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SANITARY FONT FOR POULTRY

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FIG. I.

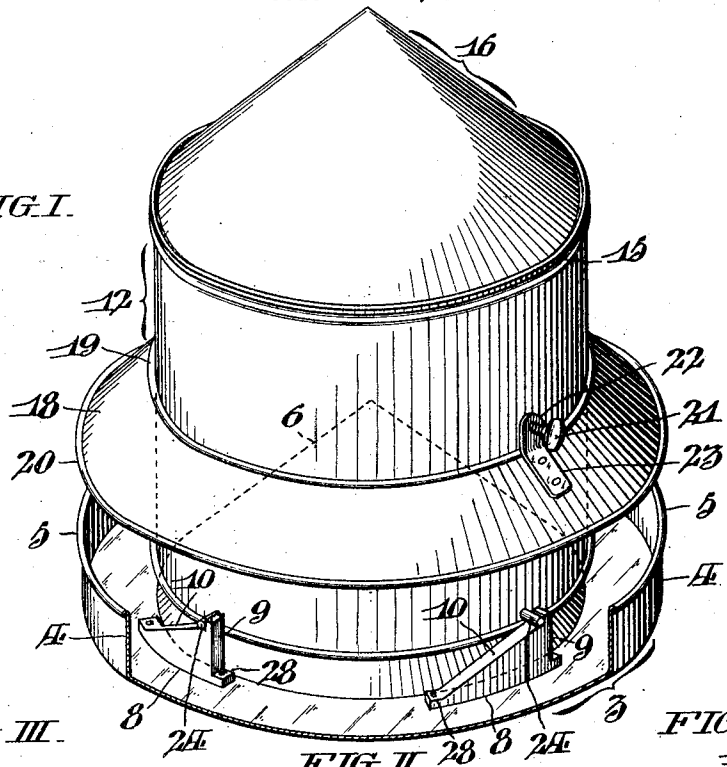


FIG. III.

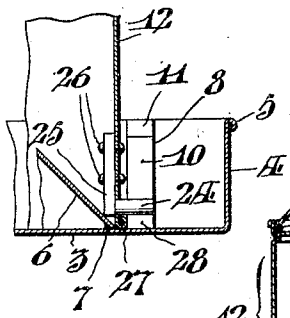


FIG. II.

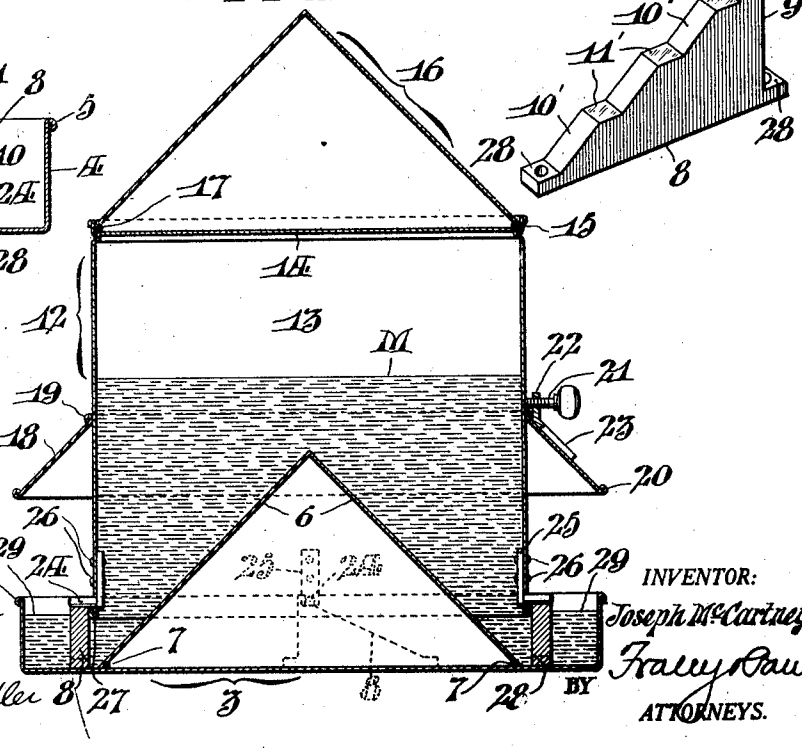


FIG. IV.

WITNESSES

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SANITARY FONT FOR POULTRY.

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This invention relates to devices for dispensing feed to poultry and more particularly to fonts for use by brooder chicks.

An object of this invention is to provide a device of the character referred to which embodies means whereby the feed magazine is positively centered relative to the pan or trough and may be inverted to service position without "spill" or wasteful overflow of its contents.

Another object is the provision of a font in which the feed magazine is automatically positioned and supported relative to the feed trough through the medium of cam and wiper devices.

A further object is to provide a poultry font having an adjustable guard functional to limit access to the feed trough or pan and thereby prevent the entry of young chicks.

A still further object is to furnish the font with a removable roosting-preventer, so that the filling of the feed magazine may be more expeditiously effected.

With the above general objects in view my invention consists in the features of construction, combination and arrangement of parts hereinafter described, illustrated by the accompanying drawings, and specifically defined as to subject-matter and scope in the subjoined claims.

In the drawings:—

Fig. I is a perspective view of a poultry font—embodying the present improvements—with a portion of the feed pan wall broken away to better illustrate an otherwise obstructed feature.

Fig. II is a central vertical section.

Fig. III is a fragmentary detail section hereinafter fully exlpained; and,

Fig. IV is a perspective view of a slightly modified type of cam device likewise later on fully described.

Referring more particularly to Figs. I—III inclusive, the feed trough or pan 3 is of conventional sheet metal construction with an upwardly extending annular flange 4, finished off by a circumferential bead 5. Concentric within the pan 3 I permanently secure the hollow cone member or feed spreader 6, as by soldering the basal edge thereof to the bottom of the pan 3 at 7; and said spreader is provided at diametrically opposed points about its basal edge with a series of what may be conveniently termed arcuate cam devices 8. These cam devices 8 are preferably—although not essentially—in the nature of radial uni-directional inclined blocks having vertical and inclined faces 9, 10, respectively; as well as formed with a notch or rest 11 adjacent the apex or upper points thereof.

The feed magazine 12 consists of a cylindrical body portion 13 of predetermined capacity and a diameter closely approximating that of the spreader 6, at its base or junction with the pan 3. The magazine 12 is closed in at the upper end by a flat top 14 with provision of a perimetrical flange 15, functional to protect said top from ground contact and damage when the magazine is inverted for filling purposes or cleaning. The perimetrical flange 15 also affords an annular retainer in which the conical roosting-preventer or removable top 16 seats, when the device is in use. This roosting-preventer or removable cone top 16 is hollow and made of sheet metal with a surrounding internal bead 17 to reinforce the same, as well as to eliminate any exposed sheet metal edges.

Slidably fitting the feed magazine 12 is a truncate guard or conical hood 18 of sheet metal having perimetrical beading 19, 20 at the upper and lower edges, respectively. This guard or hood 18 is adapted for secure retention at the required elevation, relative to the feed pan 3, by means of a winged set-screw 21, threadedly engaging an aperture in the vertical portion 22 of an angle member 23, riveted or otherwise immovably attached to said guard or hood. As will be apparent, more particularly from Fig. II, the winged set-screw 21 engages the exterior surface of the magazine 12 in clamping the guard or hood 18 at the required height.

The means effective to properly center and support the magazine 12 relative to the pan 3 comprise outstanding radial studs 24 conveniently integral with members 25 attached to the magazine wall by rivets 26. Attention is directed to the fact that the studs 24 pass through holes in the magazine wall just above its basal bead 27 so that said magazine may seat snugly in the pan 3, when desired; or when moving said studs into co-operative en-

gagement with the cam devices 8, as later on explained. Incidentally, the cam devices 8 are provided with apertured end pieces 28 for the reception of rivets whereby they are rigidly secured in the pan 3, as will be well understood without further description: and these end pieces are of a depth or thickness convenient for the studs 24 to pass over in bringing the same to co-operative engagement with the inclined faces 10.

In use, and assuming the magazine 12 is to contain a liquid food—such as buttermilk M—for feeding young chicks, it will be readily understood that the roosting-preventer top 16 is removed and said magazine inverted to stand on the perimetric flange 15. The feed trough or pan 3 is next removed in an obvious manner. The magazine 12 is then filled—for example to the level of the studs 24, and the feed trough or pan 3 replaced by a reverse operation to that just described; whereupon said magazine and pan are inverted and the former manipulated by turning until the studs 24 seat on the rests 11—as shown in Figs. I and II—with determination of the liquid level 29 (Fig. II) in said pan. The roosting-preventer 16 is replaced, when the font is ready for use, after the truncate guard or conical hood 18 has been adjusted—as set forth—to the proper height for the size of chicks being fed. It will be readily understood that the liquid food M is gradually deflected outwards by the spreader 6 into—and maintained at a constant level in—the pan 3 under the lower edge of the cylindrical body 13, without waste—or overflow—over the beaded edge 5 of said pan. In some instances I may provide the cam devices 8 with a series of rests 11′ and inclined faces 10′—Fig. IV—thereby affording provision to vary the level 29 of the food M in the pan 3, as will be well understood without further explanation herein.

Incidentally the truncate guard 18 is raised—as the chicks grow—by increasing the interspace between the same and the beaded edge 5 of the pan 3; while it may be lowered down thereon when it is desired to cease feeding, and thereby protect any food remaining in the annular feeding space from contamination, or the ravages of rodents and vermin.

From the foregoing my invention will be understood as fully justifying all the objects and advantages set forth, while it is equally apparent that detail structural changes may be effected without departing from the spirit of said invention as tersely defined in the following claims.

Having thus described my invention I claim:

1. A poultry font comprising a feed pan having a conical spreader concentric with its base, cam devices about the lower part of said feeder, and a feed magazine having radially directed elements for co-operative engagement with the cam devices in centering and supporting said feed magazine in the feed pan.

2. A poultry font comprising a feed pan having a conical spreader concentric with its base, uni-directional cam devices about the lower end of said spreader having rest portions, and a feed magazine having radially directed projections adapted to co-operate with the cam devices aforesaid in positively positioning and supporting the magazine in the pan, respectively.

3. A poultry font comprising a feed pan having a conical spreader concentric with its base, uni-directional arcuate cam devices about the lower end of said spreader having stepped rest portions, and a feed magazine having radially directed elements adapted to co-operate with the cam devices in positively positioning and supporting the magazine at varied elevations relative to the pan.

4. A poultry font comprising a feed pan having a conical spreader concentric with its base, uni-directional cam devices about the lower end of said spreader having rest portions, a feed magazine with radially directed studs adapted to co-operate with the cam devices in positively positioning and supporting the magazine at varied elevations relative to the pan, and a removable roosting-preventer fitting a perimetrical flange at the top of the magazine.

5. A poultry font comprising a feed pan having a conical spreader concentric with its base, uni-directional arcuate cam devices about the lower end of the spreader, said devices having upwardly inclined faces merging to lateral rests, radially outstanding studs adjacent the bottom of the magazine adapted to co-operate with the inclined faces and rests aforesaid in centering and supporting the magazine in the pan, a removable roosting-preventer fitting a peripheral extension flange at the top of the magazine, and a truncate guard adjustable relative to the feed pan by means of a clamp screw.

6. In a poultry font of the type described, a feed pan, a feed magazine seating in said pan; cam means about the feed pan, and projections about the feed magazine co-operative with the cam means, jointly functional to effectively center the feed magazine relative to the pan with capacity for inversion of the font and rigid support of said magazine without spill or wasteful overflow of its content so long as the lower edge of the magazine locates below the upper edge of the feed pan.

7. In a poultry font comprising a bottom pan, a magazine having radially projecting stops and adapted to be inverted axially in the pan with provision of a circumferential feed well and retainment of its content through sealing at its lower edge in the well, and stepped cam devices co-operative with the aforesaid stops by partial rotation of the

magazine to vary the elevation of its lower edge relative to the pan and thereby increase or decrease the depth of the feed in said well.

8. In a poultry font comprising a feed pan, an invertable container adapted for concentric seating in the pan with provision of a seal about its lower edge, cam devices in the feed pan, and projections about the container co-operative with said cams to vary the elevation of said container in controlling the depth of the feed in the pan exterior to the container.

In testimony whereof, I have hereunto signed my name at Philadelphia, Pennsylvania, this 30th day of December, 1926.

JOSEPH McCARTNEY.