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BEER BARREL TAPPER

Filed Nov. 25, 1958

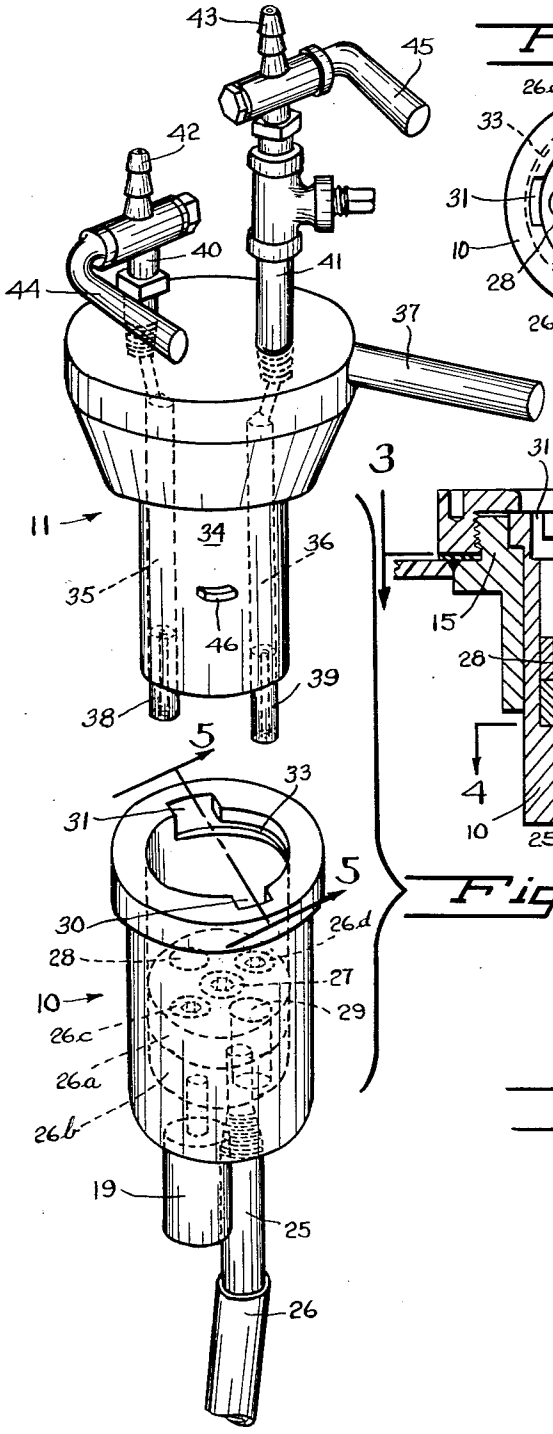


Fig. 1.

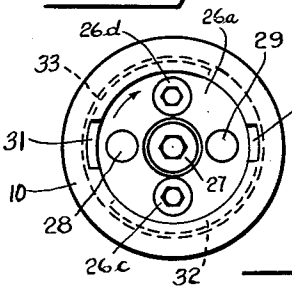


Fig. 3.

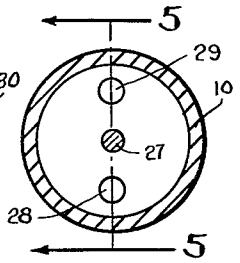


Fig. 4.

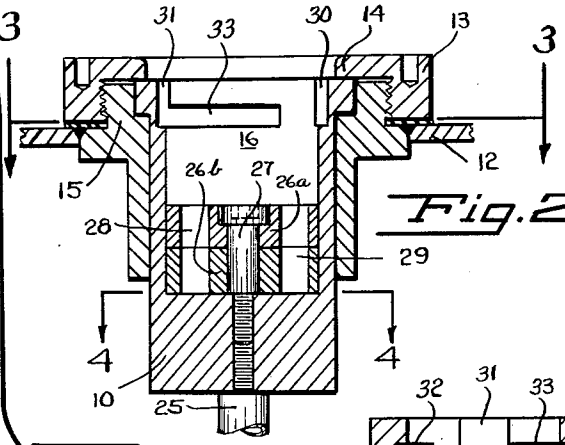


Fig. 2.

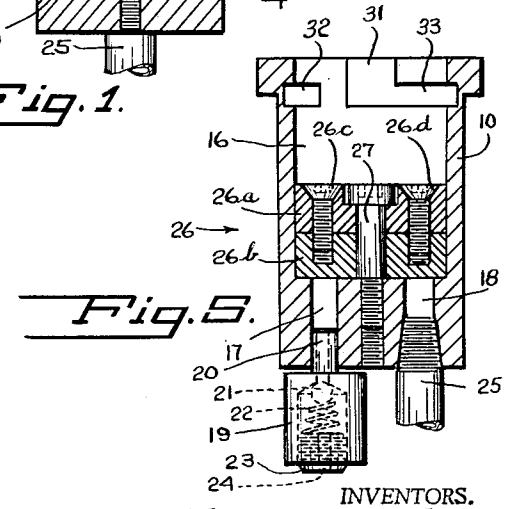


Fig. 5.

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BEER BARREL TAPPER

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This invention relates to a new and improved beer barrel tapper, that is, a device for tapping beer kegs or barrels and has particular reference to a device of the type set forth wherein a compressed gas is introduced into the barrel or the like for removing the liquid contents, such as beer, under pressure.

An object of the invention is to provide a new and improved closure and tapping mechanism for barrels for beer or the like and which could also be employed on other containers for liquid content.

Another object of the present invention is to provide a device of the type set forth which facilitates the tapping of such barrels and eliminates the loss of beer or the like during the tapping and also prevents injury to the operator due to pressure during the tapping and is, therefore, less dangerous to use.

Another object of the invention is to provide a device of the type set forth which is relatively compact and easy to clean and, therefore, more sanitary than present conventional devices, and wherein the device may be easily and quickly employed for closing one barrel and tapping another with a minimum of difficulty and time.

Other objects and advantages of the present invention will be apparent from the following description taken in connection with the accompanying drawings.

Referring to the drawings:

FIG. 1 is an exploded side view of a device embodying the invention;

FIG. 2 is a longitudinal sectional view of the barrel closure apparatus;

FIG. 3 is a top or plan view of the apparatus shown in FIG. 2 on lines 3—3 of FIG. 2, looking in the direction of the arrows;

FIG. 4 is a sectional view taken on line 4—4 of FIG. 2, looking in the direction of the arrows; and

FIG. 5 is a sectional view taken on line 5—5 of FIG. 4, looking in the direction of the arrows.

Referring more particularly to the drawings wherein similar reference characters designate corresponding parts throughout, the apparatus comprises a barrel closure member designated generally at **10** and a barrel tapping apparatus designated generally at **11**.

The closure member **10** is adapted to be retained in operative position in an opening in the barrel **12** by means of an internally threaded nut **13**, which has a flange **14** overlying an upper surface of the member **10** and which nut is in threaded relation with a threaded fitting **15** on the barrel **12**.

The closure member **10** has the chamber **16** and bores or passages **17** and **18** in the bottom wall which provide communication between the interior of the barrel and chamber **16**.

A valve member **19** has an extension passage **20** pressed into passage **17**, and the valve member **19** contains a ball check valve **21** which is retained in operative closed position by valve spring **22** which, in turn, is retained in position by threaded plug **23** having an aperture or passage **24**.

The passage **18** communicates with the interior of the barrel through pipe or fitting **25** which is threaded into the end of passage **18** and on which may be positioned a hose **26** or the like which extends downwardly into the barrel a desired amount.

The passage **18**, pipe **25** and hose **26** are provided for the passage of beer or other liquid out of the barrel under

pressure of a compressed gas which is adapted to enter the barrel through passages **17** and **20**, and the pressure of the gas opens check valve **21** against the pressure of spring **22**, and the gas then passes into the interior of the barrel through passage **24** in valve member **19**.

Within chamber **16** is positioned the sealing member **26** which is pivotally mounted on a pivot **27** which threads into a lower portion or bottom wall of the member **10**.

The sealing member **26** has openings **28** and **29** therethrough adapted to be aligned with passages **17** and **18** for tapping of the barrel and to be pivoted out of aligned relation to seal the barrel.

Sealing member **26** is composed of the relatively hard backing member **26***a* and the softer sealing or facing member **26***b* which have the openings **28** and **29** passing therethrough and which are retained in aligned relation by bolts **26***c* and **26***d*.

Adjacent the upper end of closure member **10** are provided the diametrically opposed slots **30** and **31** which communicate with bayonet slots **32** and **33** respectively for connecting tapping apparatus **11** to closure member **10** in operative relation.

It will be noted that slots **30** and **31** are not of the same size, thus preventing any error in the connection of the members.

Tapping apparatus **11** comprises a housing **34** having apertures **35** and **36** therethrough and which housing is provided with the handle **37**.

At the lower end of tapping apparatus **11** are provided passage members **38** and **39**, each of which is preferably a tubular member having a passageway or duct therethrough and which members are adapted to be positioned in respective openings **28** and **29**, and the passage members **38** and **39** can be formed of tubular members pressed into the ends of apertures **35** and **36**.

At the upper ends of apertures **35** and **36** there are provided fittings **40** and **41** respectively which are adapted to be connected at their outer ends **42** and **43** respectively to an air hose and hose communicating with a faucet or tap for dispensing of the liquid.

Valves **44** and **45** are provided for allowing the closing off of the lines to prevent any return and loss of fluid during the changing of the tapping member from one barrel to another.

On the opposite sides of housing **34** are provided lugs **46** of such size as to be received by the slots **30** and **31** and to slide into helical slots **32** and **33** upon pivoting of apparatus **11** by turning handle **37**.

In operation, each barrel is provided with a closure member **10**, and a single tapping apparatus **11** is provided with its fittings **40** and **41** connected to a source of compressed gas and a liquid tap.

To tap a barrel, the body housing **34** is placed into chamber **16** of closure member **10** with passage members **38** and **39** extending into openings **28** and **29** respectively, and with lugs **46** entering their respective slots **30** and **31**. It will be understood that for this purpose the relationship between lugs **46** and members **38** and **39** will be the same as that existing between openings **28** and **29** and their respective slots **30** and **31** when the openings **28** and **29** are out of alignment with passages **17** and **18**.

With the lugs **46** in the respective slots **30** and **31**, the tapping apparatus **11** is pivoted by turning handle **37** to simultaneously establish communication between openings **28** and **29** in sealing member **26** with their respective passages **17** and **18** and, therefore, establish communication between the gas and liquid lines with said passages **17** and **18**.

It will be seen that by simply inserting the passage members **38** and **39** into the openings **28** and **29** and turning handle **37**, that tapping apparatus **11** and closure member **10** will be locked in operative relation and com-

munication will be simultaneously established through passages **17** and **18** and passages **35** and **36** respectively, and then by turning valves **44** and **45** the operator is ready to draw liquid from the barrel.

When it is desired to remove the tap from the barrel to tap another barrel, the turning of the handle **37** will simultaneously pivot member **26** to sealing position and align lugs **46** with slots **30** and **31**, whereby the tapping apparatus **11** may be easily and quickly withdrawn for use in tapping another barrel.

From the foregoing it will be seen that we have provided new and improved means for obtaining all of the objects and advantages of the invention.

We claim:

1. In a device of the character described, a closure member, means for securing said closure member in an opening in a barrel, said closure member having a chamber and having a pair of passages extending through the bottom wall of said chamber, a sealing member in said chamber, said sealing member having a pair of openings therethrough, a pivot member extending through said sealing member and connected to the bottom wall of said chamber to pivotally mount said sealing member on said bottom wall, opposed bayonet slots in said closure member adjacent the upper end thereof, and a tapping apparatus comprising a housing adapted to be positioned in said chamber in said closure member, said tapping member having lugs adapted to fit in said opposed bayonet slots and said housing having a pair of apertures therethrough, said housing having fittings communicating with each of said apertures, said housing having depending passage members communicating with each of said apertures and adapted to be positioned in the openings in said sealing member, the relationship between said openings in said sealing member and said passages in the bottom wall of said chamber and said bayonet slots being such that when said tapping apparatus is turned to lock said apparatus through said lugs in said bayonet slots that said depending passage members will automatically pivot said sealing member from a closed position in which flow through said device is arrested by said sealing member to an open position where the openings in said sealing member are in communication with said passages in the bottom wall of said chamber.

2. In a device of the character described, a closure member, means for securing said closure member in an opening in a barrel, said closure member having a chamber and having a pair of passages extending through a bottom wall of said chamber, a composite sealing member in said chamber, said composite sealing member comprising a hard backing member and a softer facing member, said composite sealing member having a pair of openings therethrough, a pivot member extending through said composite sealing member and connected to the bottom wall of said chamber to pivotally mount said composite sealing member on said bottom wall, means connecting the backing member and said facing member together with the respective openings therethrough in aligned relation, opposed bayonet slots in said closure member adjacent the upper end thereof, and a tapping apparatus comprising a housing adapted to be positioned in said chamber in said closure member, said tapping member having lugs adapted to fit in said opposed bayonet slots and said housing having a pair of apertures therethrough, said housing having fittings communicating with said pair of apertures, said housing having depending passage members communicating with said pair of apertures and adapted to be positioned in the openings in said composite sealing member, a handle on said tapping member, the relationship between said openings in said composite sealing member and passages in the bottom wall of said chamber and said bayonet slots being such that when said tapping apparatus is turned to lock said apparatus through said lugs in said bayonet slots that said depending passage members will automatically pivot said composite sealing member from a closed position in which flow through said device is arrested by said composite sealing member to an open position where the openings in said sealing member are in communication with said pair of passages in the bottom wall of said chamber.

3. In a device of the character described, a tubular fitting having an externally threaded portion adapted to extend out of an opening in a barrel, said fitting having an external peripheral flange and an internal peripheral flange, a threaded nut having an internally threaded portion in threaded engagement with said threaded portion on said fitting, a closure member having an external peripheral flange positioned on said internal peripheral flange of said fitting, said threaded nut having a flange overlying the upper surface of said closure member to retain said member in operative position, said closure member having a chamber and having a pair of passages extending through a bottom wall of said chamber, a composite sealing member in said chamber, said composite sealing member comprising a hard backing member and a softer facing member, said composite sealing member having a pair of openings therethrough, a pivot member extending through said composite sealing member and connected to the bottom wall of said chamber to pivotally mount said composite sealing member on said bottom wall, means connecting the backing member and said softer facing member together with the respective openings therethrough in aligned relation, opposed bayonet slots in said closure member adjacent the upper end thereof, and a tapping apparatus comprising a housing adapted to be positioned in said chamber in said closure member, said tapping member having lugs adapted to fit in said opposed bayonet slots and said housing having a pair of apertures therethrough, said housing having fittings communicating with each of said apertures, said housing having depending passage member communicating with each of said apertures and adapted to be positioned in the openings in said composite member, a handle on said tapping member, the relationship between said openings in said composite sealing member and passages in the bottom wall of said chamber and said bayonet slots being such that when said tapping apparatus is turned to lock said apparatus through said lugs in said bayonet slots that said depending passage members will automatically pivot said composite sealing member from a closed position in which flow through said device is arrested by said composite sealing member to an open position where the openings in said composite sealing member are in communication with said passages in the bottom wall of said chamber.

References Cited in the file of this patent

UNITED STATES PATENTS

498,787	Hagen	June 6, 1893
871,073	Spikes	Nov. 12, 1907
2,031,172	Maloney	Feb. 18, 1936
2,331,001	Simon	Oct. 5, 1943