(No Model.)

J. NEUMANN.

ALE TAP.

No. 494,015. Patented Mar. 21, 1893.

Fig. 1.

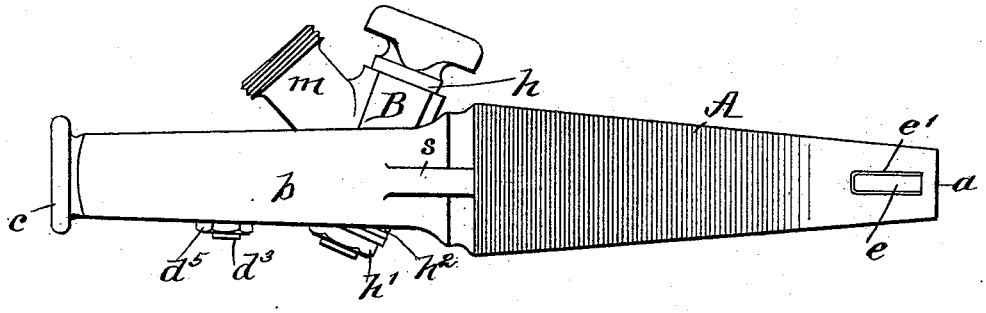


Fig. 2.

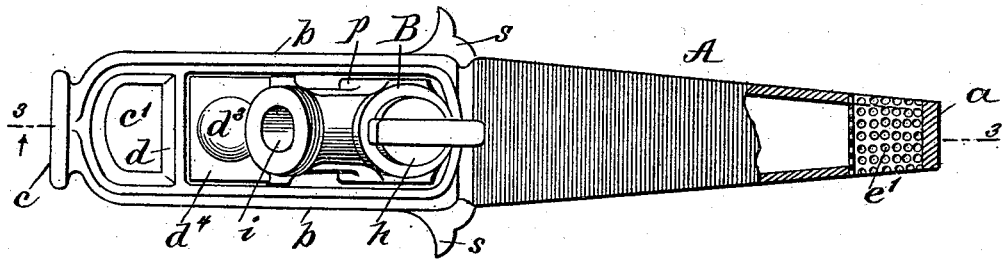


Fig. 3.

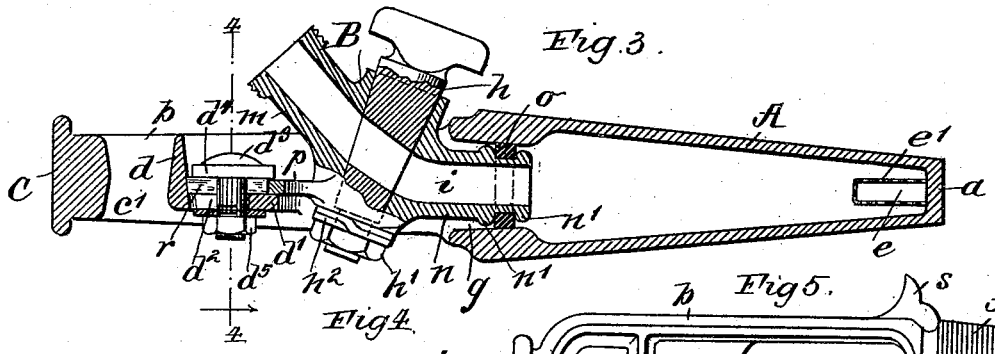


Fig. 4.

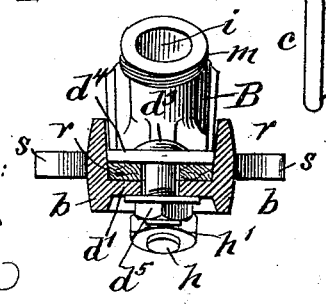


Fig. 5.

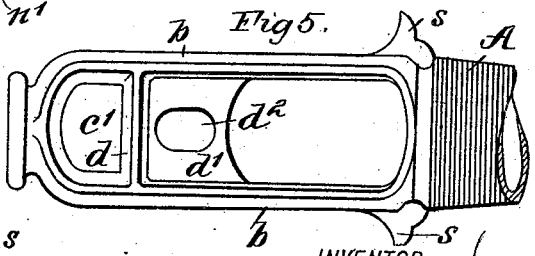
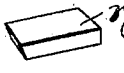


Fig. 6.



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ALE-TAP.

SPECIFICATION forming part of Letters Patent No. 494,015, dated March 21, 1893.

Application filed October 22, 1892. Serial No. 449,545. (No model.)

To all whom it may concern:

Be it known that I, JOHN NEUMANN, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Ale-Tap, of which the following is a full, clear, and exact description.

The objects of my invention are, to provide a novel ale or beer tap or faucet, which will be well adapted to sustain percussion on the end where blows from a mallet are applied, when the tap is driven into a plugged orifice in a cask for service, which will be convenient to remove from an empty cask, and furthermore, which will have its faucet body separable from the tap shank, which will be easy to manufacture, be reliable in operation and that may be produced at a low cost.

To these ends, my invention consists in the novel construction of parts, and their combination, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of the device. Fig. 2 is a partly sectional view, showing the upper side of the ale tap. Fig. 3 is a longitudinal sectional view of parts on the axial line 3—3 in Fig. 2. Fig. 4 is a view in cross section on the line 4—4 in Fig. 3. Fig. 5 is a top view of the front portion of the tap shell with the faucet body and other parts removed; and Fig. 6 is a detached perspective view of a detail of construction.

As ordinarily constructed, the body of an ale tap or faucet, is made integral with the tapered shank that is driven into a tap hole in a keg or cask, to removably secure the draw faucet in connection with the filled cask, and thus provide convenient means for tapping ale or beer from the cask as may be desired. In order to insert the said faucet, heavy blows are applied to its forward end with a hard wood or lead mallet; and as the faucet must be quite frequently removed and inserted into different casks, the percussion on its end soon injures the portion that receives the blows, and unless the faucet body is made very heavy, the part that is engaged by the plug or turn-key, is distorted, and caused to leak from the injurious effect of percussive action.

To avoid the defects incidental to the ordinary ale tap, produce a superior device for the purpose, and cheapen the article by using a comparatively inexpensive material for the heavier part of the same, a novel construction is adopted, comprising a faucet body, that should be made of brass or bronze, separable from the tap shell or shank which is designed to sustain the impact of blows on one end and penetrate the plugged hole in a full cask with its opposite end; other parts being provided to facilitate the connection of the faucet body with the tap shell and adapt it for ready removal when necessary.

Referring to the drawings, A represents the tap shell, and consists of an elongated tapering hollow shank, preferably closed at the smaller or free end *a*, the latter being made heavy enough to withstand the effect of its forcible impact on a plug or bung in a cask.

A suitable length is given to the tap shell A, and on the forward end of its conical body a frame is integrally formed, having two parallel side bars *b*, that are of proper dimensions to receive other parts between them, as will be explained, and project sufficiently beyond the same to allow said bars to be united, thickened, and shaped into a circular knob *c*, that is to receive blows from a mallet when the shank is inserted into a cask. A transverse bar *d*, and web plate *d'*, are integrally formed with and extend between the side bars *b*, at a point near the knob *c*, an aperture *c'*, being produced between the knob formation and transverse bar; and as shown in Figs. 3 and 4, the plate *d'* engages the side bars near their lower edges, so as to afford a seat for other parts, at a proper distance from the upper edges of said bars.

Near the end *a*, of the tap shank A, aligning slots *e*, are formed in its wall, for the entrance of liquid; a screen *e'*, formed of a piece of sheet metal numerously perforated, is inserted and affixed in said slots, after it is bent to produce an end wall and two parallel top and bottom walls, the free ends of the latter having a contact with the end wall *a*, so that free entrance for liquid from a cask into the tap shell is afforded, while impurities are restrained from passing through the slotted apertures into the shell, by the protecting screen.

The front end portion of the conical tap shell A, is interiorly thickened, to afford a

passage of less diameter than is in the part of the shell adjacent to it, said passage g, being slightly tapered toward its inner terminal and circular in cross section, the front edge being rounded to facilitate the introduction of the faucet body.

As shown, the faucet B, is comparatively small, and has a transverse conical plug h, that is made to engage a conical transverse hole in the part B, and has a cross slot produced in it at a point which will permit an alignment of said slot with the longitudinal passage i, in the faucet body when the T head of the plug is properly adjusted to open the passage, and allow liquid to flow through from the tap shell to the discharge end m, of the faucet, as indicated in Fig. 3.

The part of the faucet just described is of ordinary form, and as usual, the plug h is rotatably secured in place by a nut h' and spring washer h^2, that are placed on its smaller projecting end.

The body of the faucet B, is bent sufficiently in the same direction, or toward the T head of the plug h, to project the end portion m, upwardly and forwardly, when the other cylindrical end portion n, is introduced within the passage g, of the tap shell B.

Between two spaced encircling ribs n', on the part n, of the faucet body, an elastic ring o, is located, which by its contraction is securely held from displacement, and serves as a joint washer between the walls of the faucet end portion and the interior of the tap shell, as shown in Fig. 3.

On the forward side of the faucet B, below the upwardly inclined portion m, a pad p, is integrally projected in a plane which adapts it to be seated upon the transverse web plate d', when the end portion n, of the faucet body is fully inserted within the passage g, of the tap shell. The pad p, is of such a relative length as will allow it to rest level upon the rear portion of the web-plate, and afford sufficient space in advance of its front edge for the introduction of two similar keeper bars r, endwise between said edge and the rear wall of the cross bar d. The length of the preferably wooden keeper bars r is so proportioned, that these when forced into place will retain the faucet body in its proper position with regard to the tap shell it is partly inserted in.

An orifice d^2 is produced in the web plate d', for the free insertion of the clamping bolt d^3, between the keeper bars r, as shown in Fig. 4, there being a cap-plate d^4, strung upon said bolt before the latter is introduced.

The bolt d^3, is threaded on its end portion that passes through the web plate d', and is provided with a nut d^5 and an intervening washer that has contact with the lower side of the web plate when the parts are assembled.

When the faucet B, is to be introduced within the cylindrical passage g, of the tap shell A, it is first pushed in by hand pressure until the pad p, will engage the web plate d', and rest level upon it, and its side edges then having a loose contact with the inner surfaces of the side bars b, prevent a lateral movement of the pad. The keeper bars r, are now placed along each side bar b' allowing their front ends to rest against the inclined rear wall of the cross bar d, then the headed bolt d^3 is inserted and the washer and nut placed upon its lower end and an adjustment of the nut effected, which will draw the keeper bars down upon the web plate, and at the same time cause a toggle action of the bars upon the front edge of the pad p, so as to crowd the end portion n, of the faucet body farther into the tap shell, and firmly bind the engaged parts together. The parts being assembled as has been described, serve to join the tap shell and faucet so as to adapt them for co-action. The end portion m, of the faucet body, being exteriorly threaded, furnishes convenient means for the connection of a pipe extension (not shown), that may be a supply pipe for a dispensing apparatus in a room above the place of location for the cask wherein the tap shell is inserted.

There are encircling grooves of slight depth produced in series on the tapering tap shank or shell A, to give the shell portion which engages a cask head a firm bite, and prevent an accidental displacement of the tap.

When the device entire is to be driven into a plugged hole in a cask head, so as to engage the hole by first displacing the plug, the tap is held in one hand, and a smart blow struck upon the knob c by a mallet in the other hand of the operator. If, when the tap shell is located in the cask head, it should be necessary to change the position of the faucet body by a rotatable movement of the shell A, this can be effected by tapping either of the lugs s, that project from the tap shell oppositely where the side bars b join it; and after the correct lateral adjustment has been given to the faucet B, the knob of the tap shell may be again struck to insure a proper insertion of said shell.

When the tap shell is to be removed from an empty cask, this may be quickly done by introducing one end of a lever of proper diameter into the hole c', and the lever then vibrated so as to loosen the tap shell. This is much better than the use of a mallet to strike the tap body on either side, as is usually done to remove the draw cock from a keg or cask.

As the tap shell A, may be made advantageously of a cheaper metal than brass, such as soft grade steel, or malleable iron, and subsequently coated with tin to prevent oxidation and adapt it for use as a conveyer of ale or beer to the draft faucet B, it will be evident that the cost of production will be considerably reduced by the use of such a cheap material for the heavier part of the composite ale tap.

By removing the bolt d^3, the faucet body B, may be quickly displaced from the shell A, so

that repair or renewal of either part A, B, may be effected and the use of the part that is good be continued, which renders the device an economical substitute for the ordinary ale cock or tap, that use has upset forwardly so as to cause leakage of the faucet plug, or fracture of the body at some point that will render the entire device useless.

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

1. An ale tap, comprising a shell having a faucet protecting skeleton frame in front, an insertible faucet, and means for connecting the skeleton frame and faucet, substantially as described.

2. An ale tap, comprising a shell adapted to receive and convey liquid, a bent plug faucet engaging the front end of the tap shell and a faucet protecting frame forwardly on said shell, and means for holding said parts connected, substantially as described.

3. The combination with a conical tap shell adapted to receive liquid and screen it at its small end, of a plug faucet entering the large end of the tap shell and bent to project one end at the side of said shell, and clamping devices for holding the shell and faucet connected, substantially as described.

4. The combination with a conical tap shell, a screen within the shell at its small end, a skeleton frame formed at the forward end of the tap shell and aligning therewith, and adapted to sustain percussion on its free end and also to support part of a faucet body, of a bent faucet having a transverse controlling plug and adapted to penetrate the tap shell at one end and form a tight joint therewith, and a securing device engaging a pad on the faucet and parts of the frame, to retain the faucet in the tap shell, substantially as described.

5. The combination with a conical tap shell transversely apertured at its small end, a screen for said aperture, and a frame at the large end of said tap, consisting of parallel side bars merged into a knob at their forward ends, and a transverse bar and an apertured web plate connecting said side bars, of a bent plug faucet entering at one end a passage in the front end of the tap shell, and provided thereat with a joint ring, a pad on the faucet body adapted to seat on the web plate of the frame, longitudinal spaced keeper bars within said frame, a perforated cap-plate covering said keeper-bars, and a clamping bolt passing through said cap-plate and between said keeper bars, and provided with a suitable washer and nut, substantially as described.

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Witnesses:
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