can be fastened to a table or support having a suitable hole therein.

On this bottom base is the housing or casing

4 extending upwardly therefrom at an acute angle. This housing is a box-like structure, cast preferably in one or two pieces, and is hollow and is open at the top and bottom so that a bottle can be inserted therein and pass through it. On top of this housing is a lid 5 which can be raised for the purpose of opening the housing at the top, so that a bottle can be inserted therein. This lid swings on a pivot pin 6 having a helical spring 7 thereon which normally presses the lid 5 down and holds it in closed position.

On the front of the housing are lugs or bosses 8 and 9 between which swing the hammer 10 and its handle 11. This hammer and its handle, so to speak, are all made of one piece and is provided with a boss 12 at the top, through which extends a pivot pin 13 which extends through the lugs 8 and 9. Fastened to the boss on top of the handle 11 is a handle 14, by which the hammer can be conveniently swung toward and away from the housing. The housing is provided with a slot 15. The hammer is provided with a blade 16 having teeth 17 thereon, which blade is curved concentric with the pivot pin 13. This blade is adapted to enter the slot 15 when the hammer swings forward. When the hammer has swung through its full stroke, this blade will extend inward through the slot 15 and into the housing far enough to penetrate the bottle and break it. The apparatus is intended to be used with standard size bottles that are adapted to be broken by this device.

On the side of the housing is pivoted an arm 18 on a pivot pin 19. On the bottom of this arm is a mutilated gear 20, which meshes with a mutilated gear 21 pivoted on a pin 22. Carried on this pin 22 is a plate or a bottom 23 which is wide and long enough to hold the bottle before it is broken. On top of this arm 18 is a handle 24. After the bottle is broken, the arm 18 is pulled forward by the handle 24, causing the plate 23 to tilt downward. This permits the pieces of the bottle to pass through the opening 25 into the receptacle below the device.

The arm 18 is normally held in the position shown in Figure 1 by a spring which is strong enough to support the bottle.

Inside of the housing is also placed a spring plate 26, fastened to the housing by a rivet 28. This plate is in the nature of a spring, the bottom of which yields when the bottle is placed in the housing and pushes the bottle back in the housing in position to receive the blow from the hammer.

In the ordinary operation, the lid 5 is raised and the bottle is inserted, it being pushed back

by the spring plate 26. The operator then closes the lid and grasps the handle 14 and swings the hammer with a quick blow, so that the blade 16 and its points 17 strike the bottle and break it.

5 The hammer then swings out to the position shown in Figure 1 by gravity, or is moved thereto by the operator who then grasps the handle 24 and moves the lever 18, thereby dumping the plate 23, thereby permitting the pieces of glass to fall
10 down into the receptacle below.

In Figure 3 is shown a modified form of the mechanism for operating the bottom 23. In this case an arm or crank 30 is provided keyed to the shaft 22 which carries the bottom 23. To this
15 arm is connected a link 31 having a handle 32 thereon, which handle is shown partly broken away. The link 31 is normally held in the position shown in Figure 3, as follows: On the handle is a wedge-shaped lug 33 projecting sideways
20 therefrom under the housing 4. This lug 33 engages in a recess formed by a block 34 cast integral with the housing. When it is desired to

dump the bottom 23, the lug is drawn out of the recess and the link 31 is then pushed down, which causes the bottom to tilt, and this permits the broken pieces of the bottle to fall out of the housing.

I claim:

In a device for breaking bottles, the combination of a housing open at the top and bottom and closed on the four upright sides in which a bottle can be inserted, a base for said housing on which
10 said housing is supported at an incline, a hammer having a handle the upper end of which is pivoted to the outside of the housing at the top so that the hammer swings outside of the housing and outside of its base, a spring plate inside of the
15 housing adapted to bear against a bottle and temporarily hold it therein, a bottom plate pivoted on one side adapted to temporarily support the bottle, means for swinging said bottom plate downwardly so as to dump the bottle.
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MICHAEL LEHR.