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2,587,702

VENTILATED WALL

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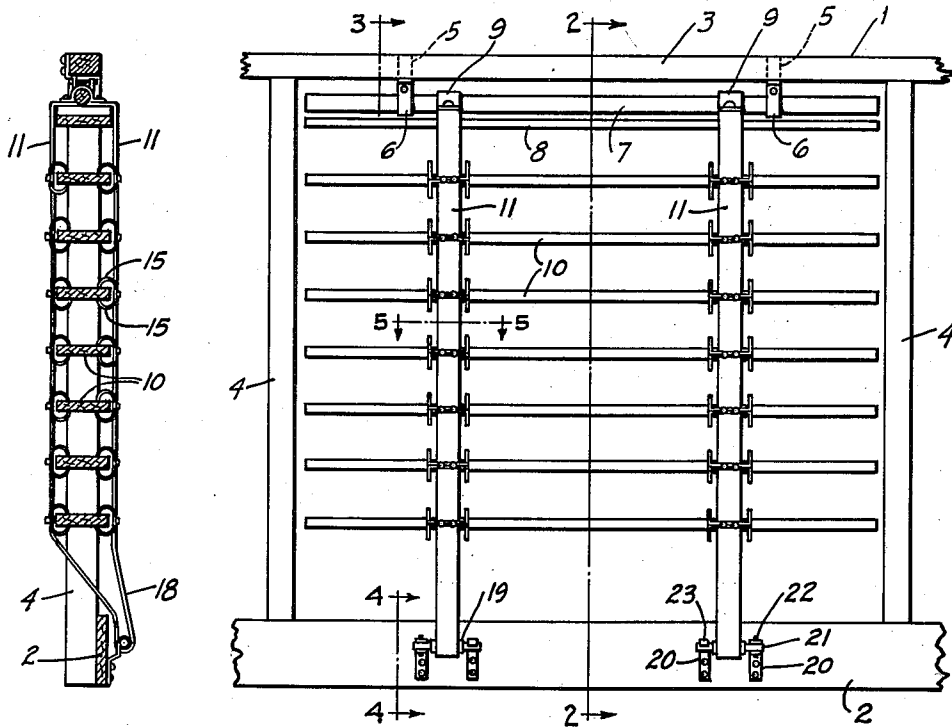


Fig. 2

Fig. 1

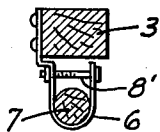


Fig. 3

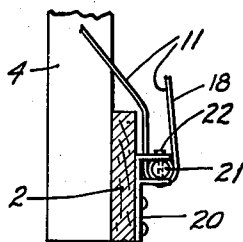


Fig. 4

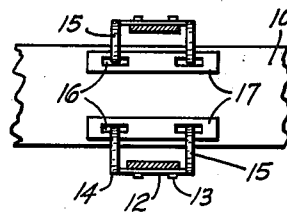


Fig. 5

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VENTILATED WALL

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3 Claims. (Cl. 20—62)

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The present invention relates to improvements in a ventilated wall adapted for use in connection with an open-type chicken house and for other uses, and its principal object is to provide a wall of the character described that will give the operator control over the elements, such as rain, sunshine and wind.

Open-type chicken houses, that is houses consisting merely of a floor and a roof with a suitable frame structure for supporting the roof have been found very much superior to the so-called closed type having a substantially complete wall enclosure, since the open-type accommodates many more chickens per area, gives ample fresh air and ventilation and results in healthier growth of the chickens.

I have found, however, that uncontrolled access of the elements such as rain, sunshine and wind may also prove very detrimental and even disastrous in many cases.

In the present invention it is proposed to provide a wall structure that combines all the advantages of the open-type chicken house with a control over the elements so that any desired portion of the house may be closed against excessive sunshine or wind or rain, as the case may be, while at the same time all the advantages of the open-type chicken house are retained.

More particularly it is proposed to provide a wall structure comprising a series of tiltable slats, with suitable control means whereby the slats may be tilted to any desired position for limiting access of the elements to the inside of the chicken house.

It is further proposed to arrange the slat control means in such a manner that upon a closing movement the lower slats will close more quickly than the upper ones for principally excluding the elements from the lower portion of the chicken house while the upper portion still remains open for a desired degree of ventilation.

It is additionally proposed to provide, in connection with the control means, a certain amount of braking action which causes the slats to retain any inclined position to which they may have been adjusted.

And finally, it is proposed to provide a novel means for supporting the slats in spaced relation with respect to one another for common control.

Further objects and advantages of my invention will appear as the specification proceeds, and the novel features of my invention will be fully defined in the claims attached hereto.

The preferred form of the invention is illustrated in the accompanying drawing, in which

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Figure 1 shows an outside view of a ventilated wall made in accordance with my invention,

Figure 2, a section taken along line 2—2 of Figure 1,

Figure 3, a section taken along line 3 of Figure 1, on an enlarged scale,

Figure 4, a section taken along line 4—4 of Figure 1, on an enlarged scale, and

Figure 5, a detail sectional view taken along line 5—5 of Figure 1.

While I have shown only the preferred form of my invention, I wish to have it understood that various changes and modifications may be made within the scope of the claims attached hereto without departing from the spirit of the invention.

Referring to the drawing in detail, the frame 1 may be considered part of a conventional frame structure for an open-type chicken house, including a horizontally disposed sill 2, a plate 3, and studdings 4 supporting the plate 3 in elevated position over the sill 2.

The plate 3 has a pair of straps 5 suspended therefrom to form bearings 6 for a shaft 7, the straps being adapted for being tightened upon the shaft by means of bolts 8' to produce a desired braking action on the shaft 7.

A top slat 8 is secured upon the under side of the shaft 7 by suitable metal straps 9 preferably secured in such a manner that the upper slat and the shaft 7 form a rigid unit rotatable about the axis of the shaft.

A number of additional slats 10 are suspended from the top slat 8 by means of opposing strips 11 of canvas or similar suitable material, the slats being supported between the strips of canvas in such a manner as to run parallel to the top slat 8, and to tilt with the latter when any one of the slats is tilted. The slats when in normal position are horizontal and are spaced sufficiently to admit almost unimpeded access of air into the chicken house while exercising a certain degree of control over the sun rays, depending upon the position of the sun.

My particular fastening means, in connection with each slat, comprises a bar 12 suitably secured upon the canvas as by rivets 13 and projecting beyond both edges of the strips of canvas. Each of the projecting portions 14 of the bar carries an opposing pair of spring fingers 15 adapted for engagement over opposite faces of the slats. The spring fingers may be curved in their extremities and received in small grooves 16 in the slats or in plates 17 secured to the slats to hold the same against sidewise movement.

It will be noted that in this manner each slat is capable of easy removal for replacement purposes.

The two strips of canvas on opposite sides of the slat assembly extend below the latter and are suitably connected below the slat assembly to form a loop 18 adapted for training over a spool 19 which latter is revolvably mounted in brackets 20 secured upon the face of the sill 2 or any other appropriate portion of the frame. The spool shaft 21 is preferably pivoted in one of the brackets as at 22 for outward swinging movement while the other end of the spool shaft engages under a small hook 23 formed in the other bracket. Thus the spool may be swung outward upon being freed from the hook 23 for releasing the loop 18.

In operation it will be seen that the entire assembly may be readily suspended from the plate 3 by means of the straps 5, which may be made to exercise a desired braking action on the shaft 7 by tightening up on the bolts 8'. The loops 18 may thereupon be readily applied to the spools 19, the different supporting means being positioned of course to place the strips of canvas under a desired degree of tension. The angularity of the slats may be readily changed to any desired position by operation of any one of them.

The slats naturally are positioned and dimensioned in such a manner that when in horizontal position they are evenly spaced and that when tilted to an extreme position they will slightly overlap. A certain amount of control over differential tilting may be exercised by proper selection of the spools 19, the diameter of which should be considerably less than the width of each individual slat. When thus selected, as shown in the drawing, any tilting effect will be accompanied by a tapering effect which causes the tilting angle of the slats to progressively increase from the top member towards the bottom member so that in case of extreme tilting movement the lower portion of the assembly will close in advance of the upper portion, making the lower substantially solid while leaving the upper portion slightly open for ventilating purposes. This differentiation in the tilting angle of the different slats may be increased or lessened by proper selection of the spools 19. It is apparent that if the diameter of the spools 19 were the same as the width of the slats there would be no such differentiation.

I claim:

1. A ventilated wall comprising spaced upper and lower frame members, a slat having a shaft mounted fixedly upon the upper face thereof, brackets fixed upon the upper frame member and having the shaft revolvably mounted therein, opposing strips of canvas suspended from opposing edges of the slat, a series of additional slats supported between the strips of canvas in vertically spaced relation and parallel to the first

slat when the latter is in horizontal position, the strips of canvas extending below the lowermost slat to form loops underneath the same, spools seated in the loops, and means for securing the spools upon the lower frame member to maintain the strips of canvas under tension, the spools having a diameter smaller than the width of the first slat to cause the other slats to tilt through angles progressively increasing from top to bottom when the first slat is tilted.

2. A ventilated wall comprising spaced upper and lower frame members, a shaft revolvably mounted underneath the upper frame members, opposing strips of canvas suspended from the shaft, an upper slat disposed between the strips of canvas near the shaft and secured for tilting movement with the shaft, a series of additional slats supported between the strips of canvas in vertical spaced relation and parallel to the first slat when the latter is in horizontal position, the strips of canvas extending below the lowermost slat to form loops underneath the same, spools seated in the loops, and means for securing the spools upon the lower frame member to maintain the strips under tension, the spools having a diameter smaller than the width of the first slat to cause the other slats to tilt through angles progressively increasing from top to bottom when the first slat is tilted.

3. A ventilated wall comprising spaced upper and lower frame members, a slat suspended from the upper frame member with freedom of tilting motion, opposing strips of canvas suspended from opposing edges of the slat, a series of additional slats supported between the strips of canvas in vertical spaced relation and parallel to the first slat when the latter is in horizontal position, the strips of canvas extending below the lowermost slat to form loops underneath the same, spools seated in the loops, and means for securing the spools upon the lower frame member to maintain the strips under tension, the spools having a diameter smaller than the width of the first slat to cause the other slats to tilt through angles progressively increasing from top to bottom when the first slat is tilted.

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