

A. F. W. NEYNABER.

Beer Preserver.

No. 55,151.

Patented May 29, 1866.

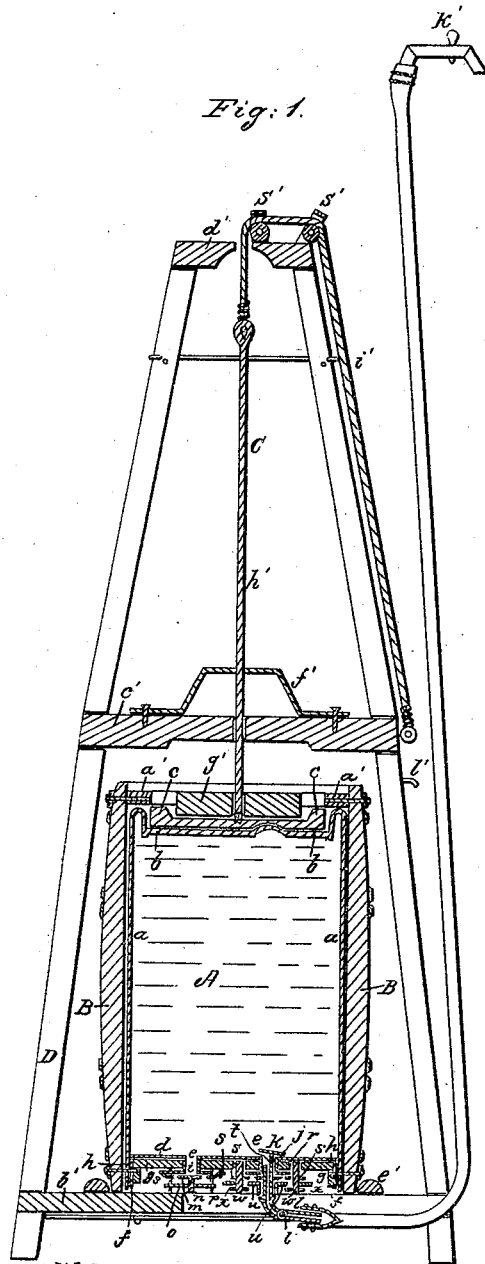


Fig. 1.

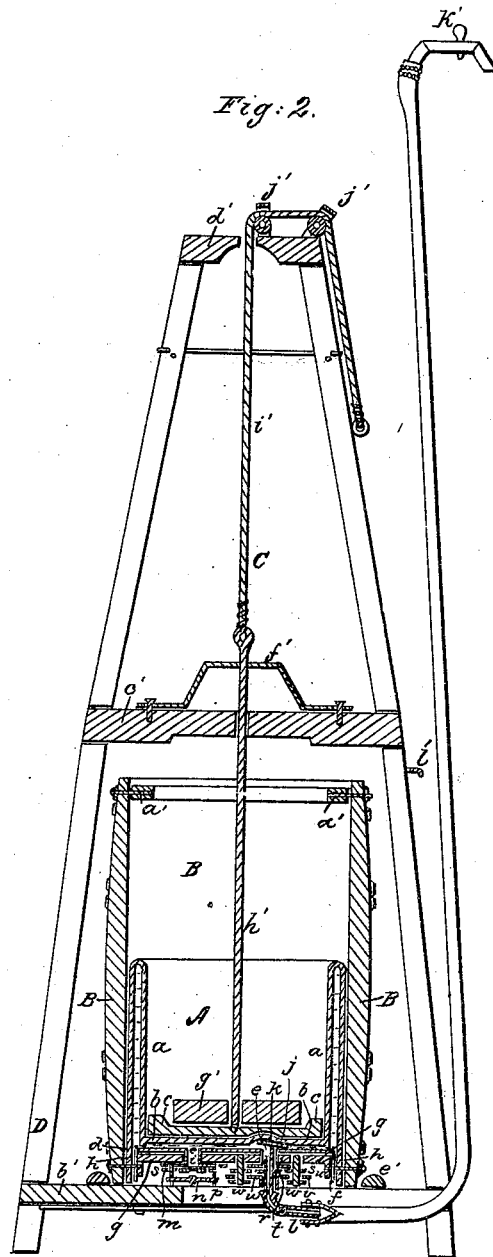


Fig. 2.

Witnesses:
John Wiley
S. Frank's.

Fig. 3.

Fig. 4.

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IMPROVED APPARATUS FOR PRESERVING BEER.

Specification forming part of Letters Patent No. 55,151, dated May 29, 1866.

To all whom it may concern:

Be it known that I, A. F. W. NEYNABER, of Philadelphia, in the county of Philadelphia, State of Pennsylvania, have invented a new and useful apparatus—the beer-keeper—for preserving beverages or fermented liquors, as lager-beer, ale, porter, &c., and discharging these liquids therefrom in parts without admission of any atmospheric air; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a portion of my apparatus in vertical section, to wit: the india-rubber vessel A and frame B, with means provided for compressing the vessel for the purpose of discharging its contents. Fig. 2 represents the india-rubber vessel compressed by weight, the contents of the vessel having been discharged. Fig. 3 shows a presser, with plate for closing the outlet of the vessel. Fig. 4 shows the outlet of the vessel closed with the presser and plate of Fig. 3.

The object of this invention is to produce an apparatus for keeping lager-beer, ale, porter, &c., so constructed as to enable these liquors to be kept in larger vessels for draft without becoming sour in a reasonable time, this object being realized by the perfect exclusion of air while the liquid is drawn off the vessel.

A in Fig. 1 indicates an india-rubber vessel filled with liquid. *a* is a cylindrical casting of india-rubber, which admits at *b* the iron casting *c*, whereupon rests the presser C. *d* is an india-rubber casting with two openings, *e e*, in form of tubes, and flanges *f*, to admit the iron casting *g*. The tubes *e e* extend through the corresponding holes of the iron casting and lap over on the outside, and form there an india-rubber packing. The india-rubber casting *d* and iron casting *g*, fitting exactly together, are inserted into the india-rubber casting *a*, and at *h* tied together firmly and perfectly air-tight by means of wire, the iron casting *g* having at the corresponding point of *h* a groove, so that the iron wire presses the india-rubber *a* and *d* into the groove of the

iron casting *g*, to keep the different pieces in their places.

The opening *i* forms the inlet or orifice for filling the vessel, and opening *j* the outlet, having inside a clack-valve, *k*, of india-rubber. Into this outlet *j* fits the tap *l*, for drawing off the liquor. The orifice *i* is closed when the vessel is filled by means of the plate *m*, which plate can be of any suitable hard material. When of cast-iron it should be tinned or protected with a cap of india-rubber. The plate *m* is pressed to the india-rubber packing *r* by means of the screw *n* and the bar *o*, fitting into the holders *p*, the point of the screw *n* fitting into the countersink of the plate *m*. The india-rubber packing *r*, the extension of the tubes *e e*, is fastened more firmly by the rings *s s* by means of screws. The tap *l* is provided with a flange, *t*, which fits on the india-rubber packing *r* of the outlet *j*. On the flange rests a presser, *u*, consisting of a ring with two arms, on which are two incisions, *v*, to admit the screws *w w*. When no tap is required the outlet *j* is closed by the presser *y*, having for that purpose the plate *z*, in the manner as shown in Fig. 4.

The india-rubber vessel A is connected with the frame B in the way that a screw passes through each stave into the iron casting *g*. On the top the staves are fastened by means of screws to the iron ring *a'*, which ring also prevents the top (iron casting *c*) from being forced out. The frame B is further provided with hoops, to make it more durable. The india-rubber vessel A and frame B together form the cask.

The cask rests on the stand D, which consists of four posts secured to the plate *b'*, and the cross-pieces *c'* and *d'*. The plate *b'* is provided with a curved U-shaped strap, *e'*, to keep the cask in its proper place, and has an incision to admit the tap *l*.

The presser C consists of the weight *g'*, rod *h'*, passing through the holes of beam *c'*, and guide *f'*, and chain or rope *i'*, passing over the sheaves *j' j'*, and constituting therewith a pulley.

The operation and use of the apparatus (see Fig. 1) is as follows: The vessel A being filled, is closed by means of the plate *m*, Fig. 1, and presser *y*, Fig. 4, and is in this way ready for

transportation. When the contents are to be drawn off the presser *y*, with the plate *z*, are removed, and in their places the tap *l* is inserted. (See Fig. 1.) The end of the tap *l* is inserted into the outlet *j*, and presses against the india-rubber valve *k*, opens this, and directly afterward the outlet is closed again by pressing with the hand the tap, so that the flange *t* presses against the india-rubber packing. While holding the tap with one hand the presser *u* is turned so that the incisions *v v* admit the screws *w w*, and the nuts *x x* can be screwed on with the other hand until the flange *t* presses air-tight to the india-rubber packing. The tap *l* connects with an india-rubber tube of a suitable length, which again connects with a cock fixed at any place where the liquor is to be drawn. The key of the tap *l* is now turned so as to allow the liquid to pass through, and the liquid is then drawn off by means of the spigot *k'*. As soon as the cock *k'* is opened the weight *g'*, fitting into the casting *c*, and directed properly by rod *h'*, presses the top of the vessel *A* down in proportion to the liquid drawn. According to the heavier or lighter weight used, the liquor can be forced up to any desired part of a building. In general, the apparatus will be kept in the cellar and the beer forced up through the tube to the first, second, &c., story; but when the apparatus will be kept in the same apartment where the liquor is to be drawn off the stand *D* could be dispensed with, and a simple weight without the rod would be sufficient. Under certain circumstances a piece of ice would answer both purposes—would serve in a bar-room to keep the beer cool and would press the top of the vessel down. When the vessel has become empty on its stand it will be in the position as shown in Fig. 2.

When the cask is to be removed the rope *i'* is pulled and hooked at *l'*, and so, the weight

suspended, the cask is lifted out of its place, the tap *l* and plate *m* removed, and the vessel ringed, is ready again for filling.

When it becomes necessary the india-rubber and iron castings *d* and *g*, forming the bottom of the cask, can be taken out, the inside of the vessel thoroughly cleaned, and then put in again.

The main advantage of this apparatus is the perfect preventing of the entering of any atmospheric air while the liquor is drawn off, and thus enabling larger casks to be used for beer or beverages sold on draft.

Further advantages are that this apparatus serves as a fountain, and can be placed in the cellar or in the bar-room, according to circumstances.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The method of preserving beverages or fermented liquors, as lager-beer, ale, porter, &c., in air-tight india-rubber vessels, and discharging these liquids therefrom in parts by means of compressing the vessel by weight, in such a manner as to avoid the admission of any air, substantially as set forth in the foregoing specification.

2. The construction of the beer-keeper by the application, combination, and arrangement of the india-rubber vessel *A*, inlet *i*, with plate *m*, screw *n*, and bar *o*, outlet *j*, with valve *k*, tap *l*, and presser *y*, frame *B*, with ring *a'*, presser *C*, with pulleys *j' j'*, and stand *D*, substantially in the manner and for the purpose as herein described.

These claims I make jointly and separately.

A. F. W. NEYNABER.

Witnesses:

JOHN EKLEY,
S. FRANKS.