March 3, 1936. G. K. S. FERGUSON 2,032,978

FEED TROUGH FOR POULTRY

Filed May 18, 1934

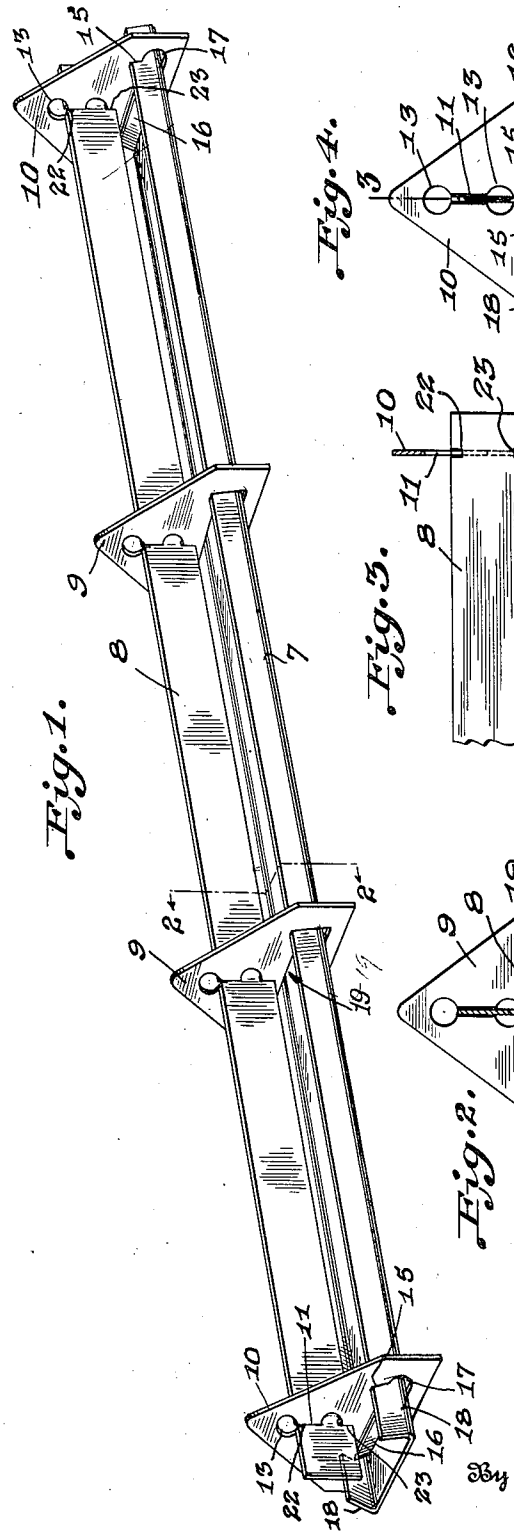


Fig. 1.

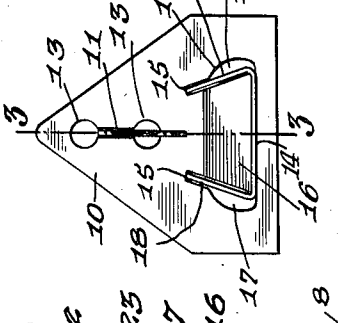


Fig. 4.

Fig. 5.

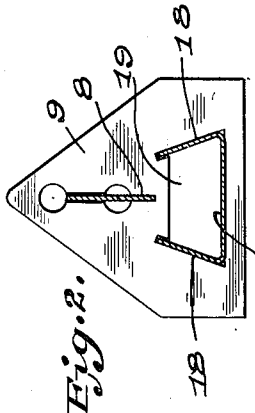


Fig. 2.



Fig. 5.

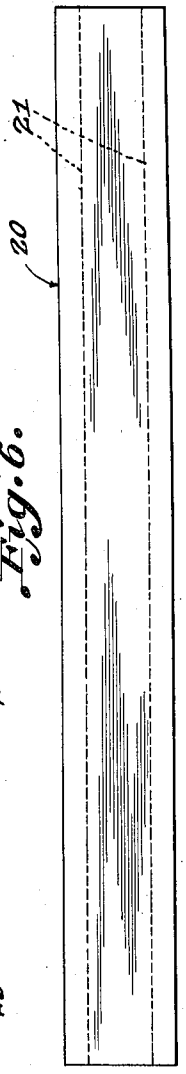


Fig. 6.

Inventor

G. K. S. Ferguson

By Seymour & Bright

Attorneys

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UNITED STATES PATENT OFFICE

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FEED TROUGH FOR POULTRY

George K. S. Ferguson, Baltimore, Md., assignor to The Baltimore Paper Box Company, Baltimore, Md.

Application May 18, 1934, Serial No. 726,398

12 Claims. (Cl. 119—61)

This invention relates to improvements in feed troughs for poultry and more especially to a novel feed trough of inexpensive and sanitary construction.

One of the objects of the invention is to provide a feed trough which may be formed of any suitable sheet material, such as paper board, fiber board or corrugated paper board, the parts of which can be assembled without the use of tools.

A further object is to furnish a chick feeder of such inexpensive construction that after it is used with one lot of chicks, it may be destroyed by fire so as to reduce the spread of disease.

With the foregoing objects outlined and with other objects in view which will appear as the description proceeds, the invention consists in the novel features hereinafter described in detail, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims.

In the drawing:

Fig. 1 is a perspective view of the improved feeder.

Fig. 2 is a transverse vertical sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a longitudinal vertical sectional view of one end portion of the feeder, the section being taken on the line 3—3 of Fig. 4.

Fig. 4 is an end view of the same.

Fig. 5 is an elevation of the ridge strip of the device.

Fig. 6 is a plan view of the blank from which the trough is made.

From an inspection of the drawing, it may be seen that all of the parts are formed of sheet material and therefore may be shipped in knock-down condition.

In the form of the invention illustrated, the feeder is made of six parts, a trough 7, a ridge strip 8, center supports 9 and end supports 10. Each of the end supports may be of substantially triangular shape provided with two die-cut holes 11 and 12. The opening 11 is preferably enlarged at its ends 13 to facilitate the cutting of the hole and to provide clearance space to permit the ridge strip to be threaded therethrough. The hole 12 is cut in such a way as to provide a lower horizontal supporting edge 14, upper notches 15 and a tongue 16, the latter being of less length than the hole 12 so as to leave enlarged apertures 17 at the side edges of the tongue.

Each of the center supports 9 is of the same construction as the end supports with the exception that the tongue 16 is omitted and the side edges 18 of the hole 19 converge upwardly so as to hold the walls of the trough in converging relation.

The trough is made from the rectangular blank 20 shown in Fig. 6 and this blank is provided with a pair of score lines 21 extending lengthwise thereof so as to permit the blank to be folded to form the trough.

The ridge strip 8 is of the same length as the trough and is formed of a rectangular piece of paper board or the like and its opposite edges are provided with short notches 22 and long notches 23 which are adapted to frictionally interlock with the supports 9 and 10 at the lower ends of the openings 11 when the strip is threaded through said openings.

In assembling the feeder the blank 20 is folded into trough shape and then it is threaded through the openings 12 and 19 of the supports until these supports are spaced along the trough as shown in Fig. 1. Then the ridge strip 8 is threaded through the openings 11 until the notches 22 or 23 register with the supports, at which time the ridge strip is pushed downwardly so as to interlock with the supports. By using notches 22, 23 of different lengths at opposite sides of the strip 8, the ridge strip may be set either high or low with reference to the supports to accommodate chicks of different sizes.

The openings 19 of the center supports allow the feed to pass from one end of the trough to the other while the tongues 16 form end walls for the trough to prevent the feed from discharging from the ends of the trough.

The ridge strip 8 has a three-fold purpose; first, it frictionally holds the supports in place and keeps them properly spaced and assembled; second, it keeps the chicks out of the trough and out of the feed; third, it has smooth surfaces and is of sufficient depth to prevent the chicks from wrapping their toes around it. In other words, it prevents the chicks from roosting thereon.

When the ridge piece is in place with the longer notches 23 down, the distance between the sides of the trough and the ridge piece is sufficient only to allow the chicks' heads to enter to get the feed but too small to receive the bodies of the chicks. Obviously this feature acts to keep the chicks out of the feed. As the chicks grow, it is necessary to have more head room and this is accomplished by simply inverting the ridge piece.

It will be noted in my construction that there are no nuts, bolts or the like used and no tools

are needed in setting up the feeder. It will also be observed that my feeder is very simple in construction and as it only requires a small amount of board, it can be made very cheaply. This low cost makes it possible to put the feeder on the market as a 100% sanitary feeder, as it can be made so cheap that it can be used for one lot of chicks and then destroyed. Consequently, a new lot of disease-free chicks can be started with a new sanitary feeder whenever desired.

While I prefer to make the feeder of paper board, fiber board or corrugated paper board, it is obvious that the device may be made of any other suitable sheet material and in cases where permanency is desired, it can be manufactured from sheet metal.

From the foregoing, it is believed that the invention may be readily understood and it is obvious that changes may be made in the details disclosed without departing from the spirit of the invention as expressed in the claims.

What I desire to secure by Letters Patent is:

1. A chick feeder comprising supports having side surfaces arranged in parallel planes, each support being formed of sheet material, a trough formed of sheet material and extending through said supports, and a ridge piece of sheet material extending through the supports and having notches frictionally engaging said supports and connecting the supports to one another.

2. A chick feeder comprising supports formed of sheet material, a trough formed of sheet material and extending through said supports, and a ridge piece of sheet material extending through the supports and connecting the supports to one another, said ridge strip having notches interlocked with the supports.

3. A chick feeder comprising supports formed of sheet material, a trough formed of sheet material and extending through said supports, and a ridge piece of sheet material extending through the supports and connecting the supports to one another, one of said supports having a tongue extending into the trough and forming an end wall therefor.

4. A chick feeder comprising vertical supports, a trough extending through the supports and frictionally secured thereto, and a ridge strip extending through the supports above the bottom of the trough and frictionally connecting said supports.

5. A chick feeder comprising vertical supports, a trough extending through the supports and frictionally secured thereto, and a ridge strip extending through the supports above the bottom of the trough and frictionally connecting said supports, all of said parts being formed of sheet material.

6. A chick feeder comprising vertical supports, a trough extending through the supports and frictionally secured thereto, and a ridge strip extending through the supports above the bottom of the trough and frictionally connecting said supports, all of said parts being formed of fibrous sheet material.

7. A chick feeder comprising vertical supports, a trough extending through the supports and frictionally secured thereto, and a ridge strip extending through the supports above the bottom of the trough and frictionally connecting said supports, said ridge strip having notches in one of its edges interlocked with said supports.

8. A chick feeder comprising vertical supports, a trough extending through the supports and frictionally secured thereto, and a ridge strip extending through the supports above the bottom of the trough and frictionally connecting said supports, said ridge strip being vertically arranged and invertible in said supports.

9. A chick feeder comprising vertical supports, a trough extending through the supports and frictionally secured thereto, and a ridge strip extending through the supports above the bottom of the trough and frictionally connecting said supports, some of said supports being provided with tongues which project into the trough and form end walls of the latter.

10. A chick feeder comprising spaced vertical center and end supports, a trough extending through said supports and frictionally secured to the latter, and a notched ridge strip extending through the supports and having some of its notches interlocked with some of said supports.

11. A chick feeder comprising spaced vertical center and end supports, a trough extending through said supports and frictionally secured to the latter, and a notched ridge strip extending through the supports and having some of its notches interlocked with some of said supports, the center supports having openings to permit feed to move throughout the length of the trough, and the end supports having tongues forming end walls for the trough.

12. A chick feeder comprising a trough, and vertical supports for the latter frictionally secured to the trough, each support comprising a single piece of substantially flat sheet material provided with an aperture through which the trough slidably extends, said supports holding the side walls of the trough in upwardly converging relation.

GEO. K. S. FERGUSON.