F. J. SCHISLER.

FEED TROUGH.

APPLICATION FILED APR. 22, 1912.

1,067,377. Patented July 15, 1913.

Fig. 1.

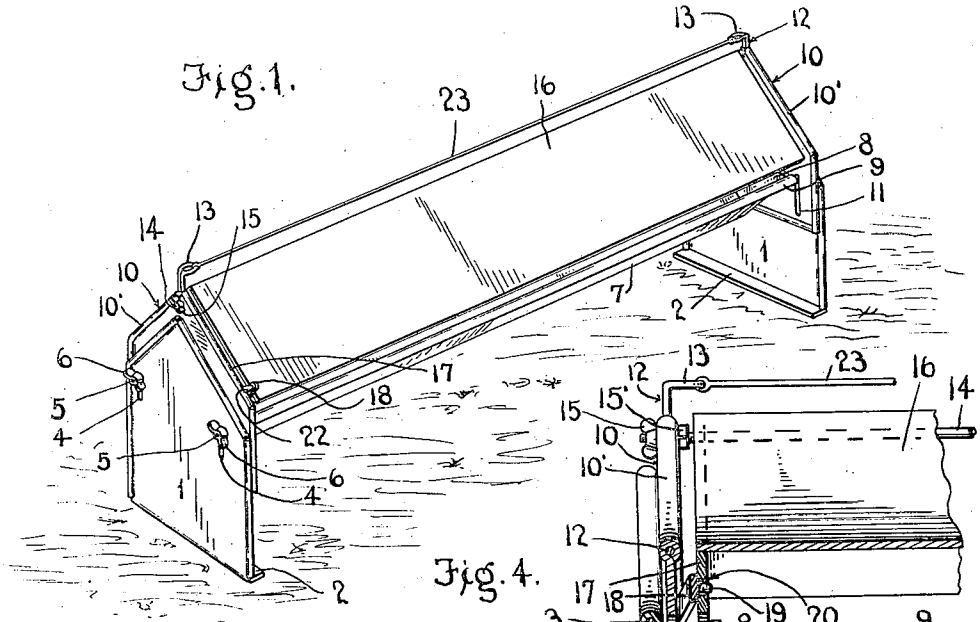


Fig. 4.

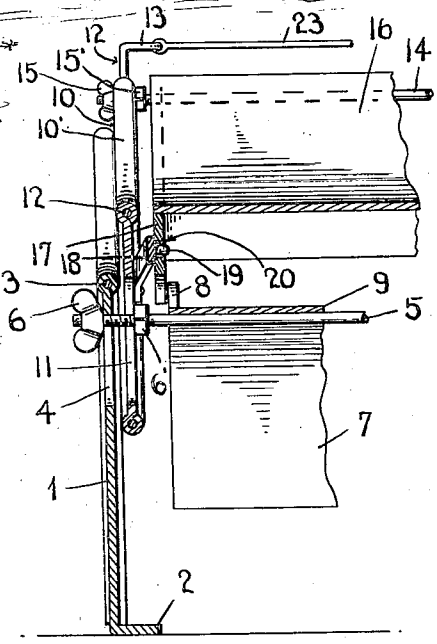


Fig. 3.

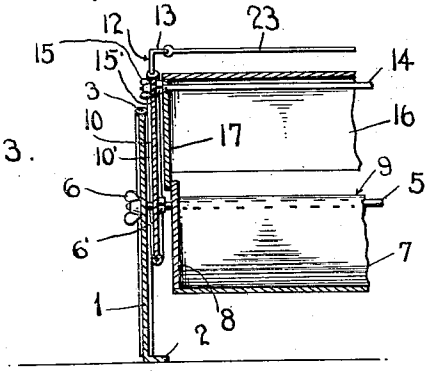


Fig. 2.

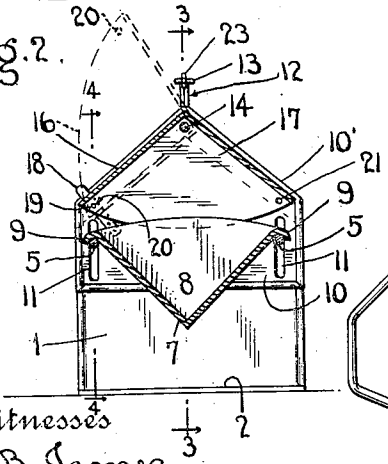


Fig. 6.

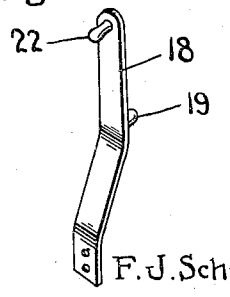
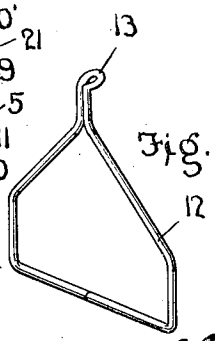


Fig. 5.



Witnesses

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FEED-TROUGH.

1,067,377. Specification of Letters Patent. Patented July 15, 1913.

Application filed April 22, 1912. Serial No. 692,342.

To all whom it may concern:

Be it known that I, FRANK J. SCHISLER, a citizen of the United States, residing at Winthrop, in the county of Sibley and State of Minnesota, have invented certain new and useful Improvements in Feed-Troughs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in feeding or watering troughs.

One object of the invention is to provide a trough of this character which is particularly adapted for the use of fowls and which is provided with means for covering and protecting the contents thereof, thus keeping the latter in a sanitary condition, means being also provided to prevent the fowls from alighting on the trough.

Another object is to provide a trough having adjustable supporting means whereby the trough may be raised or lowered and held at the desired elevation and having means whereby the cover may be adjusted to regulate the size of the feeding space or opening between the cover and the sides of the trough.

With these and other objects in view, the invention consists of certain novel features of construction, and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings; Figure 1 is a perspective view of my improved trough; Fig. 2 is a cross sectional view of the same; Fig. 3 is a central vertical sectional view through one end of the trough taken on the line 3—3 of Fig. 2; Fig. 4 is a similar view on an enlarged scale taken on the line 4—4 of Fig. 2; Fig. 5 is a detail perspective view of the binding wire which is disposed in the bead of the cover supporting member of the trough; Fig. 6 is a similar view of the spring catch for fastening the cover in operative and inoperative positions.

Referring more particularly to the drawings, 1 denotes the end supporting members of the trough, said members comprising metal plates of suitable size and shape the same being here shown as having a rectangular shaped lower portion provided on its lower edge with a right angular inwardly turned supporting flange 2 and having its upper end pointed as shown. The edge of the plate has a cylindrical bead formed thereon with which is engaged a bracing wire 3 whereby the supporting plates 1 are stiffened and strengthened to provide rigid supports for the trough. In the end plates 1 near their upper portions are pairs of vertically disposed slots 4 with which are engaged the threaded ends of trough supporting rods 5 on the outer ends of which are arranged thumb nuts 6 whereby the end plates 1 are securely fastened to the rods. Arranged between the end plates 1 is a V-shaped receptacle 7 having its ends closed by end plates 8 and having the upper edges of its sides turned outwardly and downwardly to form curved flanges 9 which are engaged with the rods 5 whereby the latter are adapted to support the receptacle. By adjustably securing the ends of the rods 5 in the slots 4 of the end supporting plates it will be readily seen that the receptacle 7 may be adjustably supported at the desired elevation.

Adjustably engaged with the rods 5 are cover supporting plates 10 which correspond in shape to the end plates 1 and have therein pairs of vertically disposed slots 11 through which the threaded ends of the rods 5 pass. On said threaded ends of the rods and adapted to be screwed up into engagement with the inner sides of the plates 10 are clamping nuts 6′ which co-act with the nuts 6 to clamp the plates 10 against the plates 1 and thereby hold said plates 10 in adjusted positions. The edges of the plate 10 are turned to form strengthening beads 10′ and with said beads are engaged wire frames 12 which brace and strengthen the plates. The upper ends of the frames 12 project above the pointed upper ends of the plates 10 and are bent to form loops 13 projecting inwardly at right angles to the frame 12.

Arranged between the upper pointed ends of the plates 10 is a cover supporting rod 14 the ends of which are threaded and are engaged with the upper ends of the plates

10 as shown. On the threaded ends of the rod 14 and engaged with the inner sides of the plates 10 are clamping nuts 15 and 15' which hold the rod in position between the plates. Pivotally mounted on the rod 14 is an inverted V-shaped cover 16 the ends of which are closed by end plates 17, the lower edges of which are engaged with the outer sides of the end plates of the receptacle 7. The cover supporting rod 14 has its ends inserted through the ends 17 of the cover, said rod thereby pivotally supporting the cover to permit the same to be swung laterally in either direction as shown in dotted lines in Fig. 2 of the drawings.

The cover is locked in an operative position over the receptacle or in an inoperative position above the same by means of a spring catch plate 18 secured at its lower end to the inner side of one of the cover supporting plates 10 and having thereon an inwardly projecting stud 19 which is adapted to be engaged with apertures 20 and 21 formed in the end plate 17 of the cover, said spring being provided with a knob or handle 22 whereby the same is operated to retract the stud 19 from the apertures 20 or 21 in the end of the cover as shown. When the cover 19 is in an operative position over the receptacle 7 the stud 19 of the spring will engage the aperture 20 in the end plate of the cover and when the latter is swung upwardly to an inoperative position as shown in dotted lines in Fig. 2 of the drawings, the stud will engage the aperture 21 in the opposite corner of the end plate of the cover. By means of the slotted engagement of the plates 10 with the threaded ends of the rods 5 it will be seen that said plates 10 may be adjusted vertically and clamped by the nuts 12 into tight engagement with the plates 1 thereby supporting the cover 16 at different positions above the receptacle 7 thus varying the feed space between the edges of the cover and the receptacle.

Arranged above the vertex of the inverted cover 16, is a longitdinally extending anti-roosting wire 23, having its ends secured to the inwardly projecting loops 13. By placing the wire 23 in the position shown and described, roosting on the apex of the vertical cover is thereby prevented and the cover and feeding receptacle thus protected from the dropping which would result from such roosting.

By means of slots in the end supports or walls the access to feed receptacle (between top of same and lower edge of cover) may be increased or diminished as may be required for any size of fowl, also by the same means the entire body may be elevated or lowered thereby setting the feed receptacle at any required height from the floor to conform to any size fowl.

A trough constructed as herein shown and described will effectually protect the contents thereof from the weather or from dirt and foreign matter, thus keeping the food or water therein in a sanitary condition. By swinging the cover upwardly in one direction or the other in the manner described, the receptacle may be readily removed for cleaning or other purpose.

By arranging the parts and connecting the same together in the manner described, it will be seen that the trough may be readily knocked down or disassembled and closely packed for storing or shipping.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as claimed.

Having thus described my invention, what I claim is:

1. A feed trough comprising end supporting plates having therein vertically disposed slots, supporting rods adjustably engaged with said slots, a receptacle having a removable engagement with said rods, a cover arranged above said receptacle, cover supporting plates adjustably engaged with said rods, and means to pivotally connect said cover with said supporting plates whereby the cover may be supported at any desired elevation above the receptacle and may be swung laterally in either direction to inoperative positions.

2. A feed trough comprising end supporting plates having therein vertically disposed slots, pairs of receptacle supporting rods having threaded ends engaged with said slots, nuts arranged on the outer ends of said rods. a receptacle having on the upper edges of its sides flanges adapted to be engaged with said rods whereby the receptacle is detachably supported thereon, cover supporting plates having an adjustable connection with said rods, a cover supporting rod engaged at its ends with said cover supporting plates, a cover pivotally supported on said rod over said receptacle and adapted to be swung laterally in either direction to uncover the receptacle, a latch adapted to hold said cover in operative and inoperative positions, and means to prevent fowls from perching on the cover.

3. A feed trough comprising main supporting plates having therein vertically disposed slots, pairs of receptacle supporting rods having threaded ends engaged with said slots, nuts arranged on the outer ends of said rods, a receptacle arranged between said

rods and having on its upper edges flanges adapted to engage the rods whereby the receptacle is adjustably and removably supported between said supporting plates, cover supporting plates having therein slots adapted to receive the ends of said receptacle supporting rods, clamping nuts arranged on the threaded ends of said rods and adapted to engage the inner side of said cover supporting plates whereby the latter are clamped against said main supporting plates and thereby adjustably held in position, a cover supporting rod having its ends secured in the upper ends of said cover supporting plates, a cover pivotally engaged with said rod and adapted to be supported thereby above said receptacle and to be swung laterally in either direction from over the receptacle, said cover having in one end apertures arranged near the opposite sides of the cover, and a spring catch arranged on the adjacent cover supporting plate and adapted to be engaged with the apertures in the end of the cover whereby the latter is fastened in an operative position over the receptacle or in an inoperative position when swung to one side of the trough.

4. A feed trough comprising main supporting plates, supporting flanges on the lower edges of said plates, receptacle supporting rods having an adjustable engagement with said plates, a receptacle removably engaged with said rods, cover supporting plates having an adjustable connection with said receptacle supporting rods, a bead formed on the edge of said cover supporting plates, wire bracing frames arranged in said bead and having their upper ends projecting above the upper edges of the supporting plates and bent to form right angular inwardly projecting loops, a cover supporting rod having its ends secured in said cover supporting plates, a cover pivotally mounted on said rod over said receptacle and adapted to be swung laterally in either direction to permit the removal of the receptacle said cover having inclined sides, means to fasten the cover in its operative and inoperative positions, and a guard wire arranged above the upper edge of the cover and having its ends secured in the right angular loops of the bracing frames of said cover supporting plates whereby fowls are prevented from perching on the cover of the trough.

5. In a feed trough, the combination of end supporting plates having therein oppositely disposed vertical slots, supporting rods having their ends threaded and slidably engaged with said slots, whereby said rods may be vertically adjusted therein, a feeding receptacle disposed between said rods and consisting of a trough having the upper edges of its opposite sides bent outwardly and around said adjustable rods, whereby the receptacle may be raised or lowered with respect to the end plates when said rods are adjusted, clamping nuts to hold the rods and receptacle in adjusted position, a cover disposed above said receptacle, and means for adjustably supporting said cover in spaced relation to the receptacle.

6. In a feed trough, the combination of end supporting plates, supporting rods having their ends threaded and adjustably engaged therewith, a feeding receptacle arranged between and supported by said rods, a cover supporting device arranged adjacent said end plates and consisting of plates having therein vertical slots adapted to slidably engage the rods, nuts on said rods to clamp said cover supporting plates in adjusted position, and a cover carried by the last mentioned plates.

7. In a feeding trough, the combination of end supporting rods having their ends vertically adjustable in said plates, a feeding receptacle arranged between and supported by said rods, cover supporting plates having a vertically adjustable engagement with said supporting rods, a cover for said receptacle including V-shaped ends having therein openings at their apexes, and a cover supporting rod having its ends extending through said openings and secured to the adjustable cover supporting plates, whereby said cover is pivotally and adjustably supported above the feeding receptacle, to enable it to be swung laterally for the removal of the receptacle and also adjusted vertically to increase or diminish the space between said cover and receptacle.

8. In a chicken feeding trough, the combination of a feed receptacle, means for supporting the same, a cover arranged in spaced relation to and above the receptacle, said cover being of inverted V-shape in cross-section, cover supporting means consisting of upright sheet metal plates having inverted V-shaped upper portions, the edges of said plates being rolled to form tubular beads, reinforcing wire frames arranged in said beads and having portions extending vertically above the apexes of said plates, said extending portions of the wire frames being formed with eyes, and a guard wire connecting said eyes and spaced above the cover.

9. In a feed trough, the combination of end supporting rods connected therewith, a feeding receptacle arranged between and supported by said rods, cover supporting plates vertically adjustable on said rods, a latch spring secured at one of its ends to one of said cover supporting plates and having a centrally arranged inwardly projecting cover engaging lug, a cover supporting rod having its ends secured to said cover supporting plates, a cover pivotally mounted on

said rod and having triangular shaped ends formed near their lower outer corners with apertures adapted to receive the inwardly projecting lug on said spring, whereby the cover may be securely locked in operative or inoperative position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK J. SCHISLER.

Witnesses:
J. R. HOGE,
L. O. HILTON.