Dec. 9, 1958 O. F. CARPENTER 2,863,691

CHICKEN COOP

Filed June 25, 1956 2 Sheets-Sheet 1

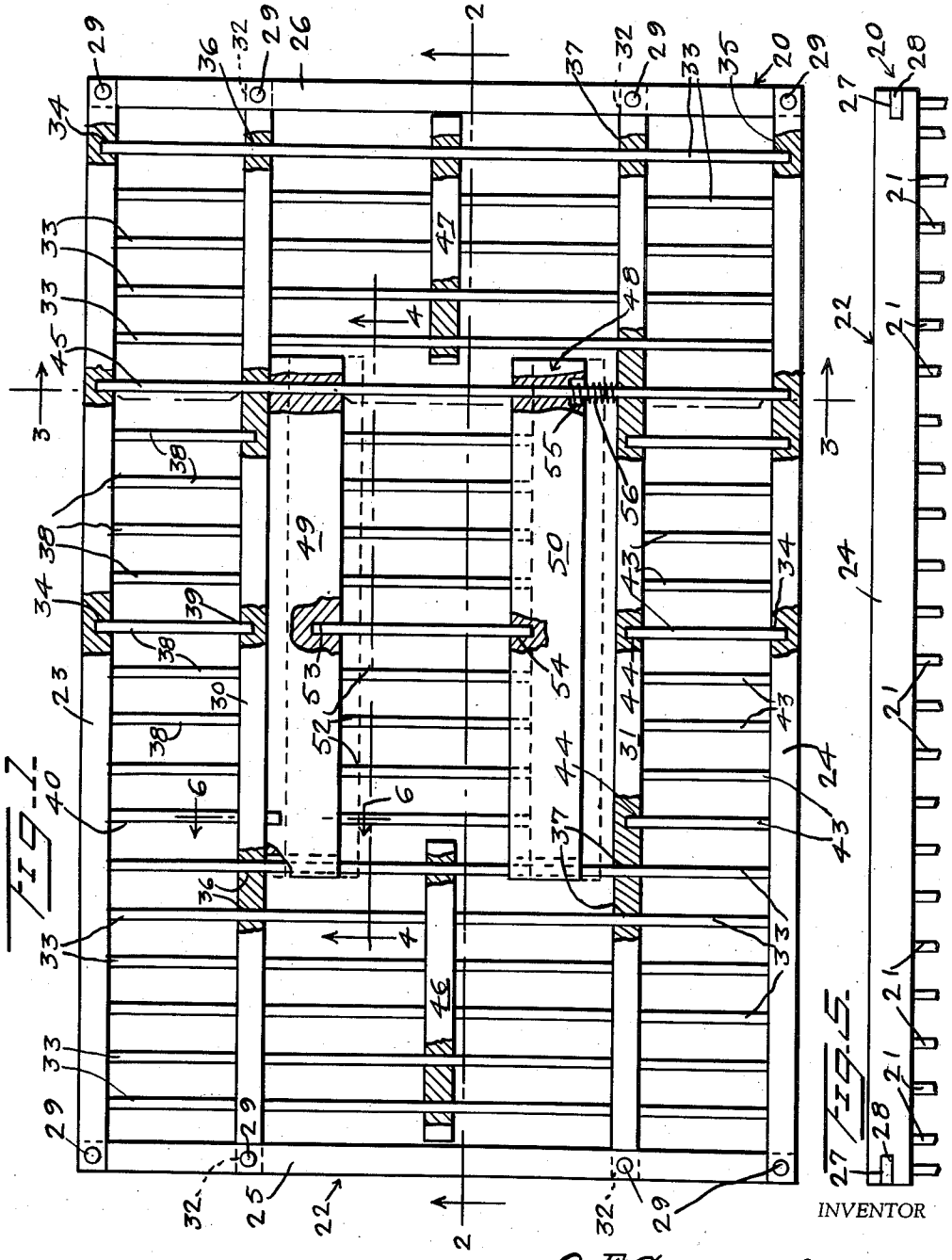


FIG. 1

FIG. 5

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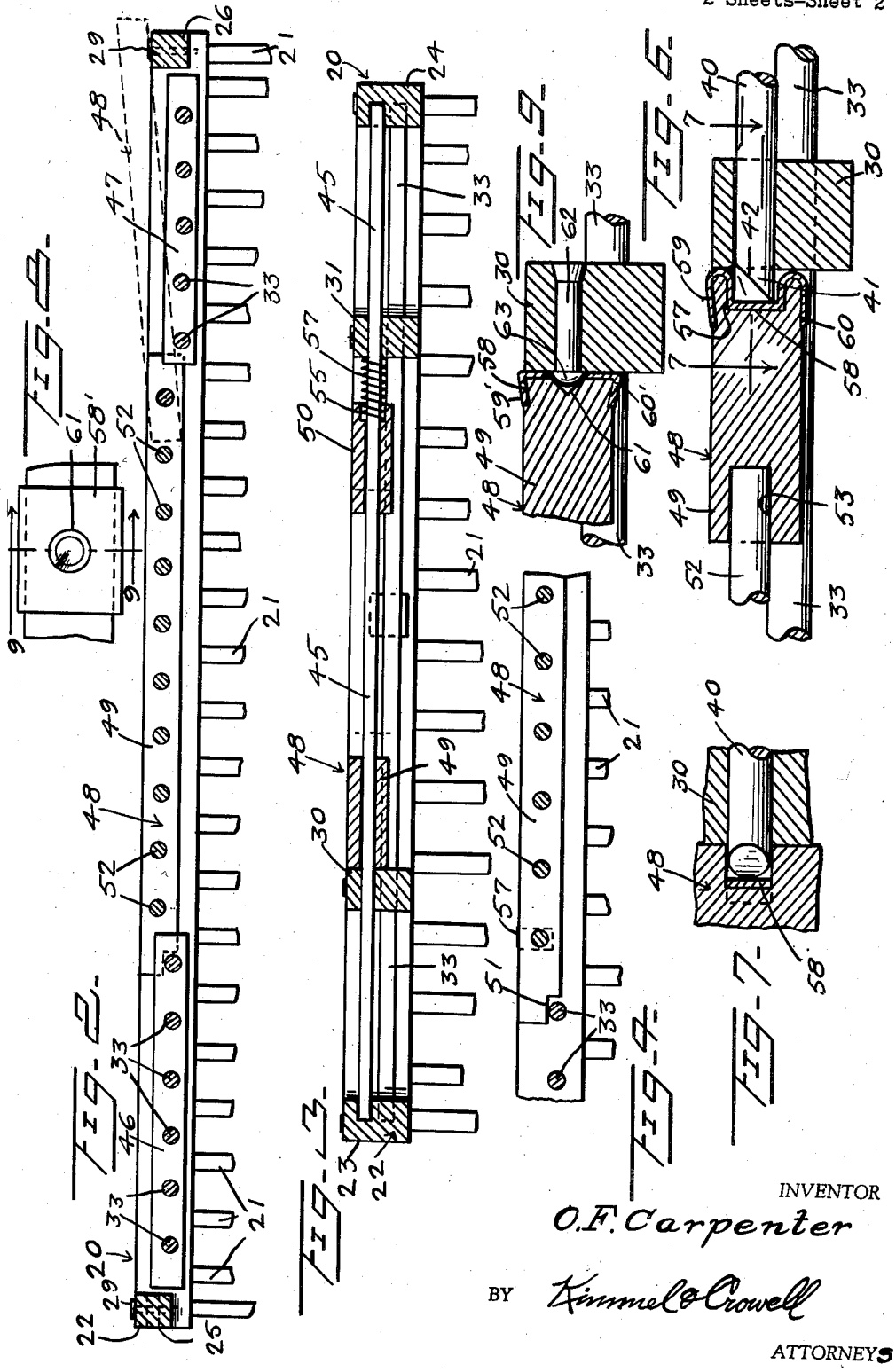
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CHICKEN COOP

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1 Claim. (Cl. 292—340)

The present invention relates to chicken coops, and more particularly to an improved top panel and closure structure therefor.

The primary object of the invention is to provide a top structure for chicken coops which will withstand severe treatment and permit the stacking of heavy loads thereon without damage to the coop.

Another object of the invention is to provide a chicken coop having an automatically latching top closure member.

A further object of the invention is to provide a chicken coop in which the closure member is supported against breakage when its in fully opened position.

A still further object of the invention is to provide a chicken coop in which the top forming rods are protected against breakage and other damage.

Another object of the invention is to provide a chicken coop of the class described above which is inexpensive to manufacture, simple to use, and completely effective in its operation.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a top plan view of the invention shown partly broken away and in section for clarity of illustration.

Figure 2 is an enlarged fragmentary longitudinal cross-section taken along the line 2—2 of Figure 1, looking in the direction of the arrows.

Figure 3 is an enlarged fragmentary transverse cross-section taken along the line 3—3 of Figure 1, looking in the direction of the arrows.

Figure 4 is an enlarged fragmentary vertical cross-section taken along the line 4—4 of Figure 1, looking in the direction of the arrows.

Figure 5 is a fragmentary side elevation.

Figure 6 is an enlarged fragmentary transverse cross-section taken along the line 6—6 of Figure 1, looking in the direction of the arrows.

Figure 7 is a fragmentary horizontal cross-section taken along the line 7—7 of Figure 6, looking in the direction of the arrows.

Figure 8 is a fragmentary side elevation of a modified form of keeper plate.

Figure 9 is an enlarged fragmentary transverse cross-section taken along the line 9—9 of Figure 8, looking in the direction of the arrows.

Referring now to the drawings in detail wherein like reference characters indicate like parts throughout the several figures, the reference numeral 20 indicates generally a chicken coop constructed in accordance with the invention.

The chicken coop 20 includes a conventional bottom framework and bottom panel (not shown), a plurality of upstanding spaced apart parallel rods 21 mounted in the bottom framework and extending upwardly therefrom, and an upper panel construction generally indicated at 22.

Referring now particularly to Figure 1, it will be seen that the upper panel 22 includes a pair of spaced apart parallel longitudinal frame members 23 and 24 joined at their opposite ends by spaced apart parallel transverse frame members 25 and 26. The longitudinal frame members 23 and 24 are slotted at each end, as indicated at 27, and the transverse frame members 25 and 26 carry tongues 28 on their opposite ends engaging in the slots 27. Securing pins 29 extending through and lock each of the tongues 28 in the slots 27.

A second pair of longitudinal frame members 30 and 31 are positioned parallel to and inwardly spaced from the longitudinal frame members 23 and 24, respectively. The longitudinal frame members 30 and 31 are provided at their opposite ends with tongues 32 which are secured to the transverse frame members 25 and 26 by means of pins 29 extending therethrough.

A plurality of spaced apart parallel rods 33 have one end thereof mounted in a socket 34 in the longitudinal frame member 23, and the other end thereof mounted in a socket 35 in the longitudinal frame member 24 with the medial portions thereof passing through bores 36 and 37 in the frame members 30 and 31, respectively. The rods 33 are divided into relatively equal groups with one group being adjacent each of the transverse frame members 25 and 26.

A plurality of somewhat shorter rods 38 extend from sockets 34 in the frame member 23 to sockets 39 in the frame member 30 in spaced parallel relation to each other and to the rods 33 lying between the groups of rods 33 adjacent the transverse frame members 25 and 26.

A rod 40 is positioned in spaced parallel relation to the rods 38 adjacent one of the rods 33 of the group of rods 33 at the end of the coop 20 carrying the frame member 25. The rod 40 extends from the frame member 23 to and through the frame member 30 having a latch bolt end 41 formed thereon projecting inwardly of the frame member 30. The latch bolt end 41 of the rod 40 is outwardly bevelled as at 42, for reasons to be described.

A plurality of spaced apart parallel rods 43 extend between sockets 35 in the frame member 24 to sockets 44 in the frame member 31. The rod members 43 are somewhat shorter than the rod members 33 and are positioned between the two groups of rods 33 in aligned relation to the rods 38. It should be noted as particularly shown in Figures 2 and 3, that the rods 33, 38 and 43 engage the frame members 23, 24, 30 and 31 substantially below the center line thereof.

A steel rod 45 is positioned between the group of rods 33 adjacent the transverse frame member 26 and the aligned rods 38 and 43. The steel rod 45 extends between the frame members 23 and 24 piercing the frame members 30 and 31, as best illustrated in Figure 1, and as shown in Figure 3, is positioned substantially above the mid-point of the frame members 23, 24, 30 and 31, and above the rods 33, 38 and 43.

A relatively short tie bar 46 is positioned between the frame members 30 and 31 adjacent the transverse frame member 25 so that each of the rods 33 adjacent the frame member 25 extend in piercing relation therethrough. The tie bar 46 secures the medial portions of the rods 33 together to provide additional strength. It should be noted that the tie bar 46 has its upper surface positioned substantially below the upper surface of the frame members 23, 24, 30 and 31.

A tie bar 47 is positioned between the frame members 30 and 31 with the rods 33 adjacent the transverse frame member 26 extending in piercing relation therethrough. The tie bar 47 has its upper surface substan-

tially below the upper surface of the frame members **23**, **24**, **25**, **26**, **30** and **31**. The purpose of the tie bar **47** is identical to that of the tie bar **46**.

A door, generally indicated at **48**, is positioned between the frame members **30** and **31** and the two groups of rods **33**. The door **48** consists of a pair of spaced apart parallel frames **49** and **50** each having one end thereof pivotally mounted on the steel rod **45**, as shown in Figure 1. The opposite ends of the frame members **49** and **50** are transversely rabbeted on their underside as at **51** to permit the frame members **49** and **50** to rest on one of the rods **33** with the top surfaces of the frame members **49** and **50** flush with the top surface of the frame members **23**, **24**, **30** and **31**.

A plurality of spaced apart parallel rods **52** extend from sockets **53** in the frame member **49** to sockets **54** in the frame member **50**, as best illustrated in Figure 1.

The frame member **50** is provided with a socket **55** on the side thereof adjacent the frame member **31** in surrounding relation to the steel rod **45**. A coil spring **56** is positioned about the steel rod **45** with one end thereof engaged in the socket **55**, and the other end thereof engaging against the inner surface of the frame member **31** so as to normally bias the frame member **50** away from the frame member **31**.

The frame member **49** adjacent the end thereof carrying the rabbet **51** is provided with a socket **57** having a U-shaped keeper plate **58** positioned therein. Opposite winged portions **59** and **60** from the keeper plate **58** are reverted about the upper and lower surfaces of the frame member **49** and are pressed together to lock the keeper plate **58** in the socket **57**. The keeper plate **58** is adapted to engage over the latch end **41** of the rod **40**, as best seen in Figure 6, to lock the door **48** in closed position.

The door **48** is sufficiently narrower than the space between the frame members **30** and **31** to permit the door **48** to be moved transversely against the tension of the spring **56** to release the keeper plate **58** from the latch end **41** of the rod **40** to permit the door **48** to be opened. In closing the door **48**, the door can be dropped and will automatically move against the tension of the spring **56** under impetus of the bevel surface **42** so as to engage over the latch end **41** of the rod **40** whereupon the spring **56** will move the door **48** into fully latched position, as shown in Figure 6.

Referring now particularly to Figure 2, it should be noted that the door **48** in its opened position is supported on the transverse frame member **26** so that should heavy objects be piled upon the opened door it will be supported rather than broken.

In Figures 8 and 9 of the drawings, a modified form of keeper plate is illustrated at **58'**. The keeper plate **58'** has an upper central portion carrying upper and

lower winged portions **59'** and **60'**, respectively, which are reverted over the upper and lower surfaces of the frame member **49** and pressure clamped thereto, as illustrated in Figure 9.

A counter-sunk conical aperture **61** is formed centrally of the keeper plate **58'**, as illustrated in Figures 8 and 9. A rivet **62** extends through the longitudinal frame member **30** and is provided with a rounded inner head **63** which is adapted to cooperate with the conical bore **61** to latch the door **48** in closed position.

The structure of the modification illustrated in Figures 8 and 9 concerns only the keeper plate **58'** and the latch rivet **62**, the remaining portions thereof being identical to that set forth in the preferred form of the invention.

Having thus described the preferred embodiments of the invention, it should be understood that numerous structural modifications and adaptations may be resorted to in addition to those shown without departing from the scope of the appended claim.

What is claimed is:

In a chicken coop of the type having an access opening normally closed by a door having sliding and swinging movement toward its closed position, automatic latching means for said door comprising a cam latch fixedly mounted on said body adjacent to one edge of said access opening, said door having a bore in one edge thereof, a U-shaped keeper plate extending into said bore, said U-shaped keeper plate including a pair of spaced parallel legs integrally connected by a bight with said bight positioned innermost in said bore and a wing integrally formed on the end of each of said legs opposite said bight, each of said wings being outwardly reverted to lie in spaced generally parallel relation to said legs, said wings and said legs engaging over and clamping portions of said frame member therebetween to secure said keeper on said frame member, said cam latch engaging said keeper plate during closing movement of said door and being received between said keeper plate legs when said door is in closed position, and spring means biasing said door and said keeper plate for sliding movement of said door toward its closed position.

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