J. W. LIGHTFOOT.

FOLDING POULTRY CRATE.

APPLICATION FILED NOV. 17, 1909.

954,981.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 1.

FIG. 1

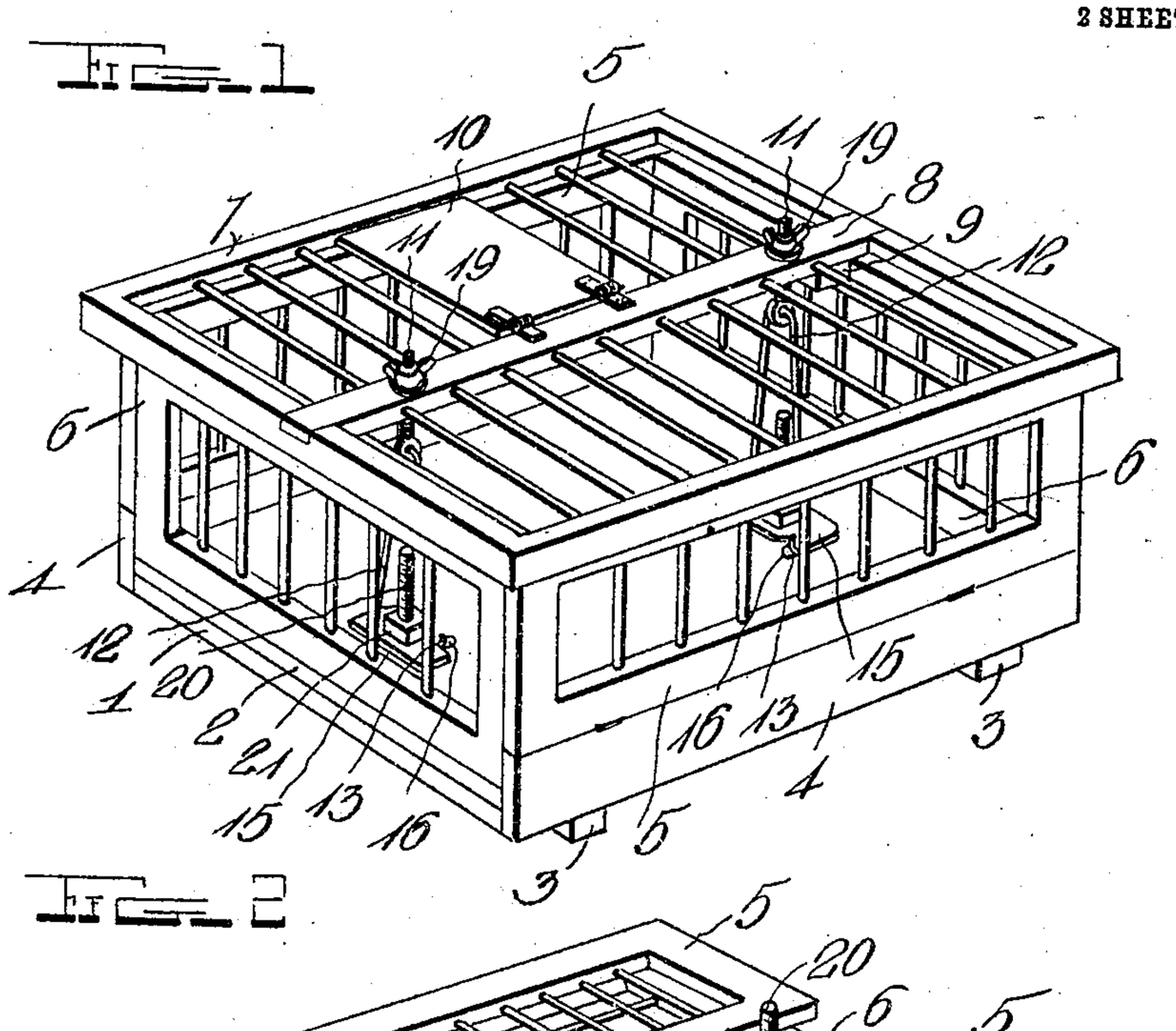


FIG. 2

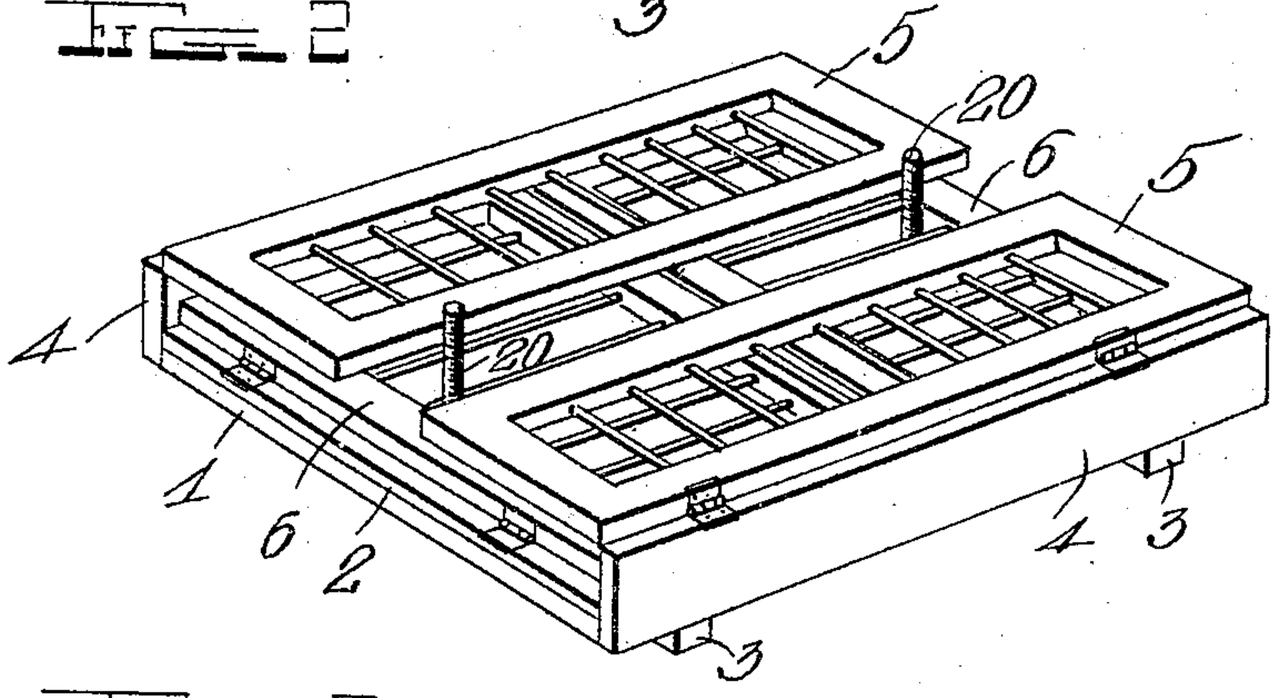
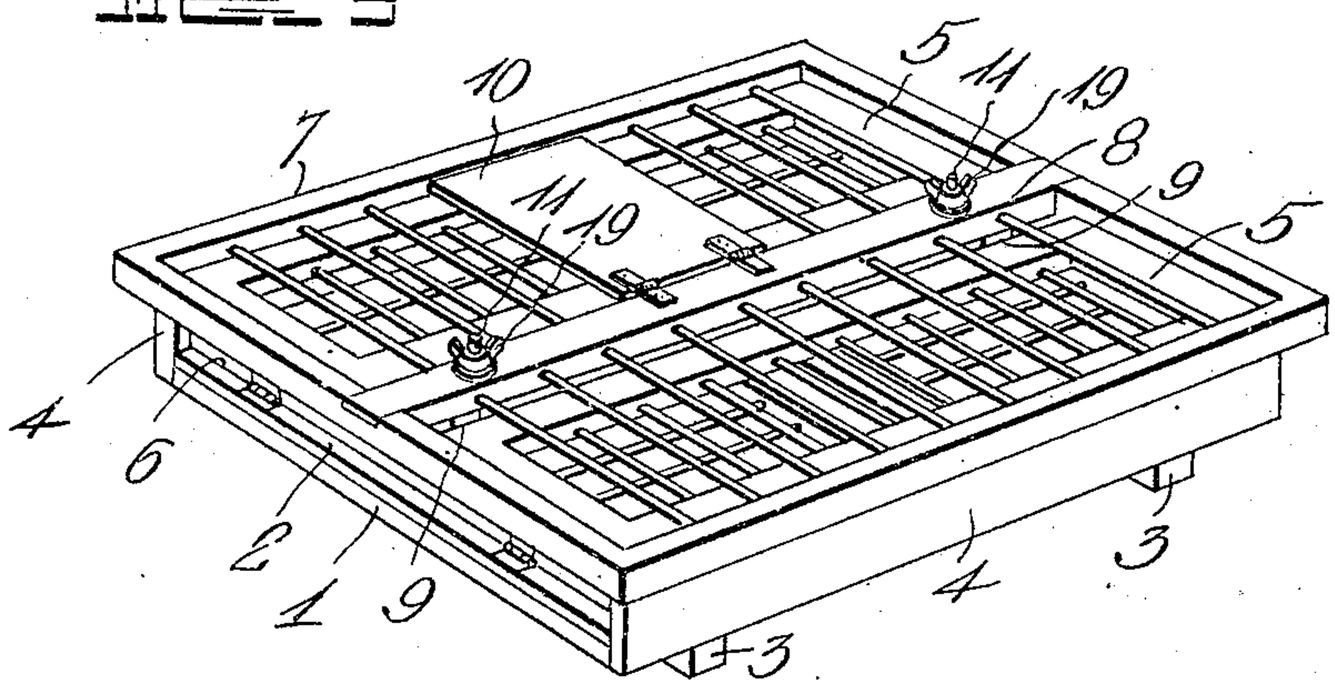


FIG. 3



Witnesses

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2 SHEETS—SHEET 2.

Fig. 4

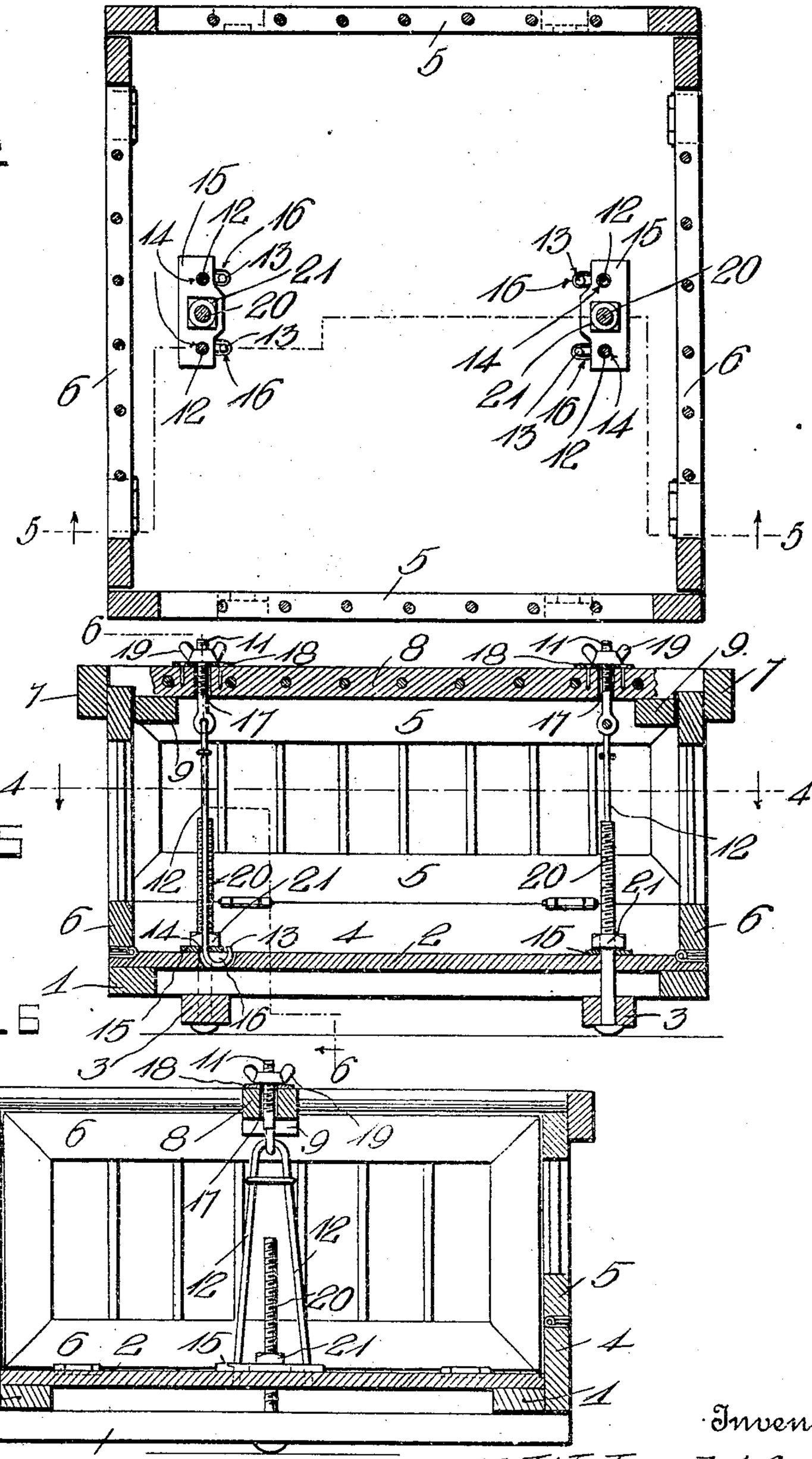

Fig. 5

Fig. 6

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UNITED STATES PATENT OFFICE.

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FOLDING POULTRY-CRATE.

954,981. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed November 17, 1909. Serial No. 528,547.

To all whom it may concern:

Be it known that I, JAMES W. LIGHTFOOT, a citizen of the United States, residing at Loraine, in the county of Mitchell and State of Texas, have invented certain new and useful Improvements in Folding Poultry-Crates; 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 folding poultry crates.

The object of the invention is to provide a poultry crate of this character having an improved construction and arrangement of fastening devices whereby the parts of the crate may be securely fastened in a closed or folded position and rigidly held and braced in an open or set up position.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of the crate set up for use; Fig. 2 is a similar view showing the top section removed and the ends folded down; Fig. 3 is a similar view showing the parts in folded position; Fig. 4 is a horizontal section of the coop with parts in set up position; Fig. 5 is a vertical section of the coop on the line 5—5 of Fig 4, and Fig. 6 is a vertical transverse section on the line 6—6 of Fig. 5.

In the embodiment of the invention I provide a bottom comprising a frame 1 which may be of any desired shape and to which is secured the floor boards 2 of the bottom.

On the lower side of the frame 1 adjacent to its opposite ends are secured cross bars 3; on the opposite side edges of frame are secured upwardly projecting side strips 4 to the upper edges of which are hingedly connected the end pieces 5 of the coop, said end pieces being hinged to fold inwardly or to the bottom boards when the coop is collapsed.

Adapted to be engaged with the side and end pieces 6 and 5, respectively, of the coop when the latter are in an open or upright position is a top section 7 which consists of an open frame adapted to fit over the outer sides of the ends and sides of the coop and has arranged therethrough a central cross bar 8 which is adapted to engage and rest on the upper edges of the end pieces 5 of the coop when the latter are in an open position.

On the under side of the cross strip 8 adjacent to the inner sides of the end pieces are secured stop blocks 9, which when the top is in position engage the inner sides of the end pieces and hold the latter in an open position. When said end pieces are in an open position and secured by the blocks 9, said ends will hold the side pieces of the coop in an upright or open position. The sides, ends and top sections of the coop may be constructed of bars, slats, woven wire, rods or any other material and in the top section is arranged one or more doors 10 which may be hinged or connected thereto and fastened in any suitable manner.

In order to brace and secure the parts of the coop in an operative or set up position, I provide tie bolts 11 which are loosely connected with the outer ends of the bail shaped tie rods 12, the inner ends of which have formed thereon hooks 13 which are engaged with apertures 14 formed in a retaining plate 15 secured to the bottom of the coop. The hooks 13 when engaged with the apertures 14 and the plates 15 are adapted to work in slots 16 formed in the bottom boards of the coop as shown. When in an operative position, the bolts 11 are engaged with bolt holes 17 formed in the cross bar 8 of the top section. Around the holes 17 are arranged metal wire plates or washers 18 adapted to receive the clamping nuts 19 which are screwed on to the projecting threaded upper ends of the bolts 11. When the nuts 19 are thus screwed down on the bolts 11 and into engagement with the washers on the cross bar 8, the top of the coop will be drawn down into tight engagement with the upper edges of the sides and ends of the coop, thus rigidly holding said parts in position.

In order to hold the parts of the coop together when in closed or folded position, I provide clamping bolts 20 which are inserted through alined apertures formed in the cross bars 3 and bottom boards 2 of the bottom section of the coop and through corresponding apertures in the plates 15. The bolts project upwardly to a suitable distance above the plates 15 and bottom of the coop and on the bolts are screwed clamping nuts

21 which when screwed down into engagement with the plates 15 serve to clamp the latter into engagement with the bottom of the coop. In closing or folding the parts of the coop, the ends 19 are unscrewed from the bolts 11 and the latter disengaged from the holes 17 in the cross bar 8 of the top, after which the bail shaped tie rods and said bolts are swung downwardly on to the bottom of the coop. After the rods 12 and bolts 11 are thus swung downwardly, the end sections of the coop are folded inwardly on to the bottom after which the side sections are folded down on to the end sections. With the sides and ends of the coop in this position, the top is placed over said folded portions and the upwardly projecting ends of the bolts 20 are engaged with the holes 17 in the cross bar 8 of the top and on the projecting ends of said bolts 20 are screwed the same nuts 19 which were formerly screwed on to the bolts 11 when the coop was in set up position, said nuts thus serving to hold the top both in operative and inoperative positions.

By means of the fastening devices herein shown and described, the parts of the coop will be rigidly held in operative position and firmly secured in folded or collapsed position, thus facilitating the shipping of the same without danger of the parts becoming dislocated or injured.

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 defined in the appended claims.

Having thus described my invention, what I claim is:—

1. A coop of the character described comprising a bottom section, side and end sections hingedly connected to said bottom section and adapted to be folded inwardly thereon, a top section adapted to fit over the upper edges of the side and end sections when the latter are in an operative position, stop blocks arranged on said top section to engage and hold the end sections of the coop in an open position whereby the latter are adapted to hold the side sections in open position, tie rods loosely connected to the bottom section, bolts loosely engaged with the outer ends of said tie rods and adapted to be engaged with the top section when the latter is in operative position, clamping nuts screwed onto said bolts and into engagement with the top section, and fastening bolts arranged in the bottom section and adapted to be engaged with the top section when the latter is in an inoperative position and to receive the clamping nuts which were formerly engaged with the bolts on said tie rod.

2. A coop of the character described comprising a bottom section, hingedly connected end and side sections adapted to be folded inwardly onto said bottom sections, a top section adapted to be engaged with said end and side sections, apertured retaining plates arranged on said bottom section, fastening bolts inserted through said bottom and said retaining plates, clamping nuts on said bolts to hold said plates in position, bail shaped tie rods having hooked lower ends adapted to be engaged with said apertured plates, bolts loosely connected with said bail-shaped tie rods and adapted to be engaged with the top section of the coop when the latter is in an operative position, nuts adapted to be screwed onto the ends of said bolts and into engagement with the top of the coop when the latter is held in operative position and into engagement with the previously claimed clamping bolts when the latter are engaged with the top to hold the same in an inoperative position.

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

JAMES W. LIGHTFOOT.

Witnesses:

J. M. HILLEMAN,

C. C. MERCHANT.