Feb. 7, 1933. J. F. GIBBS 1,896,615

POULTRY DRINKING FOUNTAIN

Filed Nov. 20, 1929

Fig. 1

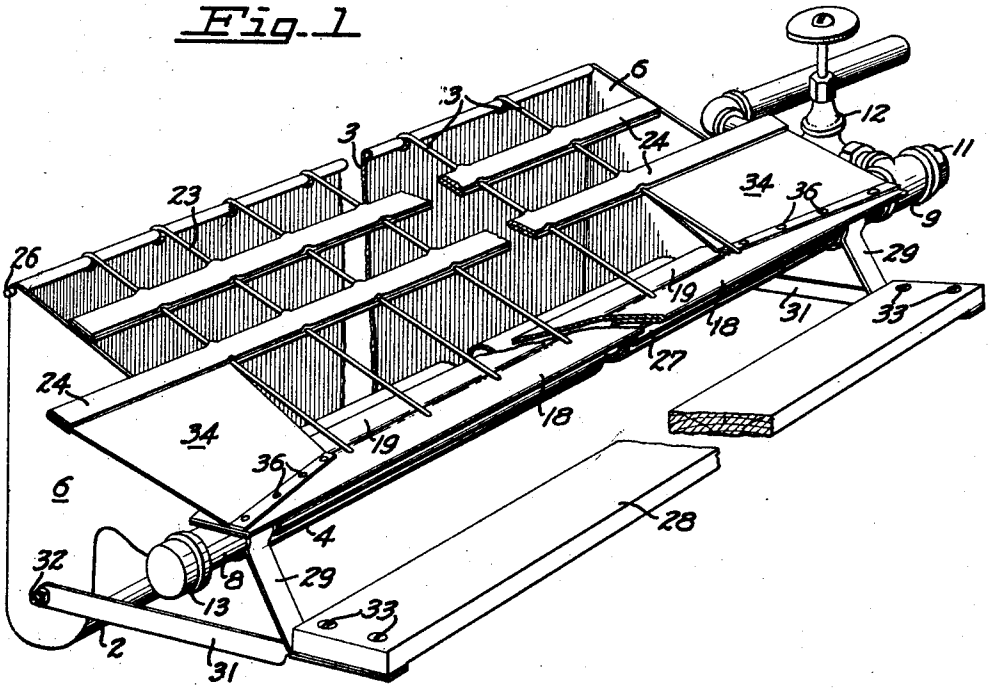


Fig. 2

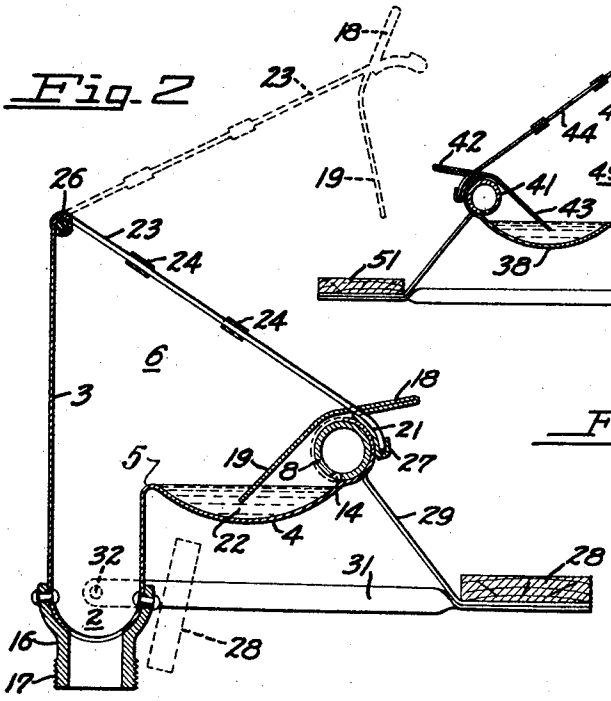


Fig. 3

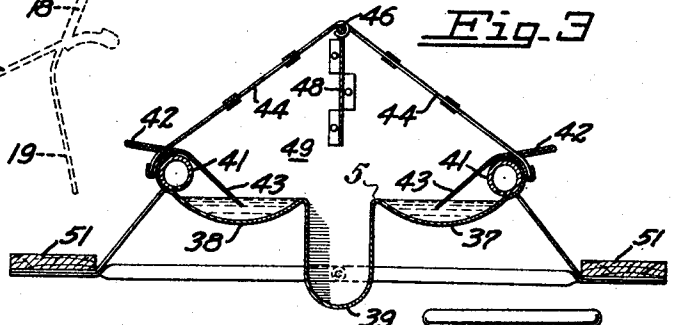
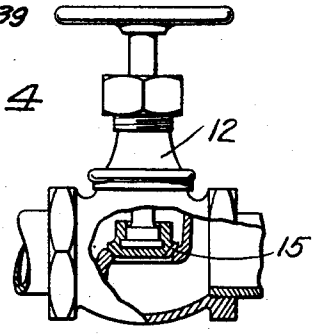


Fig. 4



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UNITED STATES PATENT OFFICE

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POULTRY DRINKING FOUNTAIN

Application filed November 20, 1929. Serial No. 408,489.

The invention relates to a drinking fountain, and particularly to a sanitary drinking basin for poultry.

An object of the invention is the provision of a sanitary drinking fountain constructed to keep the poultry out of the basin so that the collection of sediment is reduced, splashing of the water prevented, and a higher degree of cleanliness preserved.

Another object of the invention is the provision of a poultry drinking fountain having a quickly draining sump into which the basin may be flushed.

A further object of the invention is the provision of a drinking fountain which prevents fowls from wetting the ground below the basin.

Another object is the provision of a drinking fountain which may be partially knocked down for shipping.

My invention possesses numerous other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of my invention. It is to be understood that I do not limit myself to this disclosure of species of my invention, as I may adopt variant embodiments thereof within the scope of the claims.

Referring to the drawing:

Figure 1 is a perspective view of the drinking fountain.

Figure 2 is a vertical sectional view of the drinking fountain. The elevated position of the guard and bib, and the retracted position of the perch are shown by dotted lines.

Figure 3 is a vertical sectional view of a modified form of the drinking fountain.

Broadly my invention relates to a drinking fountain of the trickle type; and comprises a drinking basin above and forward of a sump which communicates with a drain pipe. A guard is provided to keep the fowls out of the basin, and a perch gives them a place to stand on while drinking. This prevents splashing of the water; and the collection of dirt in the fountain is greatly reduced. Drain plates are provided for directing water which drips from the fowls' heads back into the basin, to prevent the surface below the fountain from becoming wet. Water is supplied to the basin through an apertured pipe communicating with the water supply. The flow of water from the pipe is variable; only a trickle is required for drinking purposes, but a full stream is available for flushing the basin.

Poultry raisers have experienced considerable difficulty in finding suitable means for watering their flocks. Fowls have the habit of wiping their beaks on the sides of a drinking fountain, and allowing water to drip from their wattles, thereby causing water to fall to the surface below the fountain. Poultry also carry dirt on their feet and should not be permitted to wade in the drinking water. The drinking fountain disclosed in this application provides a sanitary, easily cleaned device, of simple construction which insures dry ground or floor surrounding it, and one that always contains a supply of fresh water which it is difficult for the poultry to foul.

In greater detail, the preferred embodiment of my invention comprises a trough having a U-shaped sump 2, a back wall 3, extending upwardly from one edge of the sump, and a drinking basin 4, communicating with the sump and positioned above and forward of its other edge. As shown in Figures 2 and 3 the edge or lip 5 of the basin adjacent the sump is higher than the bottom of the basin so that a predetermined water level is maintained at all times. The back wall 3, the sump 2, and the basin 4 are preferably formed from sheet metal. Other materials such as concrete, enamel, porcelain, terra cotta, glass, cast metal or wood can be utilized depending upon the size of the device and the conditions under which it is to be used.

Closing the ends of the trough are the end walls 6; and mounted in the curved upper forward portion of the basin and passing through apertures in the end walls 6, is the water pipe 8. One end of the pipe is provided with a T 9, having its outer end closed by a suitable plug 11. The branch passage of the T, communicates with a source of water supply, and is regulated by a wheeled valve 12 of any suitable construction having

a small by-pass 15 when the valve is closed. The by-pass is conveniently made by a saw cut in the valve head, and the purpose is to permit a trickle of water to flow past the valve when it is closed.

The other end of pipe 8 is closed by a suitable cap 13, so that removal of the plug 11 and cap 13 permits the passing of a swab through pipe 8 to clean it.

The water is discharged from the pipe 8 through a series of apertures 14 positioned to direct the water downwardly against the upper forward portion of the basin. The apertures are preferably cone shaped, opening outwardly, so as to discharge the water from each aperture in a diverging jet when under pressure, to prevent foreign matter from clogging their passages. Normally the valve 12 is closed to permit a constant trickle of water to by-pass into the basin. The level of the water in the basin is determined by the height of the edge or lip 5 adjacent the sump and the constant trickle of water insures that this level is maintained. Any overflow runs over the lip 5 into the sump so that fresh water is always available. When the fountain is to be cleaned, the valve 12 is opened wide so that the diverging jets of water are sprayed with considerable force against the entire upper surface of the basin, merging together and passing over the contour of the basin, to wash any collected dirt into the sump by a stream extending continuously the entire length of the basin.

Communicating with the bottom of the sump is a drain pipe nipple 16, through which waste water and dirt are carried away. The nipple is provided with threads 17, to permit coupling to a waste pipe.

Mounted over the forward edge of the basin 4 above the pipe is a bib 18 and an apron 19, preferably formed of a single sheet of metal bent into the shape shown. The bib extends above and forward of the edge of the basin, and is provided on its under side with a flange 21 which rests on the edge of the basin. Water dripping from the fowls' beaks or wattles will fall on the bib and run back into the basin since the bib slopes toward the basin; and the ground around the fountain will remain dry. It is to be noted also that the bib, because of its shape, discourages the fowls from attempting to stand on the edge of the fountain.

The apron extends downwardly from the pipe into the basin 4, to support the wattles of the fowls and prevent them from becoming emersed in the water. It extends below the level of the water to prevent the accumulation of scum on its edge, and the lower edge of the apron is in close proximity to the bottom of the basin so as to form a restricted passage 22 which aids in the flushing of the fountain by preventing the water from whorling and increasing the force of the water rushing across the bottom of the basin.

Guard means comprising a series of parallel spaced rods 23 and transverse bars 24, is provided across the top of the fountain to keep the fowls out of the basin. The rods are hinged about the reinforcing bar 26 with which the back of the trough is provided, and extend forwardly through apertures in bib 18 and are secured thereto by the overturned lip 27 formed on the lower edge of flange 21. The transverse bars preferably comprise strips of metal having apertures extending along the centers and through which the parallel rods pass. The strip is folded back on itself so that the rods are clamped between the two sides of the strip. The lower transverse bar is made longer than the upper bar, and projects over the ends of the trough.

The fact that the guard and bib assembly is hinged about the upper edge of the back wall, allows the whole unit to be elevated as indicated by the dotted lines in Figure 2, so as to render the trough accessible for cleaning.

The arrangement of the guard and bib in normal position is such that the water can only be reached by fowls from the perch 28 adjacent the basin. The perch may comprise a separate stand if desired, but is preferably mounted on the fountain by suitable supports such as the bracket arms 29 and 31. The arms 29 are pivotally mounted on the pipe 8, and the arms 31 are secured to the end walls 6 by the bolts 32. The free ends of the arms 29 and 31 are then brought together under the perch and secured to it in any suitable manner such as by the bolts 33. When it is desired to reduce the fountain to a more compact form for shipping, the arms 31 are removed and the perch 28 swung under the trough to a position indicated by the dotted lines in Figure 2.

One of the essential requirements in the raising of poultry is the maintenance of dry yards and houses. Fowls usually allow their wattles to be emersed while drinking, and have the habit of wiping their beaks on the sides of basins afterwards. Each time this happens, a few drops of water are thrown to the ground, which soon becomes muddy. To control this, drain plates 34 are provided over each end of the trough between the end rods 23 and the outer ends of the lower transverse bar 24; and these are arranged to slope downwardly and inwardly over the end walls so that any water falling on them will run back into the basin. The upper edges of the plates are secured between the folds of the lower transverse bar, and the lower edges are fastened on the bib 18 by rivets 36.

In Figure 3 is shown a drinking fountain designed for use in large yards where many fowls are kept. This modified form is built

on the same principle as that disclosed in Figures 1 and 2, except that two drinking basins 37 and 38 are provided on opposite sides of the sump 39. A water pipe 41 is provided to supply water to each basin. Bibs 42 and aprons 43 are arranged in each basin in the same manner as described in connection with the preferred form of fountain. The guards 44 overlying each basin make an inverted V-shaped grille in which the spaced parallel rods are pivoted about a central reinforcing bar 46 which extends across the apex of the converging sides of the fountain. A shield plate 48, rigidly mounted on the bar 46 and the end walls 49, extends downwardly between the basins to a point above their brims so as not to interfere with the cleaning of the sump. The plate also supports the bar 46 and gives additional rigidity to the structure. A perch 51 on each side of the fountain, permits fowls to drink from each basin.

When the simpler and preferred form of fountain is used, it may be secured to the wall of a building or to a fence. The double fountain is particularly adapted to be placed in the partition between two poultry yards.

I claim:

1. A drinking fountain comprising a trough formed to provide a basin and an adjacent sump, and means including a pipe having a plurality of discharge apertures positioned at one side of the basin for optionally supplying a trickle or a flushing stream to said basin, said flushing stream flowing over the basin bottom in a sheet to wash any foreign matter into the sump.

2. A drinking fountain comprising a trough formed to provide a basin and an adjacent sump having one side extending upwardly to provide a back wall for the trough, a pipe extending along the forward edge of the basin and having downwardly opening apertures therein, and a valve for controlling the flow of water through said pipe to optionally supply a trickle or a flushing stream to said basin, said flushing stream flowing over the basin bottom in a sheet to wash any foreign matter into the sump.

3. A drinking fountain comprising a trough formed to provide a basin and an adjacent sump having one side extending upwardly to provide a back wall for the trough, a valved pipe extending along the forward edge of the basin and having downwardly opening apertures therein to optionally supply a trickle or a flushing stream to said basin, said flushing stream flowing over the basin bottom in a sheet to wash any foreign matter into the sump, and a guard permitting access to the basin and overlying the trough.

4. A poultry drinking fountain comprising a trough formed to provide a basin and an adjacent sump having one side extending upwardly to provide a back wall for the trough, a valved pipe extending along the forward edge of the basin and having downwardly opening apertures therein, a guard permitting access to the basin and overlying the trough, and a perch mounted on the trough from which the water in the basin may be reached through the guard, said guard being arranged so that fowls may drink only when on the perch.

5. A drinking fountain comprising a trough formed to provide a water basin and an adjacent sump having one side extending upwardly to provide a back wall for the trough, a valved pipe extending along the forward edge of the basin and having downwardly opening apertures therein, a sheet extending forwardly of the pipe to provide a bib and downwardly from the pipe to provide an apron ending below the water level of the basin, and a guard permitting access to the basin and overlying the trough.

6. A drinking fountain comprising a trough formed to provide a water basin and an adjacent sump having one side extending upwardly to provide a back wall for the trough, a valved pipe extending along the forward edge of the basin and having downwardly opening apertures therein, a guard permitting access to the basin and overlying the trough, and an apron extending downwardly from the side of the pipe opposite the basin wall to below the water level of the basin.

7. A drinking fountain comprising a trough formed to provide a basin and an adjacent sump and having one side extending upwardly to provide a back wall for the trough, means for supplying water to the basin, and a guard permitting access to the basin for drinking at all times and pivotally mounted on the back wall of the trough.

8. A drinking fountain comprising a trough formed to provide a basin and an adjacent sump and having one side extending upwardly to provide a back wall for the trough, means for supplying water to the basin, and a guard permitting access to the basin overlying the trough and pivotally mounted thereon.

In testimony whereof, I have hereunto set my hand.

JAMES F. GIBBS.