Dec. 6, 1938. E. A. MIRZ 2,138,931

BOTTLE BREAKING TOOL

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Fig. 1.

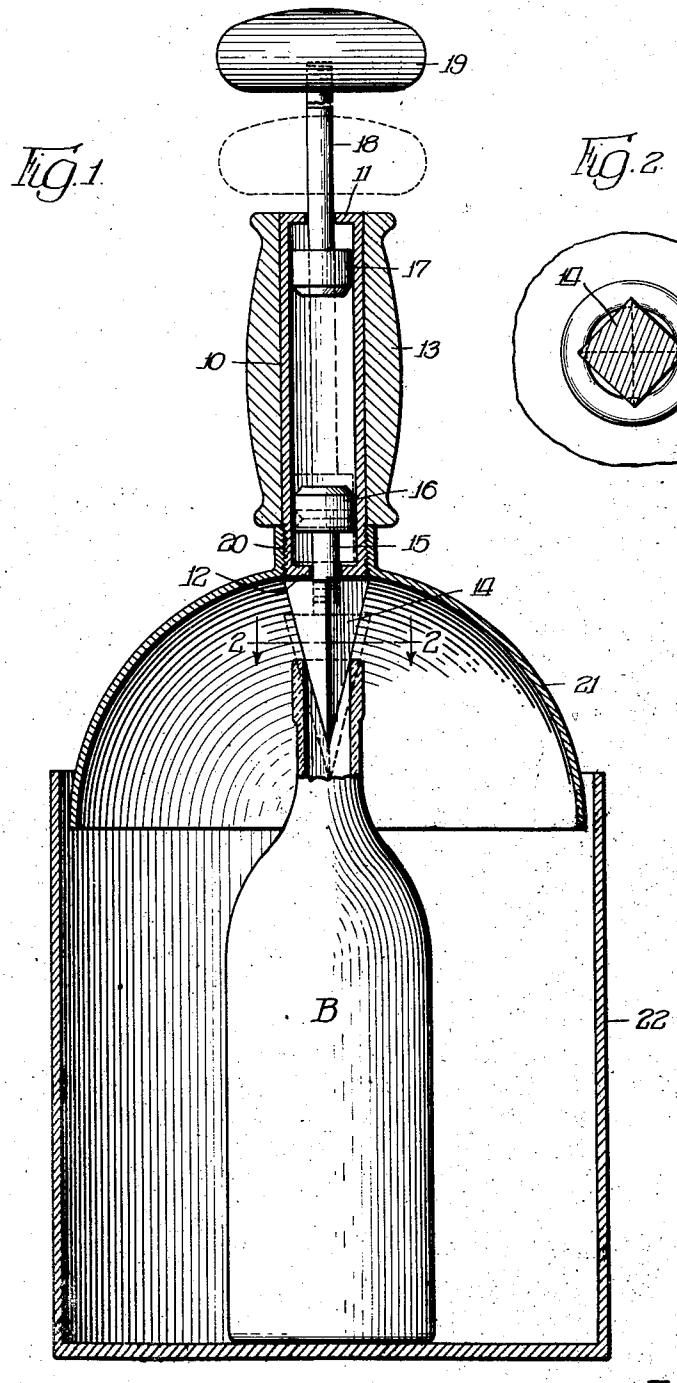


Fig. 2.

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BOTTLE BREAKING TOOL

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2 Claims. (Cl. 83—93)

The present invention is in the nature of an instrument or tool for breaking empty bottles. Tavern keepers and others who serve alcoholic drinks from bottles on which the government revenue tax has been paid are required by law to break the empty bottle as soon as its contents have been withdrawn, to prevent the bottle being illegally refilled. And where the smashing of the bottle is effected by the blow of an ordinary hammer or like tool, the glass fragments and chips of course fly in every direction, and not only involve time and labor in sweeping them up, but present a source of possible injury to the eyes or hands of the operator or by-standers.

A glass liquor bottle may be effectively and legally destroyed against the possibility of refilling and reuse by breaking the neck of the bottle alone; and with this in mind I have devised a simple tool for use by bar tenders and the like, one purpose or object of which is to provide a handy and effective means for destroying an empty bottle by splitting or otherwise destroying the integrity of the neck of the bottle, and another purpose or object of which is to provide, in such a means, auxiliary means whereby the scattering of the fragments and chips is prevented.

Still other objects and attendant advantages of the invention will be apparent from the following detailed description of a preferred embodiment thereof, taken in connection with the accompanying drawing in which:—

Fig. 1 is a vertical axial section, with certain parts appearing in elevation.

Fig. 2 is an enlarged cross-section on the line 2—2 of Fig. 1.

Referring to the drawing, 10 designates a hollow holder, preferably of tubular form, having centrally apertured upper and lower end walls 11 and 12, respectively, the holder 10 being preferably encased in a handle piece 13 of wood, cork, hard rubber, or other suitable material. 14 designates a bottle neck splitter in the form of a wedge block, preferably a four-sided structure of iron or steel, the lower pointed end of which is adapted to enter the neck of a bottle B. This wedge block 14 is supplied with a shank comprising, in the present instance, a stem 15 having a threaded lower end screwing into a tapped hole in the base of the wedge block 14 and a head 16 on the stem 15 that has a loose sliding fit in the holder 10. The stem 15 has a limited play through the aperture of the lower end wall 12 of the holder.

Reciprocable within the holder 10 is a hammer, comprising in the present instance a head 17 that has a loose sliding fit in the holder 10, a stem 18 connected to the head and extending through and guided by the aperture in the upper end wall 11 of the holder, and a knob or handle 19 on the upper end of the stem 18.

Secured to the lower end of the holder 10, as by the threaded joint 20 shown, or otherwise, is a substantially semi-spherical hood 21 which surrounds the wedge block 14.

22 designates an open top vessel that is preferably employed, in which the bottle B is seated prior to its destruction. The lower end portion of the hood 21 preferably enters the upper end portion of the vessel 22, as shown, so that any fragments or chips that may strike the inner surface of the hood 21 are deflected by the latter into the vessel 22.

The manner in which the tool is used is probably obvious from the foregoing description of its structural features, but may be briefly described as follows.

The empty bottle B is first placed in the vessel 22. The user, grasping the handle 13 with one hand, inserts the wedge block 14 into the open neck of the bottle until it comes to rest in the position shown by full lines in Fig. 1. In thus positioning the wedge block in the bottle neck, the holder 10 is lowered until it comes to rest on the base of the wedge block, which slightly elevates the head 16 within the holder, as shown by full lines in Fig. 1. With the other hand the user grasps the knob 19 and raises the hammer head 17 to approximately the top of the holder and then forces it down with a sudden sharp blow, so that the head 17, striking on the head 16, drives the wedge block 14 downwardly, splitting the bottle neck. The fragments and chips either drop directly into the vessel 22 or such of them as may fly outwardly against the hood 21 are by the latter deflected into the vessel 22, so that all the fragments, chips and glass dust that may result from the fracture of the bottle neck are collected within the holder and are not allowed to fly in every direction, littering up the bar or floor where the breaking operation is performed.

It will be apparent that the apertured end walls 11 and 12 of the holder form stops to prevent the removal of the hammer and wedge block from the holder, so that the three relatively movable parts are so inter-locked that they cannot become accidentally separated.

From the foregoing it will be seen that my invention provides a very simple, inexpensive and

handy tool for wrecking empty bottles by breaking the necks of the bottles so that the latter cannot be re-filled and re-used. Of course, for the main purpose of destroying bottles, the hood 21 and vessel 22 may either or both be omitted; but they are preferably used for the obvious purpose of preventing the scattering of the fragments and chips.

It is obvious that other specific shapes of wedge blocks might be used, and the other structural features of the tool might be more or less varied without departing from the principle of the device, and hence I reserve all such variations, modifications and mechanical equivalents as fall within the spirit and purview of the claims.

I claim:

1. An instrument for breaking bottles and confining the chips, comprising an open top vessel for seating a bottle therein, a hollow holder, a tapered block adapted to engage with the neck of a bottle in said vessel, said block having a shank slidable in said holder, a hammer slidable in said holder and adapted, by a blow on said shank, to cause said block to shatter the bottle neck, and a depending hood attached to the lower end of said holder and substantially closing the upper end of said vessel.

2. An instrument for breaking bottles and confining the chips, comprising an open top vessel for seating a bottle therein, a tubular holder having centrally apertured upper and lower end walls, a wedge-shaped block the narrow end of which is adapted to enter a bottle neck, said block having a stem extending through the aperture of the lower end wall and a head on said stem, a hammer comprising a head slidable in said holder and a stem extending through and guided by the aperture of the upper end wall, and a hood attached to the lower end of said holder and surrounding said block, the lower end of said hood entering the upper end of said vessel.

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