H. W. WORLEY.

FOLDING CRATE.

APPLICATION FILED AUG. 28, 1920.

1,413,149.

Patented Apr. 18, 1922.

3 SHEETS—SHEET 1.

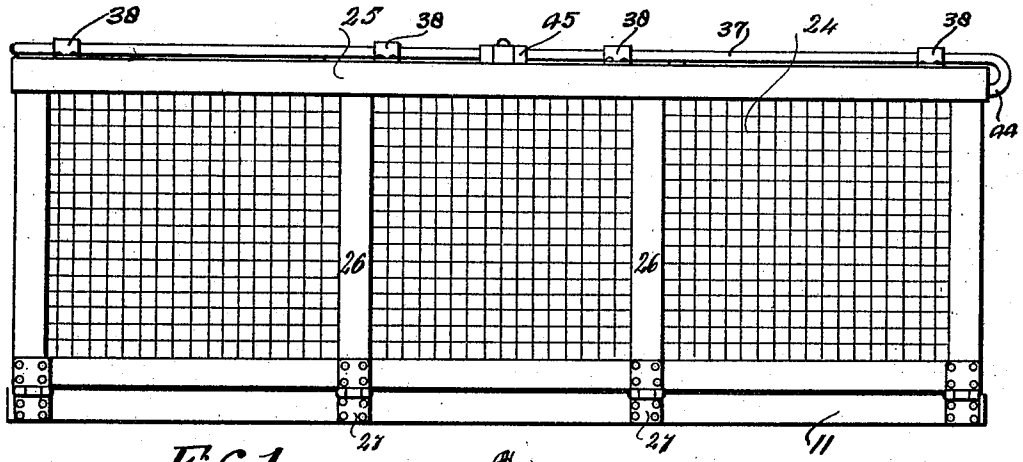



Fig. 1.

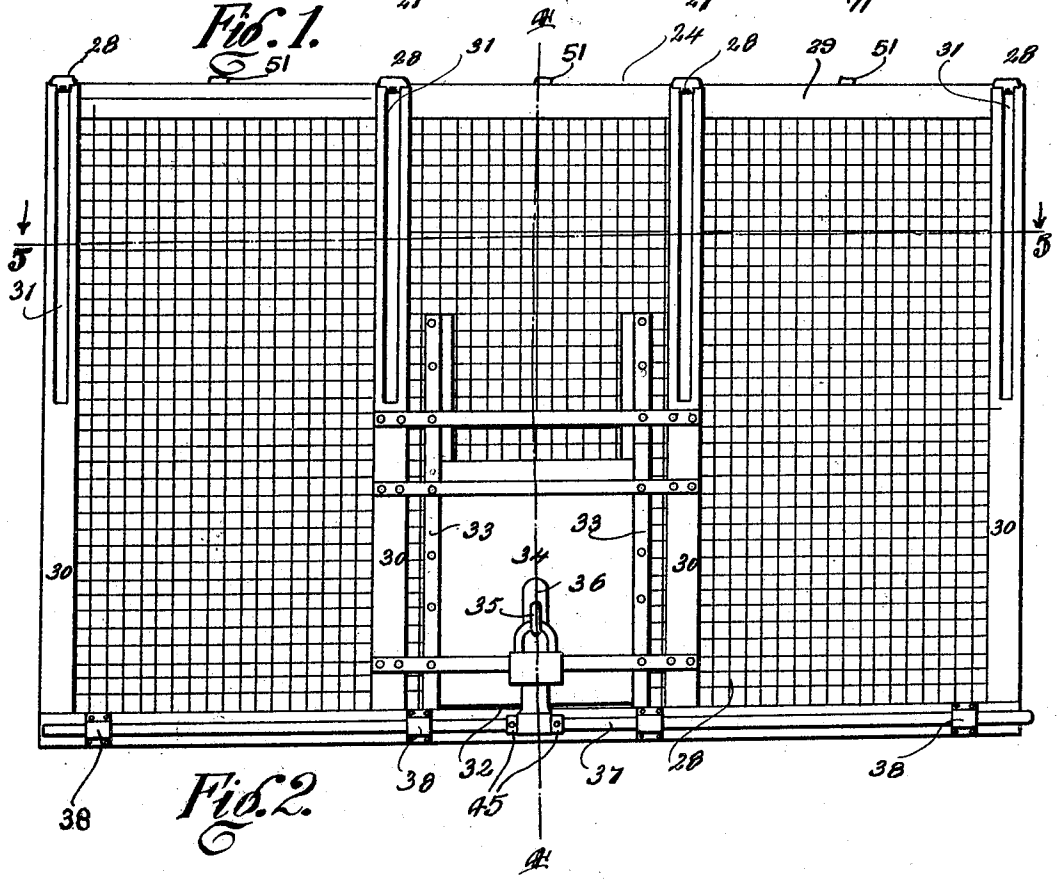



Fig. 2.

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3 SHEETS—SHEET 2.

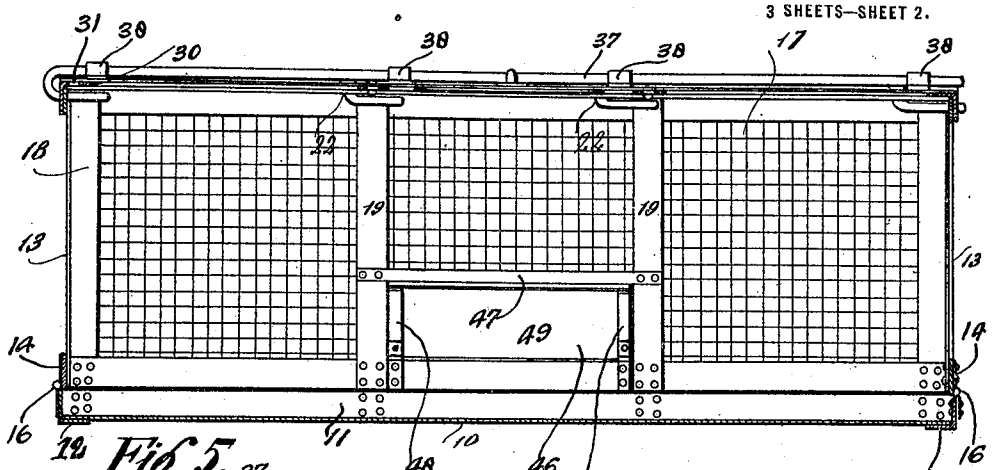



FIG. 5.

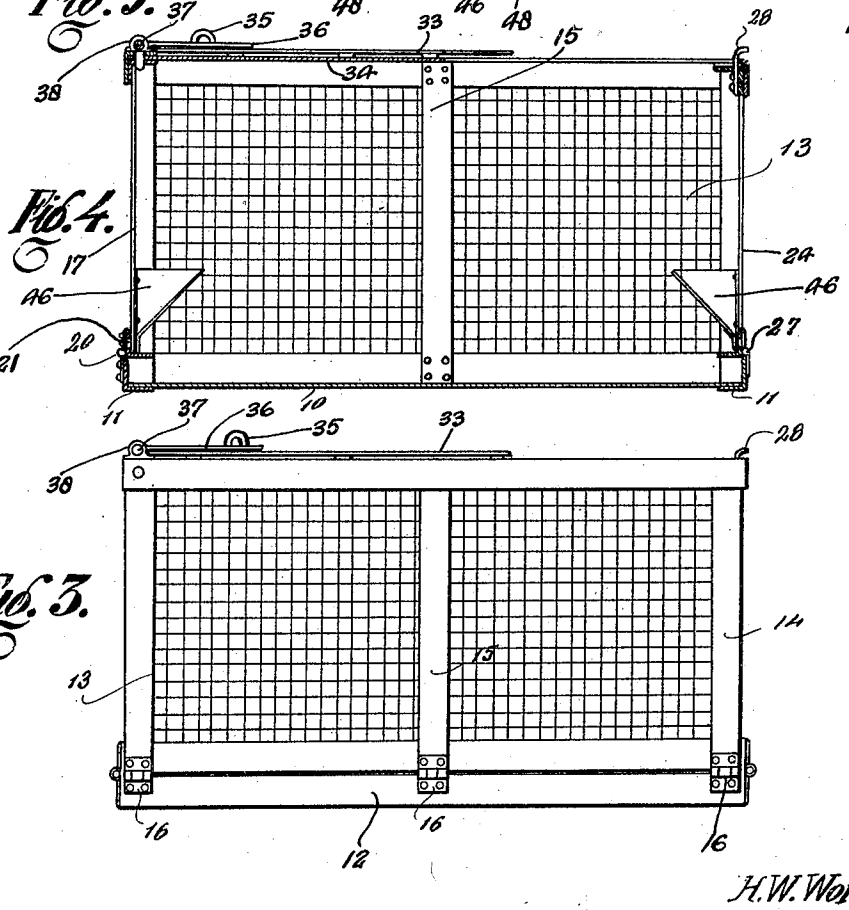



FIG. 4.

FIG. 3.

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3 SHEETS—SHEET 3.

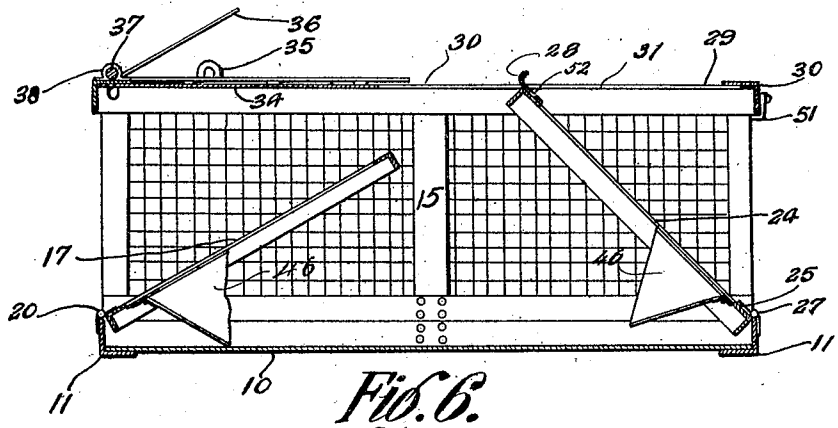



Fig. 6.

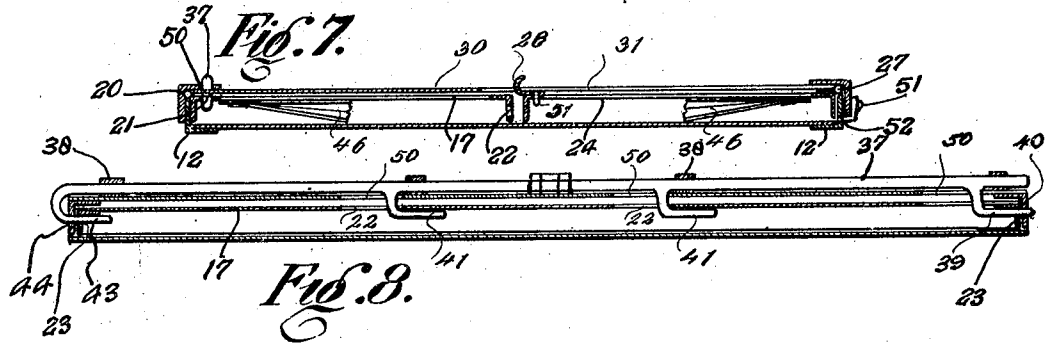



Fig. 8.

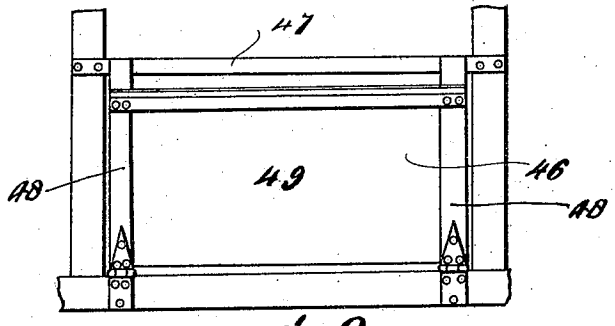



Fig. 9.

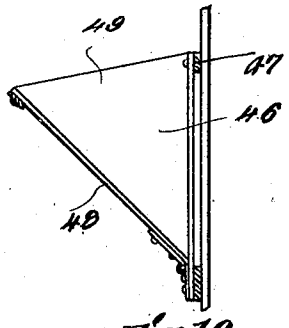



Fig. 10.

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# UNITED STATES PATENT OFFICE.

HENRY W. WORLEY, OF STOCKTON, CALIFORNIA.

## FOLDING CRATE.

1,413,149. Specification of Letters Patent. Patented Apr. 18, 1922.

Application filed August 28, 1920. Serial No. 406,547.

*To all whom it may concern:*

Be it known that I, HENRY W. WORLEY, a citizen of the United States, residing at Stockton, in the county of San Joaquin and State of California, have invented new and useful Improvements in Folding Crates, of which the following is a specification.

This invention relates to shipping crates and has for its object the provision of a preferably metallic shipping crate for poultry, the crate being so constructed that it may be easily set up and locked in such set-up position and whereby it may be readily collapsed or folded so as to occupy but little spaced during return shipment when empty.

An important object is the provision of a device of this character which is provided with folding water troughs which are automatically extended or collapsed as the coop or crate is extended or collapsed, the crate being furthermore provided in its top with a relatively small door permitting access to the interior without necessitating disconnection of the entire top.

Another object is the provision of a crate of this character which is provided with novel locking means whereby it may be held either in extended or folded position.

An additional object is the provision of a crate of this character which will be comparatively simple and inexpensive in manufacture, highly efficient in use, durable in service, and a general improvement in the art.

With the above and other objects and advantages in view, the invention consists in the details of construction to be hereinafter more fully described and claimed, and illustrated in the accompanying drawings in which—

Figure 1 is a side elevation of the crate in set-up position,

Figure 2 is a plan view,

Figure 3 is an end view,

Figure 4 is a cross sectional view on the line 4—4 of Figure 2,

Figure 5 is a longitudinal sectional view taken on the line 5—5 of Figure 2,

Figure 6 is a cross sectional view similar to Figure 4 but showing the crate partly folded,

Figure 7 is a similar view showing the crate entirely folded,

Figure 8 is a longitudinal sectional view of the folded crate showing the locking means, and

Figures 9 and 10 are detail views of the folding troughs.

Referring more particularly to the drawings, the numeral 10 designates the bottom of the crate which is rectangular and formed solid either of wood or sheet metal and this bottom has its edges reinforced by longitudinal and transverse angle bars 11 and 12, respectively. The numeral 13 designates the ends which are similar in construction and each of which includes a rectangular frame 14 of angle bars reinforced by a transverse strip 15. These ends are hinged upon the ends of the bottom 10, as indicated at 16.

The numeral 17 designates one of the sides which is formed as a rectangular frame 18 of angle bars reinforced by transverse strips 19. This side is hinged upon one of the side angle bars 11 of the bottom, as indicated at 20. The lower angle bar of the side has its vertical flange formed with slots 21 and the upper angle bar has its horizontal flange formed with slots 22. At its ends this angle bar 18 is formed with holes 23 for the purpose to be described. The numeral 24 designates the other side which is likewise formed as a rectangular frame 25, of angle bars, connected by transverse strips 26. This side is hinged upon the other angle bar 11 of the bottom, as indicated at 27. At its upper edge this side 24 carries a plurality of headed members 28.

The numeral 29 designates the top which is formed of a plurality of angle bars extending longitudinally and transversely and which also includes transverse strips 30. The end angle bars and the strips 30 are formed with slots 31 through which are engaged the headed members 28 carried by the side 24 whereby to provide a sliding as well as hinged connection. It should be here stated that the sides, ends, and top are covered with wire screen or netting of suitable mesh or weight, depending upon the size of the coop. Between the strips 30 the top 29 is formed with an opening 32 at the sides of which are located trackways or guides 33 between which is slidable a door 34 permitting access to the interior of the coop and this door is provided with a staple 35 engaged by a double hinged hasp 36 whereby the door 34 may be locked in closed position.

As stated above, the top is connected with

the side 24 by the engagement of the headed members 28 within the slots 21. In order to connect the other edge of the top with the side 17, I provide a longitudinally slidable bar 37 slidable along one of the angle bars at the edge of the top and mounted within suitable guides 38. At one end this bar carries a hook 39 which is adapted to be projected through a hole 40 in one end of the top and through the hole 23 at one end of the side 17. Intermediate its ends this rod 37 carries a plurality of depending hooks 41 adapted to be projected through the slots 22 in the upper edge of the side 17. At its other end the rod 37 is bent upon itself, as shown at 42, to provide a hook 43 adapted to be projected through the other hole 23 in the side 17 and through a hole 44 in the top. By this means it will be seen that the top will be locked with respect to the side 17 so that collapsing of the coop will be prevented, it being apparent that the sides, ends and top cooperate to brace one another. Any suitable catch 45 may be provided for holding the bar 37 against displacement.

In order to provide more fully for the comfort of poultry shipped within the crate, I provide at opposite sides thereof, collapsible troughs 46, each of which includes a stationary frame 47 and a pivoted frame 48 and these frames are covered with canvas indicated at 49. When the coop is set up these troughs will be in extended position and are adapted to hold water. When the coop is collapsed, it will be seen that these troughs will likewise be collapsed when the sides of the coop are brought down upon the bottom.

In order to collapse the coop, it is merely necessary that the operator shift the rod 37 to disengage the hooks 39, 41 and 43 from the holes and slots within which they are normally engaged whereupon the top may be lifted a trifle to permit inward folding of the side 17. The side 24 is then swung downwardly upon its hinges 27 with the headed members 38 sliding along the slots 31. The ends are of course folded inwardly and the top 29 is pressed down upon the folded sides and ends. After the parts are thus folded the rod 37 is slid to bring the hooks 39, 41 and 43 thereof, in engagement within slots 50 cut in the sides so as to prevent displacement of the top with respect to the remainder of the coop. The edge of the top opposite that carrying the rod 37 is provided with hooks 51 adapted to engage within slots 52 in the bottom edge of the side 24 for the purpose of preventing upward swinging of this side.

From the foregoing description and a study of the drawings it will be apparent that I have thus provided a simply constructed and consequently inexpensive coop for shipping poultry and which may be easily set up or extended for use and as easily knocked down and collapsed for convenience in storage and transportation when empty.

While I have shown and described the preferred embodiment of my invention, it is of course to be understood that I reserve the right to make such changes in the form, construction, and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A folding coop comprising a bottom, ends hinged thereto, sides hingedly connected with the bottom, a top having a hinged and sliding connection with the upper edge of one side, a longitudinally shiftable rod carried by the other edge of the top and formed with depending hooks, and the ends of the top and the ends of the adjacent side being formed with holes for engagement by said hooks.

2. A folding coop comprising a bottom, ends hinged thereto, sides hingedly connected with the bottom, a plurality of headed members carried by the upper edge of one side, a top provided with a plurality of transverse slots within which said headed members are slidably engaged, and latch means carried by said top and engageable with the opposite side, said latch means comprising a longitudinally shiftable rod carrying depending hooks, and the end portions of said last mentioned edge of the top and the end portions of the adjacent side member being formed with holes for the passage of said hooks.

In testimony whereof I affix my signature.

HENRY W. WORLEY.