June 2, 1931. W. C. DEAN 1,807,972

POULTRY COOP OR CRATE

Filed Nov. 14, 1928 3 Sheets-Sheet 1

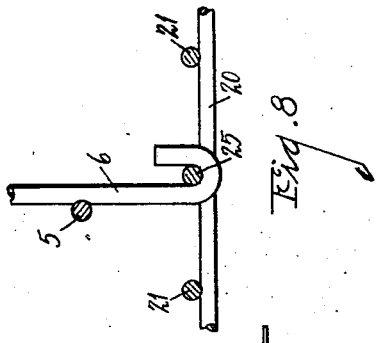



Fig. 8

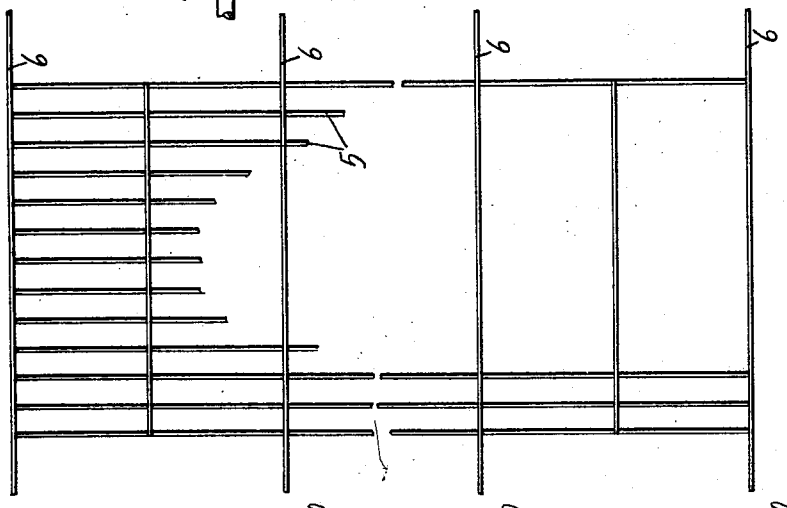



Fig. 4

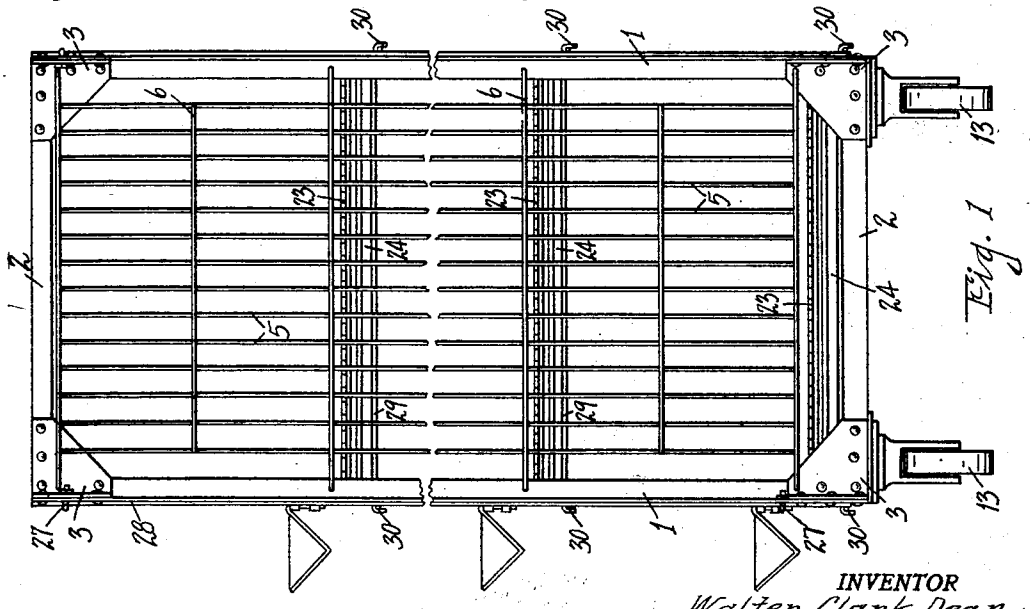



Fig. 1

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POULTRY COOP OR CRATE

Filed Nov. 14, 1928 3 Sheets-Sheet 2

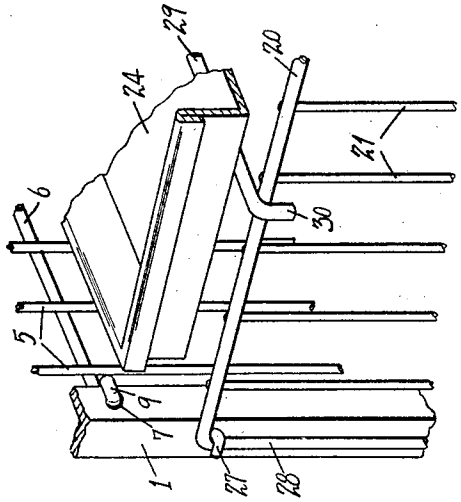



Fig. 5

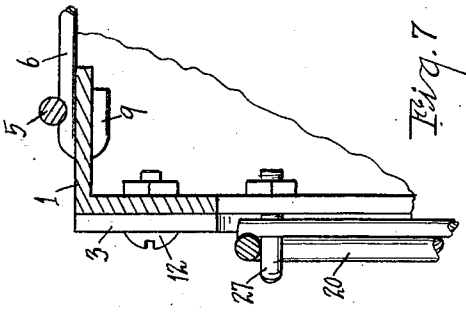



Fig. 7

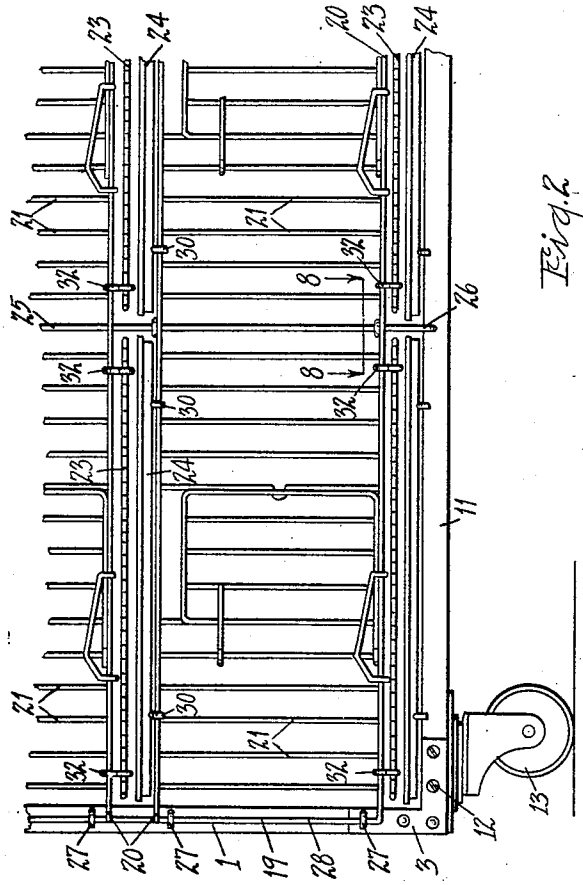



Fig. 2

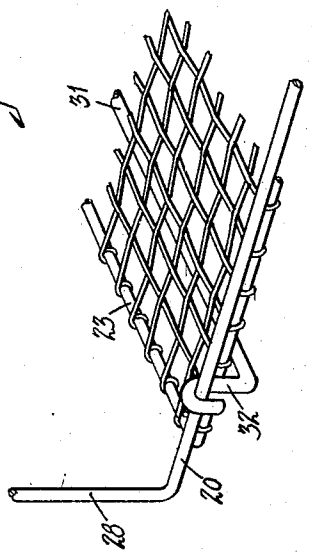



Fig. 6

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June 2, 1931. W. C. DEAN 1,807,972

POULTRY COOP OR CRATE

Filed Nov. 14, 1928 3 Sheets-Sheet 3

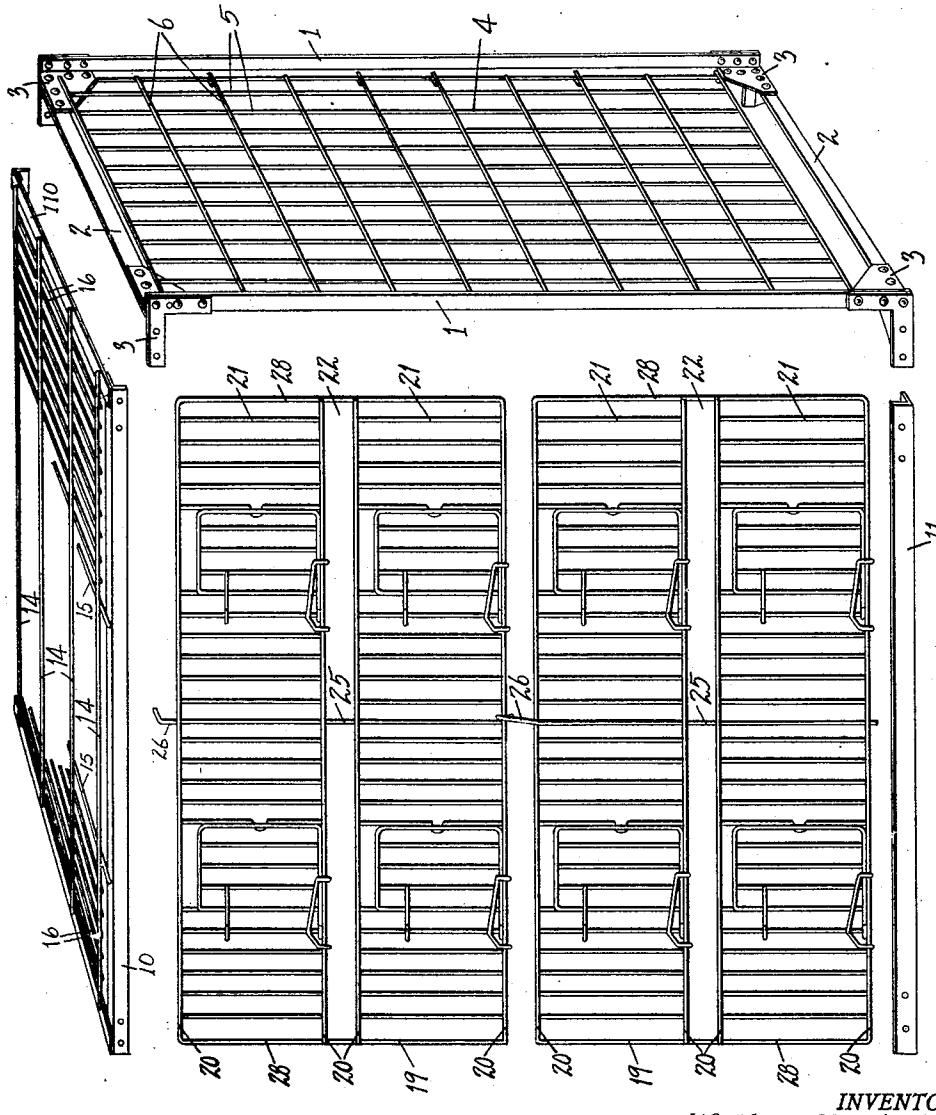


Fig. 3

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Patented June 2, 1931

1,807,972

# UNITED STATES PATENT OFFICE

WALTER CLARK DEAN, OF ALBION, MICHIGAN, ASSIGNOR TO UNION STEEL PRODUCTS COMPANY, OF ALBION, MICHIGAN

## POULTRY COOP OR CRATE

Application filed November 14, 1928. Serial No. 319,327.

The main object of this invention is to provide a poultry coop or crate of the battery feeding type which may be shipped in disassembled relation and quickly set up by the user or by an inexperienced workman.

A further object is to provide a structure of this character which when in the knock-down may be compactly assembled, yet has relatively few parts to be assembled outside of the factory.

A still further object is to provide an improved means for supporting a compartment bottom and the bottom trays or pans which effectively supports these parts; at the same time they are freely removed and replaced.

Objects relating to details and economies of my invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is illustrated in the accompanying drawings, in which:

Fig. 1 is a fragmentary end view of a structure embodying the features of my improved coop or crate.

Fig. 2 is a fragmentary front elevation.

Fig. 3 is a perspective view of the parts entering into the structure in disassembled relation.

Fig. 4 is a fragmentary view of the partition panel.

Fig. 5 is a fragmentary perspective view showing details of the support for the bottom pans.

Fig. 6 is a fragmentary perspective view showing details of the support for the foraminate compartment bottoms.

Fig. 7 is an enlarged detail section showing details of the support for the side wall panels.

Fig. 8 is a detail section on line 8—8 of Fig. 2 showing details of the partition panel mounting or securing means.

The embodiment illustrated is especially designed as a knock-down structure, that is, a structure adapted to be shipped in the knock-down to be assembled by the user and comprises factory assembled end units consisting of corner uprights 1, top and bottom end members 2 and connecting corner irons 3.

The end panel 4 is made up of vertical rods or wires 5 and horizontal rods or wires 6 secured together by electric welding. Certain of these rods or wires are inserted through holes 7 in the inwardly projecting arms of the angle iron uprights 1 and secured therein by clinching at 9. This secures the wall panel effectively without the aid of bolts or rivets.

The top and bottom side bars 10 and 11 are adapted to be bolted to the corner irons 3, registering holes being provided in the corner irons and side bars to receive the bolts 12. Casters 13 are secured to the corner irons. These are preferably mounted on the end units at the factory.

The top longitudinal bars 10 constitute a part of an assembled top unit, these bars being connected at their ends by the cross pieces 110, the cross pieces 110 being rigidly secured to the top bars 10.

The top unit is secured to the corner irons 3 by means of bolts, the cross pieces 110 meeting the upper cross pieces 2 of the end units.

The grid or panel comprises the longitudinal bars 14 and slats 15 and 16 welded thereto, the slats 15 and the bars 14 being secured at their ends to the top frame members.

The side walls in the embodiment illustrated are formed of two units 19 consisting of the horizontal bars 20 arranged in coacting pairs with vertical slats 21 welded thereto, the coacting pairs of horizontal bars being spaced and the units themselves being spaced to provide openings 22 through which the foraminate compartment bottoms 23 and the dropping pans 24 may be introduced and removed.

The wall units 19 have central bars 25 having extensions 26 at their upper ends, the extension of the upper wall unit being hooked over the bars 10 while the extension of the lower panel is engaged with the bottom horizontal bar 20 of the upper panel or wall unit as is shown in Fig. 3.

The walls units 19 are secured to the corner uprights by means of the hooked bolts 27 engaging the end members 28 of the wall

units 19 connecting the parts, as described.

The structure may be shipped in the knock-down and is quickly and easily set up, this resulting in a very material saving in shipping space and shipping cost.

The pans are supported by cross rods 29 having down-turned ends 30 engageable with the upper of the coacting pairs of longitudinal bars. Pans thus supported may be readily slipped into place or removed for cleaning.

The bottoms 23 are supported by cross rods 31 having upwardly offset outwardly facing hooks 32 detachably engageable with the bottom longitudinal bars of the compartment side walls. The hooks at one end of these bars 31 may be disengaged, allowing the bottom to drop down at one side so that it can be readily withdrawn for cleaning. The rods themselves may be withdrawn for cleaning as occasion requires. This positioning of the bottoms below the panel bars 20 has the further advantage of providing means for retaining eggs, that is, they cannot roll off the bottoms.

I have illustrated and described my improvements in a form in which I have embodied the same commercially. I have not attempted to illustrate or describe certain embodiments and adaptations which I contemplate as I believe the disclosure made will enable those skilled in the art to embody or adapt my improvements as may be desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A structure of the class described comprising assembled end units, said end units comprising corner uprights, top and bottom end members and connecting corner irons, said corner irons being adapted to receive top and bottom horizontal frame members, bottom side bars detachably secured to the bottom corner irons, a top unit comprising top bars and connecting end cross pieces and a panel secured thereto, side walls comprising panels having vertical bars provided with bendable extensions, the extension of the upper panel being engageable with the lower bars of the top unit and the bendable extension of the lower panel being engageable with the upper panel, hooked bolts detachably securing said side panels to said corner uprights, and a partition panel provided with projecting bendable members engageable by bending with said central vertical bars of said side wall panels.

2. A structure of the class described comprising assembled end units, said end units comprising corner uprights, top and bottom end members and connecting corner irons, said corner irons being adapted to receive top and bottom horizontal frame members, bottom side bars detachably secured to the bottom corner irons, a top unit comprising top bars and connecting end cross pieces and a panel secured thereto, side walls comprising panels having vertical bars provided with bendable extensions, the extension of the upper panel being enageable with the lower bars of the top unit and the bendable extension of the lower panel being engageable with the upper panel, and hooked bolts detachably securing said side panels to said corner uprights.

3. A structure of the class described comprising assembled end units, said end units comprising corner uprights, top and bottom end members and connecting corner irons and a wall panel secured thereto, top and bottom side bars detachably secured to said corner irons, side walls comprising panels having vertical bars provided with bendable extensions, the extension of the upper panel being engageable with the top side bar and the extensions of the other panels being engageable with the adjacent panel above, and means detachably securing said side wall panels to said corner uprights.

In witness whereof I have hereunto set my hand.

WALTER CLARK DEAN.