The main objects of this invention are:

First, to provide a coop or cage which is well adapted for use as a rabbit hutch.

Second, to provide a structure of this character made entirely of metal which may be shipped or stored in the knock-down and readily set up or erected without the use of tools, and when erected is strong and rigid.

Third, to provide a structure of the class described which may be easily kept in a sanitary condition.

Fourth, to provide in a structure of the class described an improved arrangement of feeding racks and troughs.

The invention is defined in the claims.

A structure embodying my improvements is clearly illustrated in the accompanying drawings, in which:

Fig. 1 is a front elevation of my improved cage or coop.

Fig. 2 is an end elevation thereof.

Fig. 3 is a fragmentary rear perspective view showing the arrangement of the floors and debris troughs.

Fig. 4 is a fragmentary perspective view corresponding to that of Fig. 3 with the sheet metal parts removed.

Fig. 5 is a fragmentary perspective view showing details of the feed troughs and racks.

Fig. 6 is a side elevation of one of the feed racks.

Fig. 7 is a cross section of one of the feed racks on line 7—7 of Fig. 6.

Fig. 8 is a fragmentary section on a line corresponding to line 8—8 of Fig. 5, showing details of one of the feed troughs.

Fig. 9 is a detail section on line 9—9 of Fig. 1 showing details of one of the compartment floors.

In the embodiment illustrated the cage or hutch has six compartments. The cage structure is formed of wire or steel bars and consists of corner uprights 1 extended at their lower ends to provide legs 2. The end walls are formed of panels designated generally by the numeral 3 formed of horizontal bars 4 having eyes 5 at their ends engaging the uprights 1 and the vertical slats 6. The slats and the horizontal bars are secured together by electric welding.

The front wall consists of panels designated generally by the numeral 7 formed of top horizontal side bars 8, and bottom horizontal bars 9 with intermediate bars 10 to which the vertical slats 11 are secured, preferably by welding. The bars 10 do not extend the full length of the panels but terminate at the uprights 12 which are spaced from adjacent slats 13 to provide door openings 15.

The side walls are made in sections united by clips 16, certain of the vertical slats at the inner ends of these sections being arranged so as to provide openings for the feed racks 17 and the feed troughs 18.

To support the racks which are of an inverted U shape, the side walls are provided with downwardly diverging support members 19 at each side while the feed troughs are mounted on the side rods 20 secured to the upper ends of the slats 21 of the partition members designated generally by the numeral 22 and comprising these vertical slats 21. The horizontal bars 23 have eyes 24 at their ends engaging the vertical slats 25 of the side walls.

Doors are provided for the openings 15 consisting of a pair of sections designated generally by the numerals 26 and 27, the upper section 27 being pivotally mounted on the horizontal rod 28 at the top of the door opening while the lower section 26 is pivotally connected to the section 27.

The section 26 is provided with a horizontal bar 29 having eyes 30 at its ends, one of which slidably engages the slat 13 and the other an upright 31 having an offset 32 therein adjacent its lower end and with which the eye engages when the door is in closed position, the offset constituting a keeper for the door. To open the doors it is only necessary to pull upwardly on the bar 29 which will disengage the door from its keeper, allowing the sections to fold or collapse upon themselves.

The rear side wall is made up of a series...
of panels designated generally by the numeral 33 and each consisting of horizontal bars secured at their outer ends to the corner uprights 1 and at their inner ends to the intermediate uprights 35. The vertical slats 36 are welded to these bars. The uprights 35 are connected by the clips 16.

The rear ends of the racks are supported by the top horizontal bars of the panels and are provided with hooks 37 to engage these bars as shown in Fig. 5. The racks comprise the longitudinal bars 38 and the U-shaped cross or rack bars 39 welded thereto. Rearwardly tapered wings 40 are hinged to the upper longitudinal bars of the racks, the hooks 37 being carried by these wings.

These wings 40 are adapted to be folded inwardly upon the contents of the rack, such as clover or like fodder, compacting it within the rack while the rack is being introduced into the cage or being transported outside of the cage so that the feed is not scattered.

The troughs 48 are formed of sheet metal and are preferably double troughs, thereby providing a trough for each compartment. These troughs are provided with downwardly facing channelled flanges 49 on their longitudinal edges slidably engageable with the slide rods 20.

The troughs are supported below the feed racks so that they may not only be employed for grain but serve to catch the leaves and loose material that falls from the rack.

The compartment floors 50 are formed of wire netting mounted upon supporting rods 51, some of which terminate in inwardly facing hooks 52 and others in downturned hooks or hooks 53. These hooks and lugs are adapted to be engaged over longitudinal bars of the front and read side wall panels, thereby supporting the floors, the turned hooks effectively retaining the parts in assembled relation. These floors when in position serve to prevent the collapsing of the side and end walls, effectively bracing the structure and at the same time the floor may be disengaged by springing the longitudinal side bars, so that, with the removal of these floors, the troughs, racks and dropping boards 54, the walls may be collapsed.

The dropping boards 54 are supported in an inclined position by means of supporting rods 55 which have hooks 56 at their ends engageable with longitudinal bars of the front and read side walls. The panels of the rear walls are spaced so that there is sufficient room to receive the dropping boards which have tapered side walls 57 and relatively narrow front walls 58.

These dropping boards are formed of sheet metal and their rear edges overlap the dropping troughs 59 which are supported on the outside of the walls by means of hangers 60 having hooks 61 engageable with the top longitudinal bars of the rear wall panels. These dropping troughs 59 are open at one end and their side walls are preferably tapered toward their open ends, and the arm of one hanger of each trough is in a plane above the other so that the bottom of the trough is inclined toward its closed end. The result is that the droppings are retained within the trough but may be conveniently removed therefrom.

In the embodiment illustrated the rear wall panels are provided with crossed braces 62 while the bottom end wall panels are provided with crossed braces 63, the lower ends of these braces being extended to a cross member 64 connecting the leg portions of the corner uprights. In this embodiment leg members 65 are provided for the inner ends of the side wall sections.

With this arrangement of parts cages of substantial capacity may be provided and at the same time they are comparatively light in weight and rigid when erected, although adapted to be shipped or stored in collapsed or knock-down form. When employed for animals such as rabbits, the feed is arranged so that it is fully accessible and the feed troughs and racks do not restrict the ventilation. The structure may also be very easily kept in a sanitary condition.

While the structure illustrated is especially designated for use as a rabbit Hutch or coop, with slight modifications it is readily adapted for muskrats and other animals or for poultry. I have not attempted to illustrate or describe such modifications as it is believed that this disclosure will enable those skilled in the art to which the invention relates to embody or adapt the same as may be desired.

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

1. In a structure of the class described, the combination of front, rear and end walls pivotaly connected at their corners to permit collapsing, the front and rear walls comprising vertically spaced panels, each including slats and horizontal bars, formate floors provided with supporting bars having hooks at their ends engageable with horizontal bars of said front and rear walls, said horizontal bars being adapted to be sprung to permit engagement of said hooks whereby the floors are detachably supported and the walls retained in erected position, dropping board supporting rods having hooks at their ends engageable with horizontal bars of the front and rear walls and disposed in a rearwardly inclined position, dropping boards supported by said rods below said floors, and cleaning troughs mounted on the rear wall in operative relation to said dropping boards.
2. In a structure of the class described, the combination of front, rear and end walls, pivotally connected at their corners to permit collapsing, the front and rear walls comprising vertically spaced panels each including horizontal bars, foraminite floors supported by said bars, dropping board supporting rods disposed in a rearwardly inclined position and having hooks at their ends engageable with the bars of the front and rear walls, dropping boards having forwardly tapered side walls removable supported by said rods below said floors, troughs open at one end, the side walls of said troughs being tapered toward their open ends, and hangers for said troughs provided with hooks engageable with horizontal bars of the rear wall whereby the troughs are supported in operative relation to the lower ends of the dropping boards with their bottoms inclined toward their closed ends in operative relation to the lower ends of the dropping boards.

3. In a structure of the class described, the combination of front, rear and end walls, the front and rear walls comprising horizontally spaced panels including horizontal bars, foraminite floors supported by said bars, dropping board supporting rods disposed in a rearwardly inclined position and having hooks at their ends engageable with the horizontal bars of said front and rear walls, said horizontal bars being adapted to be swung to permit engagement of said hooks whereby the floors are detachably supported and the walls retained in erected position.

In a structure of the class described, the front wall having openings therein through which feed racks and troughs may be introduced, the feed rack openings being above the feed trough openings, spaced transverse partitions disposed at the sides of said feed trough openings and constituting feed trough supports, feed troughs having downturned channeled flanges on their edges slideable on said partitions, feed racks adapted to be introduced through said feed rack openings and provided with downturned hooks at their rear ends engageable with horizontal bars of the rear wall whereby the rear end of the rack is supported, foraminite floors, and dropping boards disposed below said floors to extend below said partitions and feed trough.

6. In a structure of the class described, the combination of front and rear walls comprising horizontal bars and vertical slats secured thereto, the front wall having openings therein through which feed racks and troughs may be introduced, the feed rack openings being above the feed trough openings, spaced transverse partitions disposed at the sides of said feed trough openings and constituting feed trough supports, feed troughs having downturned channeled flanges on their edges slideable on said partitions, and feed racks adapted to be introduced through said feed rack openings and provided with downturned hooks at their rear ends engageable with horizontal bars of the rear wall whereby the rear end of the rack is supported.

7. In a structure of the class described, the combination of front and rear walls, the front wall having openings therein through which feed racks may be introduced, spaced transverse partitions disposed at the sides of said feed trough openings and constituting a feed trough support, feed troughs having flanges on their edges slideable on said partition, foraminite floors, and dropping boards disposed below said floors to extend below said partitions and feed troughs.

8. In a structure of the class described, the combination of front and rear walls, the front walls having openings therein through which feed racks may be introduced, spaced transverse partitions disposed at the sides of said feed trough openings and constituting a feed trough support, feed troughs having flanges on their edges slideable on said partition.

9. In a structure of the class described, the combination of front and rear walls comprising horizontal bars and vertical slats secured thereto, the front wall having openings therein through which feed racks and troughs may be introduced, the feed rack opening being above the feed trough opening, of spaced transverse partitions disposed at the sides of the feed rack opening and constituting feed trough supports, a feed trough slidably supported by said partitions, a feed rack adapted to be introduced through said feed rack opening and provided with wall engaging members.
at its rear end, foraminite floors, and dropping boards disposed below said floors to extend below said partitions and feed troughs.

10. In a structure of the class described, the combination with the walls, one of the walls having an opening through which a trough may be introduced and an opening through which a feed rack may be introduced disposed above the feed trough opening, of spaced transverse partitions disposed at the sides of the feed rack opening, a feed trough disposed above said partitions, a feed rack adapted to be introduced through said feed rack opening and provided with wall engaging members at its rear end, foraminite floors, and dropping boards disposed below said floors to extend below said partitions and feed troughs.

11. In a structure of the class described, the combination with the walls, one of the walls having an opening through which a trough may be introduced and an opening through which a feed rack may be introduced disposed above the feed trough opening, of spaced transverse partitions disposed at the sides of the feed rack opening and constituting feed trough supports, a feed trough slidably supported by said partitions, and a feed rack adapted to be introduced through said feed rack opening and provided with wall engaging members at its rear end.

12. In a structure of the class described, the combination of front and rear walls, the front wall having a rack opening therein, a feed rack comprising longitudinal bars and U-shaped slats secured thereto, rearwardly tapered wings pivotally mounted on the top longitudinal bars of the feed rack to fold or swing inwardly, and supporting hooks on the rear ends of said wings engageable with the horizontal bars of the rear wall, the front end of the rack being supported in said opening in the front wall.

13. In a structure of the class described, the combination of front and rear walls, the front wall having a rack opening therein, a feed rack comprising longitudinal bars and U-shaped slats secured thereto, wings pivotally mounted on the top longitudinal bars of the feed rack to fold or swing inwardly, and supporting hooks on the rear ends of said wings engageable with the horizontal bars of the rear wall, the front end of the rack being supported in said opening in the front wall.

14. In a structure of the class described, a feed rack comprising longitudinal bars and U-shaped slats secured thereto, and wings pivotally mounted on the top longitudinal bars of the feed rack to fold or swing inwardly upon the material within the rack.

15. In a structure of the class described,