Aug. 23, 1932. H. J. BARKER 1,872,645

POULTRY FOUNT AND FEEDER

Filed Nov. 12, 1923

Fig. 1.

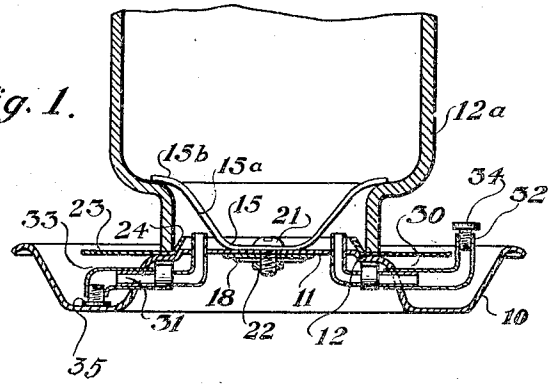


Fig. 2.

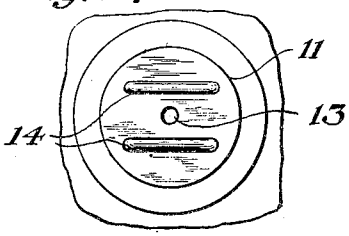


Fig. 3.

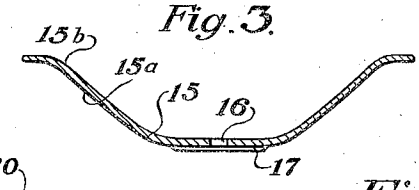


Fig. 4.

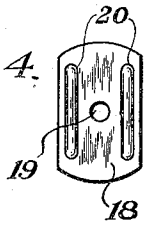


Fig. 7.

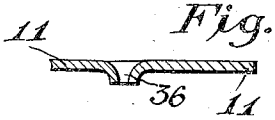


Fig. 8.

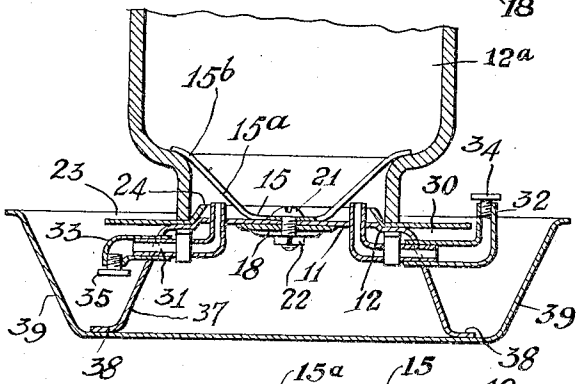
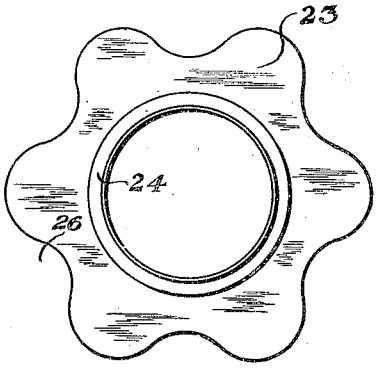


Fig. 5.



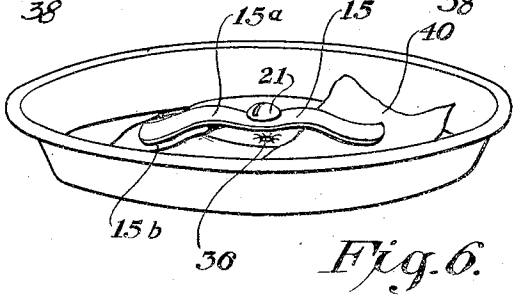


Fig. 6.

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UNITED STATES PATENT OFFICE

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POULTRY FOUNT AND FEEDER

Application filed November 12, 1923. Serial No. 674,220.

The present invention is disclosed as relating to a poultry fount and feeder but primarily it has to do with the fastening means between a reservoir and a basin.

The present invention is a somewhat modified construction of a device shown in my co-pending application Serial No. 527,741, filed January 7, 1922.

Among the objects of the invention are, the provision of a novel connecting means or clip member adapted to be reversed to secure an instruction or direction sheet or advertisement to the device; the provision of a reinforcing plate to aid in securing said clip member upon the device while reinforcing the material thereof at the point of greatest strain; and an improved assembly of the several parts of the device whereby packing space may be saved.

These and such other objects as may hereinafter appear are attained by the novel construction, combination, and arrangement of the various parts of the device, all of which are fully disclosed in the accompanying single sheet of drawing, hereby made a part of this specification, and in which:—

Figure 1 is a vertical section of my complete invention as applied to a poultry fountain or feeder;

Figure 2 is a fragmentary bottom view of the fount or stand with the clip or connecting member removed;

Figure 3 is an elevation of the clip member;

Figure 4 is a plan view of the reinforcing plate;

Figure 5 is a plan view of the protective plate I employ;

Figure 6 is a perspective view of the preferred form of the device showing the clip member used to secure a direction sheet to the device and for facilitating the packing thereof,

Figure 7 is a fragmentary section through the air passage shown in Figure 6, and Figure 8 is a vertical section of a modified form of the type of fountain shown in Figure 1.

Like reference characters are used to designate similar parts in the drawing and in the description which follows.

In Figure 1, the ordinal 10 designates a bowl, stand, basin or vessel, which may be of the same general configuration as that of the vessel disclosed in Figure 6, or of any other desired shape so long as it is provided with a centrally raised crown 11, the plan view of which is shown in Figure 2. The crown 11 may comprise a plurality of circular portions or sections of different levels as disclosed in Figure 1, the levels approaching their greatest height toward the center of the bowl, basin or vessel 10.

One of such level or flat circular portions 12 is adapted to seat a glass jar 12*a*, such as a Mason or fruit jar, which jar is secured in a vertical and inverted position by a clip or connecting member, carried upon crown 11 and to be later described.

The topmost section of crown 11 is punched out at its center to provide a hole 13, said hold being employed as a bolt hole.

Two parallel depressions 14 are arranged equidistantly from said hole 13. These are well illustrated in Figure 2.

A clip member 15 of spring material and comprising a central section coinciding substantially with the contour of the topmost portion of crown 11, and having upwardly spreading extension prongs, 15*a*, with horizontally projecting extremities 15*b* is adapted to be seated upon crown 11. A centrally situated perforation 16 coincides with hole 13 in said crown, while parallel projections 17 complemental to those (14) in crown 11 are stamped in said clip member 15 to facilitate the seating of the clip member upon said crown 11. It is manifest that rotative movement of the clip 15 with respect to crown 11 may thus be wholly prevented. Particular reference should be had to Figure 3.

A reinforcing plate 18 shown in perspective in Figure 4 and comprising a sheet or disk having a centrally disposed hole 19 and parallel depressions 20 registering with and also similar to those (14) in crown 11 is disposed beneath said crown. A bolt 21 is inserted through holes 13, 16, and 19, from above and a nut 22 is threaded onto said bolt from beneath. When said nut 22 impinges upon grooves or depressions 20, it can no

longer be rotated, and bolt 21 must then be rotated until a secure joinder between crown 11, clip 15, and plate 18 is had. It is quite manifest that aligning means other than grooves might be employed.

Intermediate basin 10 and jar 12*a*, an annular plate 23, illustrated in Figure 5, may be inserted. This plate may have an internal and upwardly directed and inwardly inclined flange 24 falling within the mouth of jar 12*a* to prevent its accidental displacement. Plate 23 may have a plurality of marginal openings or stalls 26 therein, such openings or stalls 26 being intended to save wastage of feed or water.

The control of water level and volume flow in my invention is acquired in two different manners. Reference should again be had to Figure 1. The second method of control is illustrated in Figure 6 and will later be described.

One or more passages, (two here being shown and designated 30 and 31), preferably comprising elbowed or bent pipes or tubes of small diameter are secured to bowl, basin or vessel 10. Such passages may be inserted through the material of said vessel 10 as is shown in Figure 1. Passages 30 and 31 may comprise either a single tube bent to proper angle, or either or both may include, in addition to the secured or anchored portion, a swivel joint extension, designated 32 and 33. In the construction disclosed, valves 34 and 35 are disposed at the outer extremities of extensions 32 and 33, but the use of such valves, or any other valves, is optional. In the illustration (Figure 1) passage 30 is for air while the other passage, 31, is for water or other liquid.

The second type of control is illustrated in Figure 6. Such control is obtained by a small depressed passage 36 extending through the crown 11, and expeditiously formed by punching the material of the crown 11. Water or other liquid will not be drawn upwardly upon the exterior walls of passage 36 by capillary attraction.

In any form of the device, the assembly of the clip 15, the plate 18, and of the basin or vessel is identical. Reinforcing plate 18 admits of the employment of weak and inexpensive material for the base or basin, much thinner or lighter than otherwise would be possible.

To place jar 12*a* in position for use upon any type of basin or vessel, the jar 12*a* is first filled with liquid or feed. One of the wings or prongs 15*a* is placed within the jar 12*a*. The bowl or base is then firmly pressed in the direction of the inserted prong or wing 15*a*, and then downwardly upon the jar 12*a* until the second wing or prong 15*a* snaps inside the jar 12*a*. The jar 12*a* is then turned upside down and the base or basin placed upon a level surface.

It is quite apparent that the strain or stress upon bowl 10 is at its crown 11, hence a second thickness of material such as plate 18 strengthens this portion of the device which is subject to strain while the jar and base are being or are connected.

Liquid is discharged from jar 12*a* through tube 31 until it attains a level controlled in the species disclosed in Figure 1 by the horizontal plane in which air valve 34 rests. When the rise of water encloses the air passage through said valve 34 water in jar 12*a* will cease to run from the passage 31 because of the atmospheric pressure exerted upon the exposed surface of the water surrounding the mouth of said jar 12*a*.

In the type of the invention illustrated in Figure 6, the water level in the basin is controlled by air passage 36 and is substantially constant in a plane about ⅛ of an inch below the mouth thereof.

Referring still to Figure 6, it is shown that clip 15 has a function additional to holding jar 12*a* in proper position. For purposes of nesting bowls or basins, and to save packing space, the clip 15 is reversed but otherwise the assembly of the bowl, clip and reinforcing plate is the same. As clip 15 will impinge, at its wings 15*a*, upon the material of basin 10, advertising matter or a direction sheet 40 may be secured thereunder in the manner illustrated in Figure 6.

In the form of the device disclosed in Figure 6, there are radial depressions 36*a* for allowing free flow of water from the jar or reservoir, which may form seats for the inverted clip member 15.

Protective plate 23, when used may be placed upon the mouth of jar 12*a* before the securing of the stand or base 10 thereto.

The liquid level within the fount may be controlled by a single tube or passage, such as passage 30, or a continuous and unjointed tube occupying approximately the same position as passage 30. When so controlled, the level of liquid in the basin, vessel or dish 10 is approximately ⅛ inch below the horizontal plane in which the internal extremity of passage 30 rests. Tube 30 is closed at its outermost end with a finger or otherwise as the reservoir 12*a* and basin 10 are inverted, and said passage is opened again as soon as the device is in operable position as shown in Figure 1. Water or other liquid is thus excluded from tube 30 by the air contained therein and which cannot escape during the inverting process, and after inversion has been accomplished, air is held within said tube by the atmospheric pressure exerted from the outer end thereof. As water or liquid is drawn from vessel 10, it is replaced by water released from reservoir 12*a*, such release being facilitated by the admission of air to said reservoir 12*a* through air passage 30.

It is quite evident that if the inner extremity of tube 30 is made adjustable, as for example, vertically swinging, the water or fluid level in basin 10 may be controlled, for the raising or lowering of the extremity 32 of said tube will positively affect the liquid level within said basin 10 in direct proportion to such raising or lowering movement.

A convenient way of shipping the device is by inverting the clip and securing instruction slips by means of the clip in the manner shown in Figure 6. When the device is received for use, the screw 21 is removed, the clip 15 inverted and any suitable jar of the general configuration shown in Figure 1 is filled with water. While the jar is in an upright position the fount is placed over the mouth thereof so that the clip will engage the inner shoulders of the bottle or jar as shown in Figure 1. The jar is then inverted and allowed to stand upon the base or basin. Liquid will then flow from the jar into the basin until a predetermined level, determined by the position of the controlling passage ways, is reached. As water is removed from the basin it is replenished automatically, there being no further need of attending to the device until all of the water in the jar has been disposed of. To refill the jar the entire device is removed and the operation duplicated.

Air inlet passages in each form of the device are preferably relatively small, for this permits of closer adjustments. Smaller air passages are employed in the tube form of the device than in the preferrad form, shown in Figure 6.

I claim:

1. In combination, a basin, a reservoir, a connecting member between said basin and said reservoir, a reinforcing member in association with said basin, and means for fastening said connecting member and said reinforcing member to said basin, said basin having a portion interfitting with and complemental to said connecting member and said reinforcing member whereby to prevent rotative displacement of said connecting member and of said reinforcing member.

2. A jar fountain or feeder comprising a jar reservoir member, a basin forming a support for said reservoir, a connecting member between said basin and said reservoir, a reinforcing member, said connecting and reinforcing members being adapted to be detachably attached to said basin, and fastening means for securing said connecting member and said reinforcing member to said basin, said connecting member and said reinforcing member having parts adapted to engage a complemental portion of said basin whereby to prevent rotation of said reinforcing member and said connecting member relatively to said basin.

3. In combination, a basin, a reservoir, a connecting member between said basin and said reservoir, the material of said basin being of light gauge and insufficient to maintain its configuration under the strain of maintaining said reservoir thereupon by said connecting member, a reinforcing plate also of light gauge in association with said basin, and extending over a material portion of its surface, and means for fastening said connecting member and said reinforcing member to said basin, one at one side and the other at the opposite side thereof.

4. A jar fountain or feeder comprising a jar reservoir member, a basin forming a support for said reservoir and having a centrally elevated portion forming a crown, the material of said basin being of thin gauge metal and having insufficient body to maintain a connecting member thereon without distortion, a connecting member between said basin and said reservoir, a reinforcing member also of thin gauge material, said connecting and said reinforcing member being adapted to be detachably attached to said basin, and fastening means for securing said connecting member and said reinforcing member to said basin, said reinforcing member having a bearing surface adapted to engage a complemental portion of and a material area of the under surface of the crown of said basin whereby to reinforce the material of said basin to maintain said connecting member thereon without distortion of the material thereof.

5. A chick fount comprising a basin, a reservoir, a connecting member on said basin for holding said reservoir thereon and disposed upon the upper side of the bottom of said basin, and a reinforcing plate for said basin upon the under side of the bottom thereof, said basin, said connecting member, and said plate each having sections which are complementary, the assembly of said parts with the basin intermediate said connecting member and said plate with said complementary parts in engagement preventing the rotative displacement of said connecting member and plate.

HARRY J. BARKER.