(No Model.) 2 Sheets—Sheet 1.

I. ZIMMERMAN.

METAL FOLDING CHICKEN COOP.

No. 529,230. Patented Nov. 13, 1894.

Fig. 1.

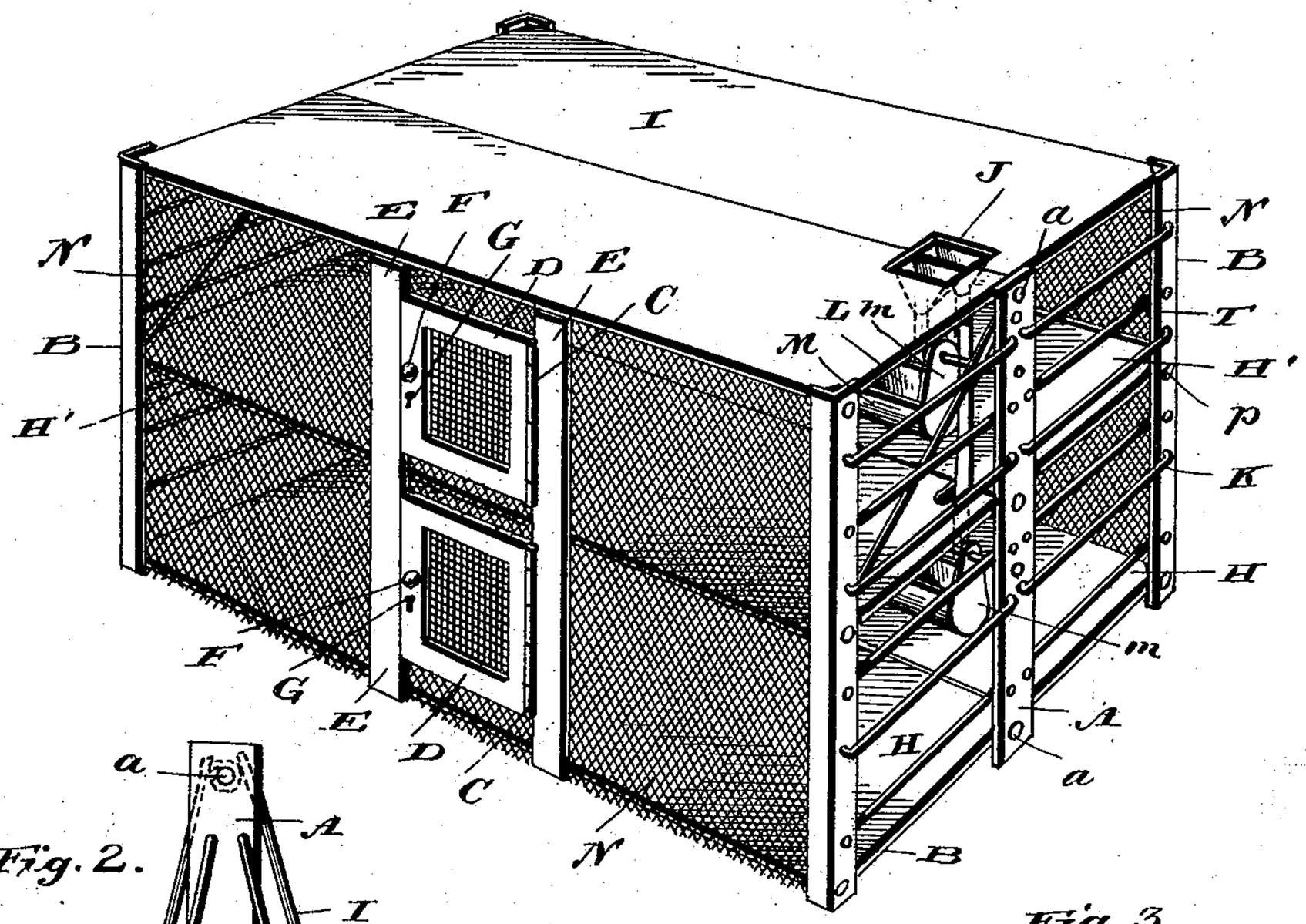


Fig. 2.

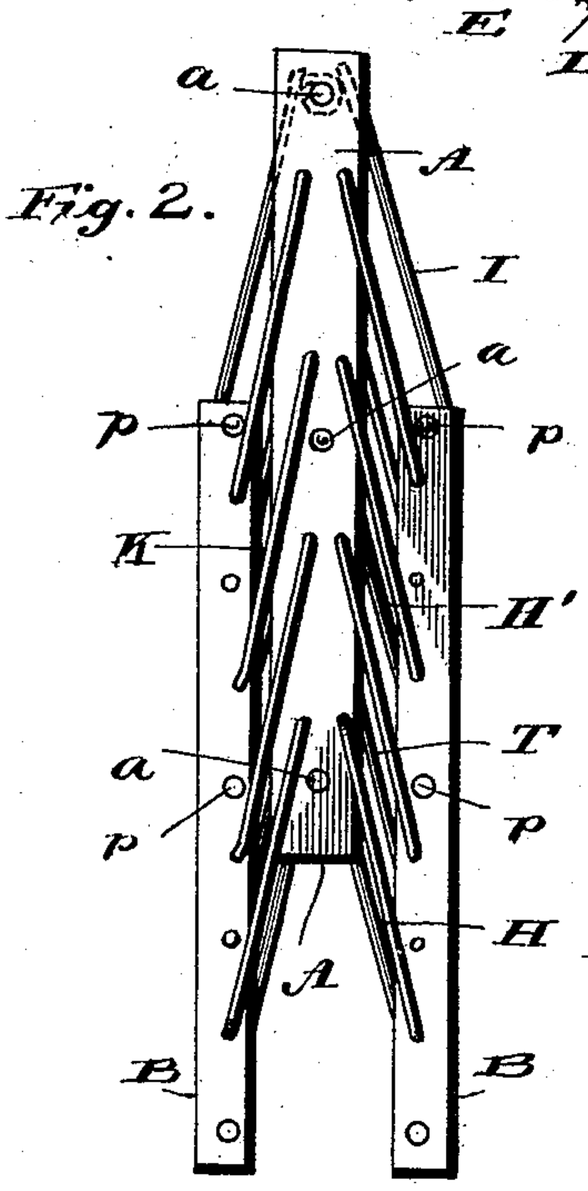
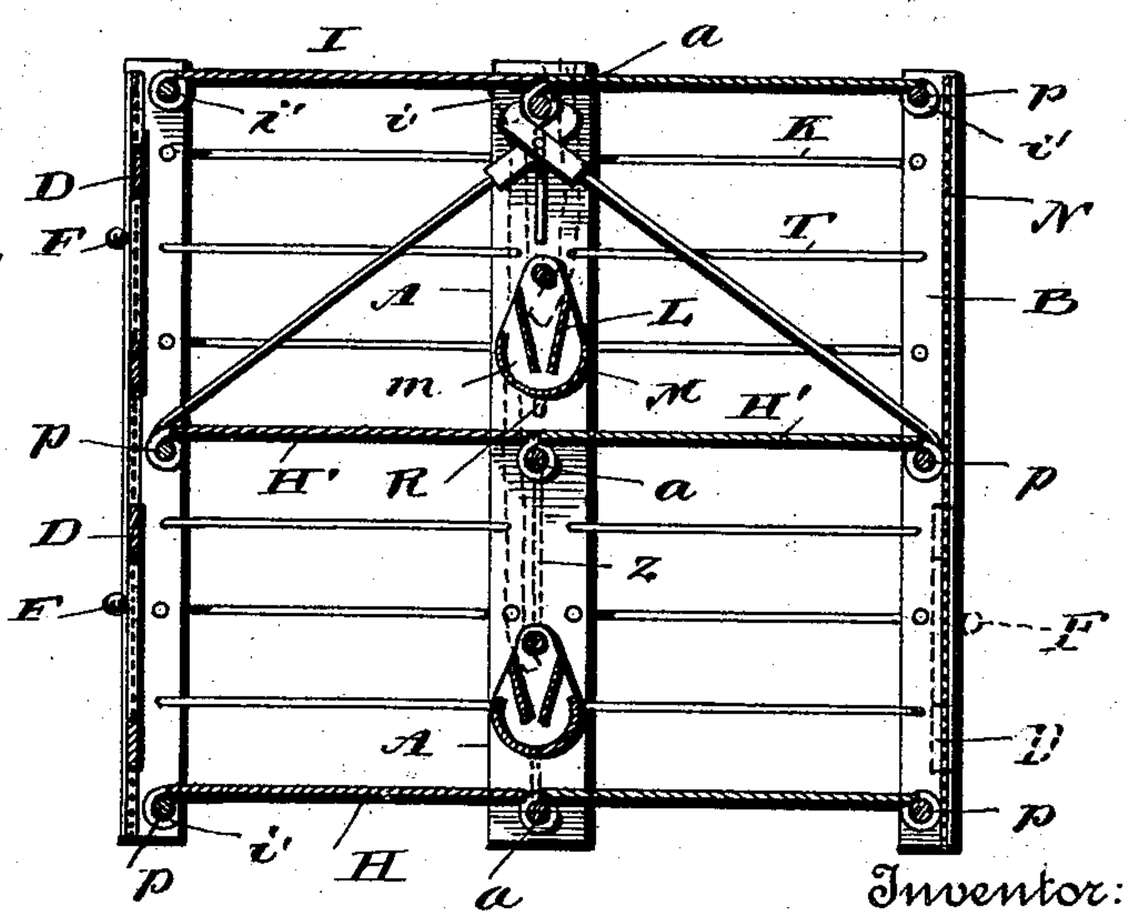


Fig. 3.



Witnesses:

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Helena Bauer

Inventor:

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(No Model.) 2 Sheets—Sheet 2.

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No. 529,230. Patented Nov. 13, 1894.

Fig. 4.

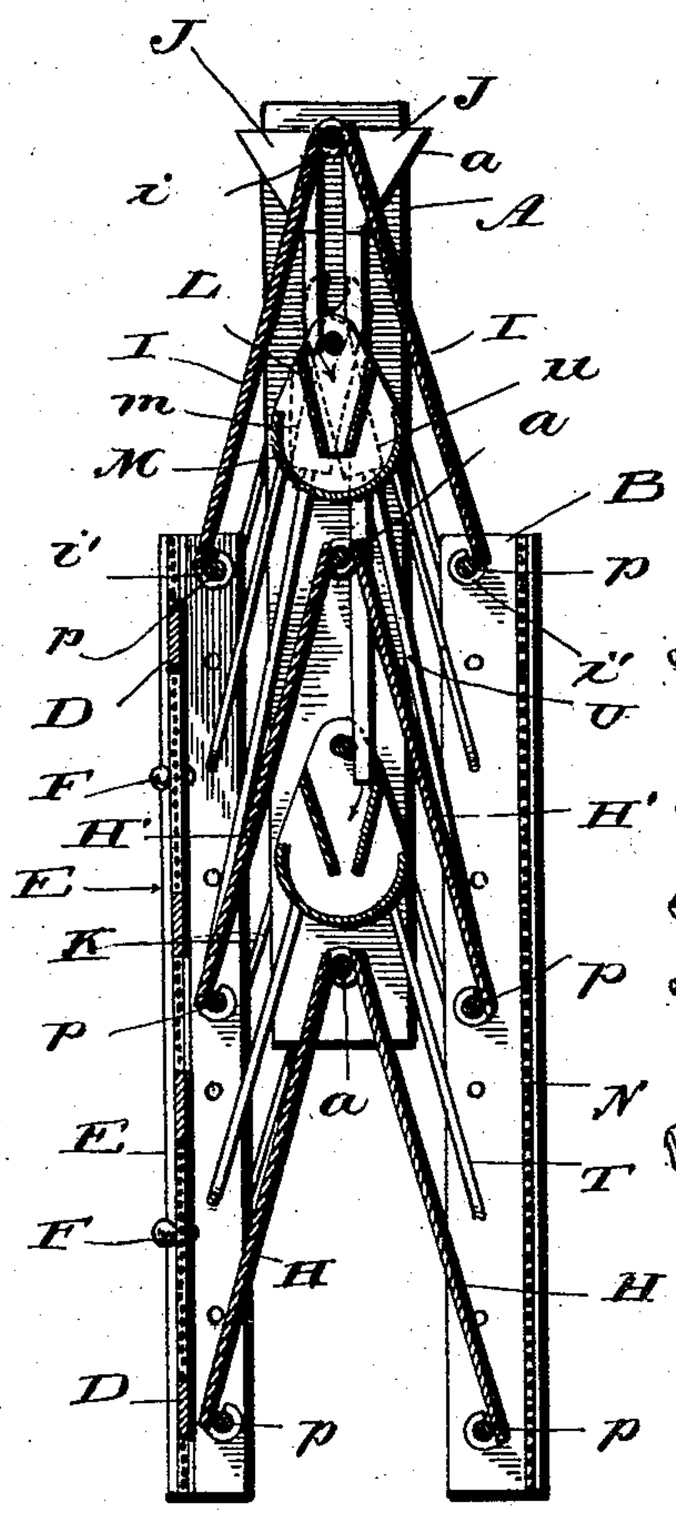


Fig. 5

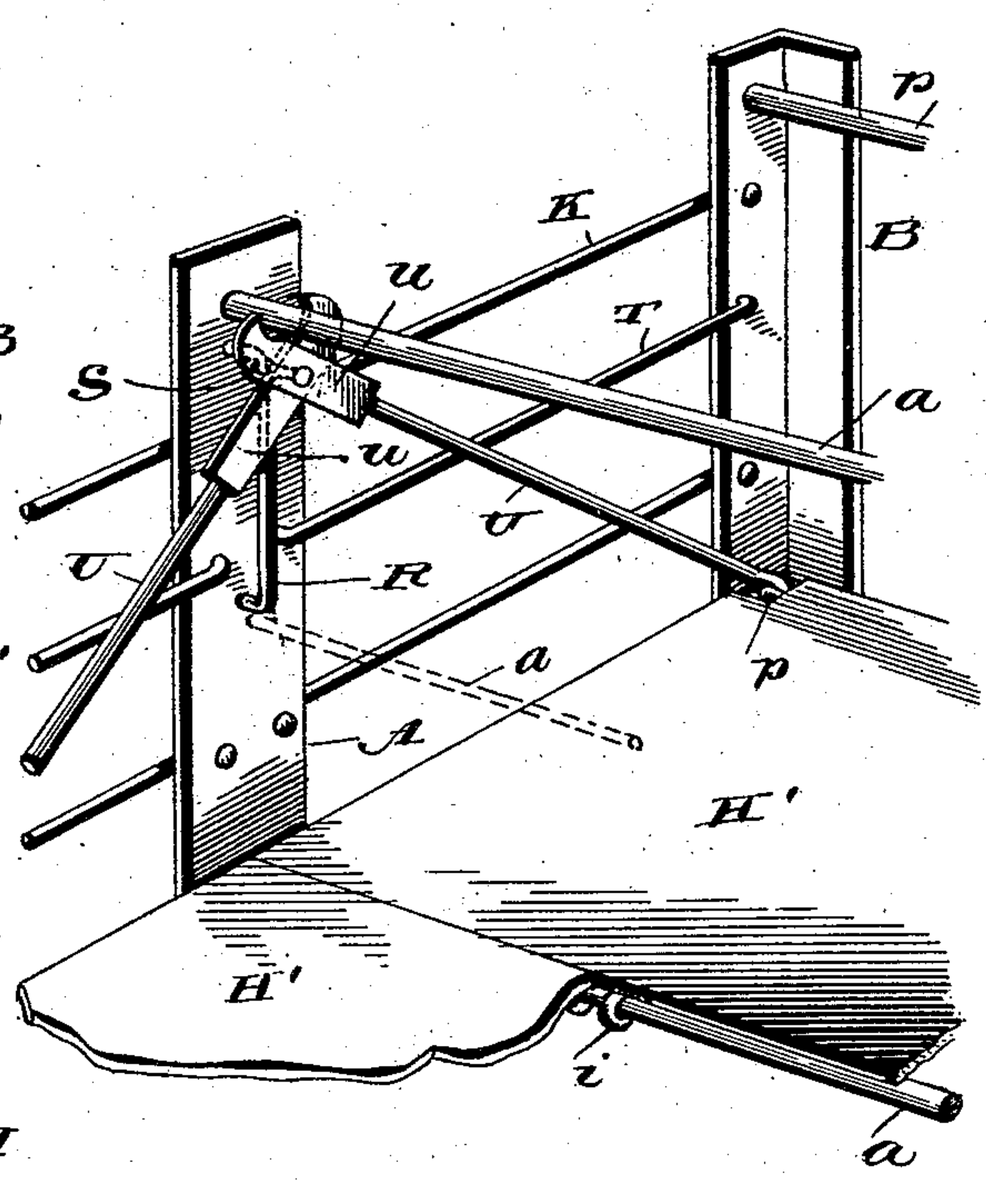
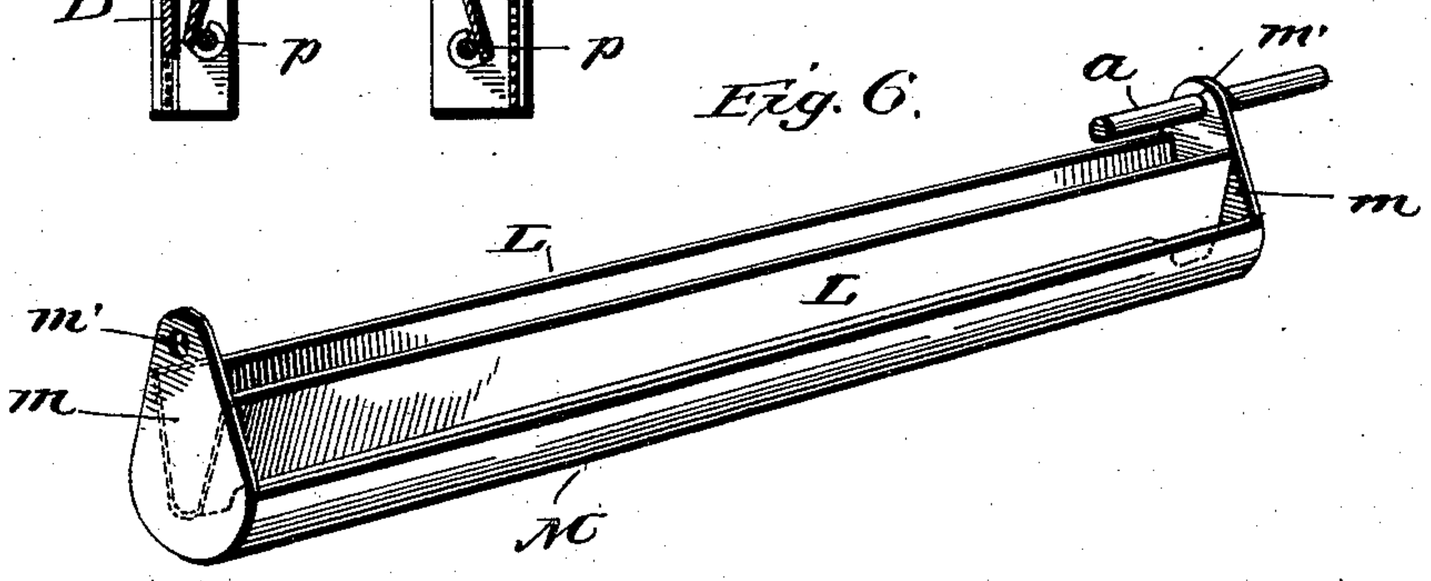


Fig. 6.



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UNITED STATES PATENT OFFICE.

ISRAEL ZIMMERMAN, OF ST. LOUIS, MISSOURI.

METAL FOLDING CHICKEN-COOP.

SPECIFICATION forming part of Letters Patent No. 529,230, dated November 13, 1894.

Application filed September 4, 1893. Serial No. 484,754. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL ZIMMERMAN, a citizen of the United States and a resident of St. Louis, State of Missouri, have invented certain new and useful Improvements in Folding Chicken-Coops; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with claims particularly specifying the novelty.

This invention relates to packing and storing vessels of metal, and more especially to that class thereof known as folding crates; and the object of the same is to produce a folding coop for transporting fowls and the like, so constructed that after the fowls have been removed the coop can be folded into small and compact space and returned to the shipper.

To this end the invention consists in the construction of such coop and the specific manner of providing it with eating or watering troughs capable of being filled from the exterior, all as hereinafter more fully described and as shown in the drawings, wherein—

Figure 1 is a perspective view of this coop open and in condition for transportation. Fig. 2 is an end elevation of the same when closed as for storage or return to the shipper. Fig. 3 is a vertical cross section through the center of the coop when open. Fig. 4 is a similar section when the coop is closed. Fig. 5 is a perspective detail of the guide and rod, &c. Fig. 6 is a perspective detail of the feed box.

At the center of each end of the coop is an upright strip A, and at each corner is an upright strip of angle-iron B forming the corner piece. Short rods K and T connect each corner strip B with the strip A—these rods being located alternately outside and inside of said strips, and the ends of all the rods being bent at right angles, journaled in the strips, and headed to prevent their displacement. The central strips A are connected in pairs by tie rods *a* extending longitudinally of the coop; and the corner strips B are connected by similar rods *p*—outside of which the sides of the coop are formed of netting N suitably secured to the corner strips and also fastened to the rods *p* if desired. The top I of the coop is preferably of two sheet metal plates having eyes *i* embracing the uppermost tie rod *a* and other eyes *i'* embracing the uppermost side rods *p*. The bottom H is of similar construction.

In the accompanying drawings I have shown the coop as provided with an additional flooring H' midway between the top and bottom, whereby the coop becomes a "double decker" so as to accommodate different breeds of fowls above and below the intermediate flooring H'. It will be understood that this flooring may be omitted, or there might be several such intermediate floorings. In one of the sides at about its center are upright metal posts E, to which at C are hinged doors D which may consist of metal frames covered with netting as shown, or could be of any desired construction. I have shown the doors as provided with knobs or handles F and with suitable locks G. Obviously when the intermediate flooring H' is used there will be doors above and below the flooring so as to permit ready access to each compartment in the coop.

I have shown in dotted lines in Fig. 3 how an upright partition Z may be employed to divide each horizontal compartment of the coop into smaller compartments, in which case doors will, of course, be necessary in both sides.

Referring now to Fig. 6, showing an improved construction of feed box which I preferably use, the letter M designates the curved bottom thereof, from which rise upright end pieces *m* having eyes *m'* at their upper ends which are journaled loosely on the tie rod *a* connecting the end strips, and L are upright plates secured between the end pieces *m* and converging downwardly to near the curved bottom M where the edges of these plates almost touch each other and nearly touch the bottom. J J are tubes or pipes whose lower ends open into the space between these plates and whose bodies rise alongside the tie rods *a* and have funnels at their upper ends opening through the top of the coop. It will be obvious that food or water can be passed down these pipes and will fill the space between the converging plates L, while part of

it will run out below onto the curved bottom M where the fowls can eat or drink. As fast as they consume the food, more will run out.

It must be understood that each compartment could have its feed box as shown in Fig. 4, and by supplying food at the funnels at the upper end of the pipes J from time to time during the transportation of the coop, fowls could be carried a long distance without suffering from hunger.

Within each end strip A near its upper end is a guide rod R whose body is remote from the strip and whose ends are secured thereto, and on this guide rod slides an eye S.

U U are oblique braces whose lower ends have eyes pivoted on the central side tie rods *p*, and whose upper ends are secured to plates *u* which latter are centrally pivoted on the shank of the eye S and have their bodies crossing each other. By this construction when the coop is open as seen in Fig. 3, the uppermost tie rod *a* rests in the crotch formed by these crossing plates, and hence the coop may be lifted by its sides or corners without fear of its collapsing. After having removed the fowls and when it is desired to fold the coop for reshipment, it is only necessary to take hold of the end strips A and raise them as shown in Fig. 4. This movement causes the eyes S to slide down on the rods R, and the plates forming the top I, the bottom H, and intermediate flooring H′ turn on their respective eyes as shown. The feed boxes swing on their supporting rods as also shown in this view, and in no manner prevent the compact folding of the coop for reshipment.

All parts of this device are of the desired sizes, shapes, and proportions, but I preferably make it entirely of metal although this is not essential.

Considerable change in the specific details of construction may be made without departing from the essentials or principles of my invention.

What is claimed as new is—

1. In a folding coop, the combination with the sides having corner pieces, central upright strips at the ends, tie rods connecting these strips, and top and bottom plates hinged on these rods and to the sides; of rods connecting each corner piece with the adjacent edge of the end strip, said rods alternating on the inner and outer faces of the strip and having their ends bent at right angles to their bodies and passing loosely through said strips and headed at their extremities, as and for the purpose set forth.

2. In a folding coop, the combination with the sides having corner pieces, central upright strips at the ends, tie rods connecting these strips, and top and bottom plates hinged on these rods and to the sides; of an upright rod standing inside each end strip near its upper end with the extremities of the rod secured to the strip, an eye sliding on this rod, two plates journaled on the shank of the eye and forming a crotch normally supporting the uppermost tie rod connecting the end strips, and oblique brace rods extending from these plates to and pivoted to the corner pieces, as and for the purpose set forth.

3. In a folding coop, the combination with upright central end strips connected in pairs by horizontal tie rods, coop sides having corner posts connected by similar tie rods, and rods pivotally connecting said posts and strips to form the coop ends; of a coop top in two parts having eyes at their inner edges mounted on the upper tie rod between the strips and eyes at their outer edges mounted on the upper tie rod between the corner pieces, a bottom flooring consisting of two plates connected and supported in the same manner, an intermediate flooring midway between said top and the bottom flooring and also consisting of two plates connected and supported in the same manner, doors in one side above and below said intermediate flooring, and a feed box in each compartment thus formed, substantially as described.

4. In a folding coop, the combination with upright central end strips connected in pairs by horizontal tie rods, coop sides having corner posts connected by similar tie rods, and rods pivotally connecting said posts and strips to form the coop ends; of a coop top, bottom, and intermediate flooring, each formed of two plates pivoted to the intermediate and outer tie rods and forming two compartments, a feed box having upright ends provided with eyes journaled on the intermediate tie rod in each compartment, and supply tubes leading from the coop top to the different feed boxes, substantially as described.

5. In a folding coop, the combination with upright central end strips connected in pairs by horizontal tie rods, coop sides having corner posts connected by similar tie rods, and rods pivotally connecting said posts and strips to form the coop ends; of a top and bottom each in two plates pivoted at their edges on the intermediate and outer tie rods, a feed box having upright ends provided with eyes mounted on an intermediate tie rod, downwardly converging plates connecting the ends of the feed box and standing just above said bottom, and a supply pipe leading from the coop top to and delivering between said plates, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ISRAEL ZIMMERMAN.

Witnesses:
J. W. KERR,
J. M. PERRY.