

(No Model.)

C. F. HAIGLER.
HOG TROUGH.

No. 517,101.

Patented Mar. 27, 1894.

Fig. 1.

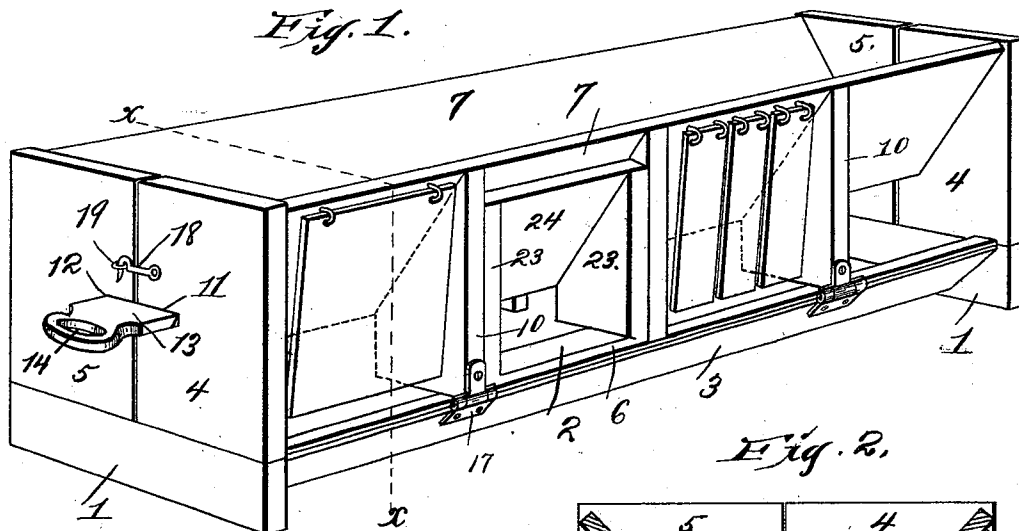


Fig. 6.

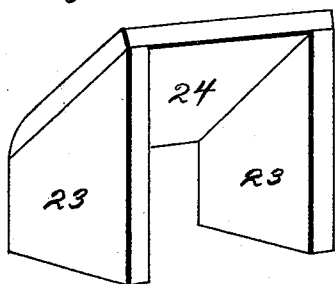


Fig. 3.

Fig. 2.

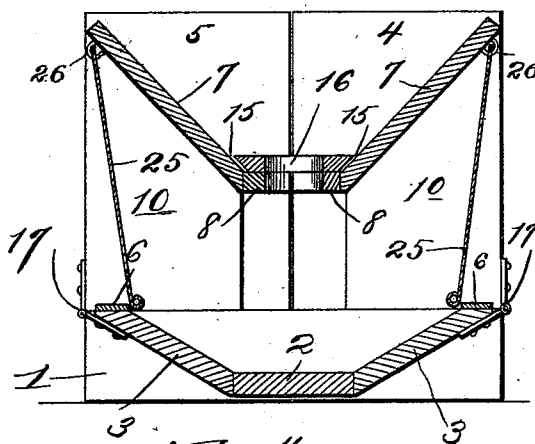


Fig. 4

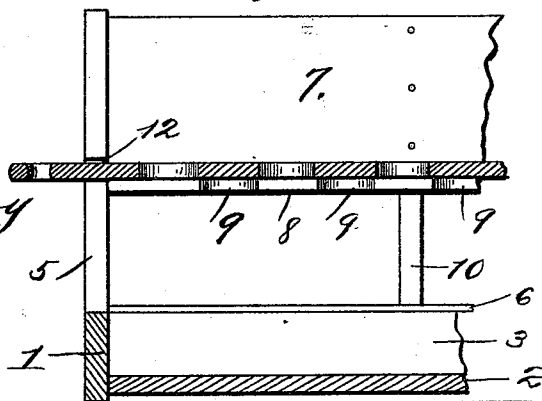
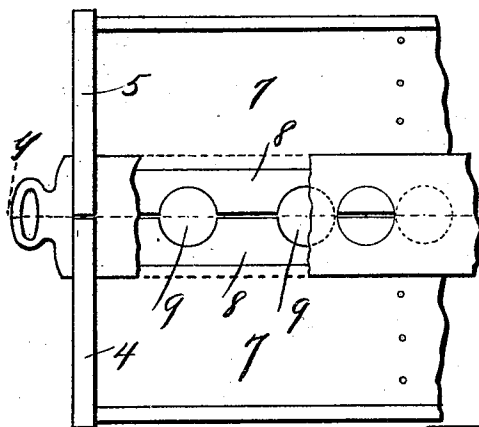
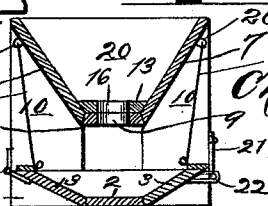


Fig. 5.



Witnesses:

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CHARLES F. HAIGLER, OF LEBO, KANSAS.

HOG-TROUGH.

SPECIFICATION forming part of Letters Patent No. 517,101, dated March 27, 1894.

Application filed September 28, 1893. Serial No. 486,660. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. HAIGLER, of Lebo, Coffey county, Kansas, have invented certain new and useful Improvements in Hog-Feeding Troughs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to that class of hog troughs, in which the passage of feed from the hopper to the feed receptacle below, is regulated by a slide-valve, and has for its object to produce a device of this character which is simple, strong, and inexpensive of construction.

With this object in view, my invention consists in certain peculiar and novel features of construction and combinations of parts as hereinafter described and claimed.

Referring to the drawings which illustrate this invention,—Figure 1, is a perspective view of a hog trough, constructed in accordance with my invention, and showing the same provided with pendent chicken guards over two of the openings. Fig. 2, is a vertical sectional view, taken on the line $x-x$ of Fig. 1. Fig. 3, is a top plan view of a portion of the trough and showing the slide valve or cut-off broken away. Fig. 4, is a vertical sectional view taken on the line $y-y$ of Fig. 3, and Fig. 5, is a cross sectional view showing a slightly modified form of construction. Fig. 6, is a detail perspective view of one of the frames for decreasing the size of the openings for the reception of the hog's head.

In the said drawings, 1 designates a pair of end-bars, and these end-bars are connected centrally and near their lower margins by the horizontal and longitudinally extending board 2, and by the boards 3 which form the sides of the feed trough proper; these boards 3 extending obliquely downward and inward from the upper corners of the boards 1 to the side margins of the board 2. A pair of boards 4 and 5 of suitable height rest upon the upper margin of the end-board 1; these boards 4 and 5 being of equal width and having their inner vertical edges adjusted so as to form practically a single end board when in their closed position. These end boards 4 and 5 are each connected near their lower corners by the horizontal and longitudinally extending bars or

strips 6 which rest upon the upper edges of the inclined sides 3 of the feed trough proper; these bars or strips 6 being preferably of metal.

Extending longitudinally and connecting the end boards 4 is a side board 7; this side board being arranged to incline from the upper and outer corners of said end boards downwardly and inwardly to within a suitable distance of their inner vertical margins. A similar side board 7 connects the end boards 5, and also extends downwardly and inwardly thereof and has its lower margin horizontally opposite the lower margin of the side board 7 connecting the end boards 4. A pair of similar horizontal strips or boards 8 are secured to the lower margin or edge of the side boards 7, and have their inner edges adjacent so as to form practically a single bottom board 8 for the hopper and these boards 8 also extend longitudinally and are secured at their opposite ends to their respective end boards 4 and 5. These side boards 8 are also formed at suitable intervals with semicircular notches in their inner edges; the notches of one board 8 registering with the notches of the other board 8 so as to form circular opening or hole 9 through the bottom of the hopper formed by said boards 8, inclined sides 7, and end boards 4 and 5.

In order to additionally support the inclined sides 7 of the hopper, and also to divide the space between the end boards into a series of openings of suitable size, through which the heads of the hogs are to be introduced to have access to the feed, as hereinafter referred to, I provide a series of vertically arranged and transversely extending boards or partitions 10, the lower ends of which near their outer corners rest upon and are secured to the longitudinal strips or bars 6, and the upper margins of said partition boards 10 are inclined or beveled correspondingly and are secured to the outer or under side of the sides 7 of the hopper.

In order to control the passage of feed from the hopper to the feed-trough below, the end boards 4 and 5 are provided with horizontal and registering notches 11 and 12 the lower margins of which are in the same horizontal plane as the upper side of the bottom boards 8 of the hopper, and passing through the slot

thus formed and resting upon the boards 8 is a slide valve or cut-off 13; said slide valve or cut-off being provided with a handle 14 as shown, or of any other suitable construction whereby the slide valve or cut-off may be reciprocated when desired. The side edges of the slide-valve are also beveled inwardly and downwardly at 15, so as to fit snugly upon the adjacent sides of the sides 7 of the hopper and to prevent any grain or feed getting therebetween and interfering with the free operation of the slide valve or cut-off. The slide valve or cut-off is also provided at suitable intervals with circular holes or openings 16 which are adapted when the slide valve is properly operated to register with the holes or openings 9 in the bottom of the hopper so that any desired quantity of feed may pass into the feed trough below.

For convenience in cleaning, and also because it may be necessary to convey the trough from one place to another, I form the trough composed of the end boards 1, the bottom board 2 and the sides 3 separate from the hopper construction, and connect the two together by means of the hinges 17, which may be secured to the inclined sides 3, and to the partitions 10 as shown. To secure the two sections of the hopper firmly together when in their closed position, I provide a pivotal hook 18 and a staple or eye 19; the hooks 18 of the end boards 4 engaging the staples 19 of the end boards 5.

Referring to Fig. 5, I show a slightly modified form of construction. In this instance I show an end board 20 resting upon each of the end boards 1 of the feed trough, and these end boards 20 are connected as before by the inclined sides 7, the lower margins of which are connected in this instance by a single bottom board 8 provided with openings 9. The partitions 10 at one side only of the hopper are hinged at 17 to the feed trough, and one or more of the partitions 10 at the opposite side of the hopper is provided with a pivoted hook 21 which engages a staple or eye 22 carried by the feed trough.

The operation is as follows: The hopper being supplied with a quantity of feed, when it is desired to feed the hogs the slide valve or cut-off is grasped and pulled outwardly until the openings 16 therethrough register with the openings 9 of the bottom of the hopper. As soon as a sufficient quantity of feed has passed through said openings into the feed trough below the slide-valve or cut-off is reciprocated inversely so as to cut off the supply of feed. The hogs may now poke their heads into the openings or spaces between the partitions 10 to obtain their food. In order to prevent young hogs or hogs of small size passing through said openings or passages and getting into the feed trough, I provide a frame which is of approximately inverted U-shape and consists of the vertical side boards 23 connected at their upper margins by the top board 24; said board being in-

clined to correspond with the inclination of the sides 7 of the hopper. By introducing this frame into one of said passages, it will be seen that the size thereof is decreased sufficiently to prevent the passage therethrough of the smaller hogs. These frames of course will necessarily be made of various sizes.

In order to prevent the entrance of chickens to the feed-trough, I provide guard-plates 25 which fit in the openings and are pivoted at their upper ends to the loops or staples 26 secured to the sides 7 of the hopper. These guards may be in the form of a single plate corresponding in width to the space between the partitions and provided with openings through which the feed may be observed, or the guards may consist of several narrow plates each being independent of the other and a slight distance apart so that the interior of the feed-trough may be seen as shown in Fig. 1. By providing the pivotal guards, which normally occupy the positions shown in Figs. 1, 2 and 5 it will be seen that when the hog or other animal presses his head against the trough or one of the guards it will yield and swing back out of the way against the side of the hopper, and will allow access to the feed, and as soon as the animal withdraws his head it will resume its normal position and again close the opening against the entrance of chickens to the feed trough.

When it is desired to have convenient access to the interior of the structure for any purpose whatever, by disengaging hooks 18 from the staples 19, and withdrawing entirely the slide valve or cut-off, the sections of the hopper can be pivotally moved apart. In the construction shown in Fig. 5, by disengaging the hooks 21 from the staples or eyes 22, the hopper can be pivotally swung upon the hinges 17 from above the feed trough. It will furthermore be seen that by disconnecting the several sections entirely at the hinge points, the trough may be conveniently and easily conveyed from one place to another, which would be difficult were the several parts of the structure secured permanently together.

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

1. In a hog-trough or receptacle, the combination with a feed-trough proper, a hopper located above the feed-trough and hinged thereto, and a series of partitions dividing the space between the end-walls of the hopper and the feed-trough into several openings or passages, of a detachable frame, fitting snugly within one of said openings or passages, and reducing in every direction, the size of the said opening or passage, substantially as set forth.

2. A hog trough, comprising a feed-trough proper, a hopper located above the feed trough and consisting of end boards resting upon the end boards of the feed trough, and inclined sides connecting said end boards, and a bottom connecting said inclined sides pro-

vided with openings, bars or strips connecting the end-boards of the hopper near their outer margins, a series of vertical partitions extending transversely and secured at their upper and lower ends against the under side of the sides of the hopper, and upon the bars or strips connecting the end boards of the hopper, and hinges connecting the hopper and the feed trough, substantially as set forth.

3. A feed trough, comprising a feed trough proper, a hopper consisting of end boards formed in two sections and secured together, and resting upon the end boards of the feed trough, a downwardly and inwardly inclined side board carried by the end boards of one section of the hopper, and a downwardly and inwardly inclined board carried by the end boards of the other section of the hopper, a horizontal bottom board extending inwardly from the lower margin of each inclined board,

and having their edges adjacent and provided with registering notches, and a slide valve resting upon said bottom boards and also provided with openings adapted to register with the openings formed by the registering notches of the bottom boards, and having a handle at one end, and vertical partitions dividing the spaces between the end walls of the hopper at each side of the inclined boards into several openings or passages, and hinges connecting the partitions at each side of the hopper with the feed trough, substantially as set forth.

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

CHARLES F. HAIGLER.

Witnesses:

MAUD FITZPATRICK,
G. Y. THORPE.