(No Model.)

T. LEWIS.

FEED TROUGH.

No. 489,589. Patented Jan. 10, 1893.

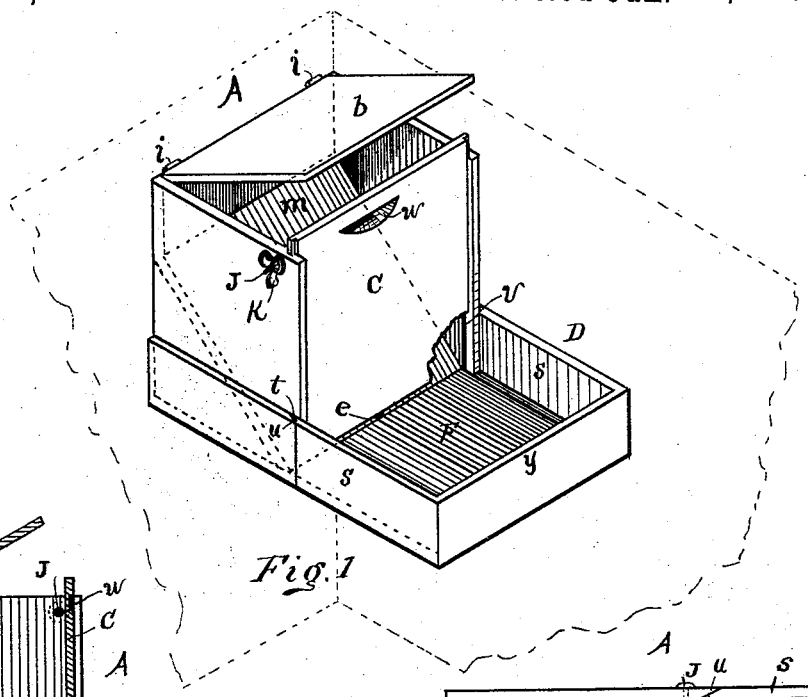

Fig. 1

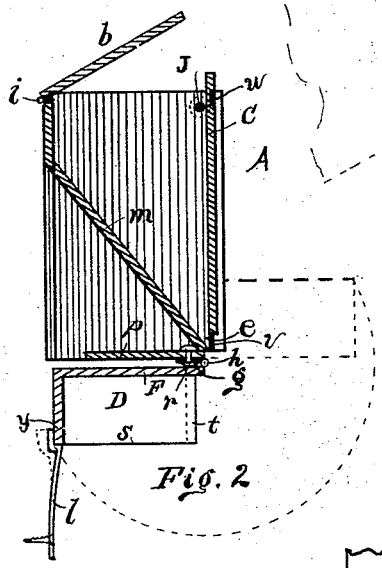

Fig. 2

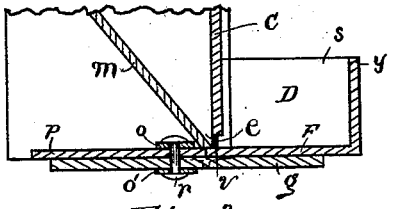

Fig. 3

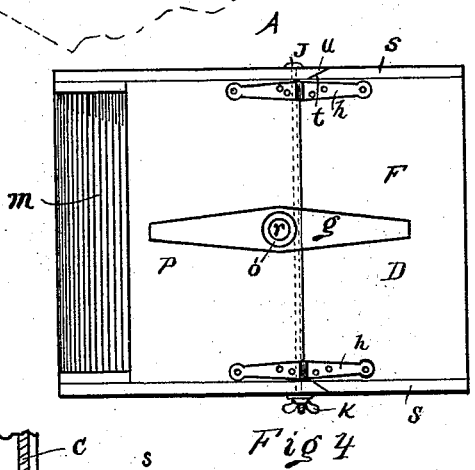

Fig 4

Witnesses

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FEED-TROUGH.

SPECIFICATION forming part of Letters Patent No. 489,589, dated January 10, 1893.

Application filed February 19, 1892. Serial No. 422,126. (No model.)

To all whom it may concern:

Be it known that I, THOMAS LEWIS, a citizen of the United States, residing at Townsend, in the county of Schuyler and State of New York, have invented certain new and useful Improvements in Combined Feed-Boxes, of which the following, with reference to the drawings, is a full, clear, and exact description of same.

This invention relates to combined feed boxes, designed to be attached to the side wall or walls of a feed stall, and has for its purpose the automatic gaging or regulating of feed in its departure from the bin to the open feed box thereof, the reverting or overturning of said feed box in connection therewith, and other minor features of construction, more particularly described hereinafter, and pointed out in the claims.

Figure 1 is a perspective view of the feed bin, and its combined or secondary feed receiving box, in position for use. Fig. 2 is a vertical sectional view of same with open feed box closed or overturned underneath the feed bin. Fig. 3 is a part vertical sectional view of same, but with open feed box in raised position for use. Fig. 4 is a bottom side view of said bin and feed box in like adjustment of that shown in Figs. 1 and 3.

Similar letters refer to similar parts throughout the description and views.

In the drawings, A represents the feed bin, and D the secondary feed receiving box thereof, attached to the bin in a manner to project laterally therefrom, and close thereunder, in inverted position, as plainly illustrated in the drawings. Said feed bin or reservoir A, is of simple rectilinear construction, having four vertical side walls, the rear wall e' being of less height and having the cover b of the bin hinged thereto along its upper end, said cover closing down flush between the side walls a' b' and stopping or resting its free opposite side upon the binding bolt J passing horizontally through the bin at its upper front corner. Connected to the lower end of the short rear wall of the bin, is the bottom m, which inclines therefrom downward to the bottom of the front of the bin, and stops resting upon, but to project horizontally and slightly over the front edge of a secondary bottom P, horizontally laid underneath the inclined bottom and similarly upon the extended side walls of the bin.

A vertically adjustable slide C comprising the front wall of the box, and sliding in the parallel vertically arranged grooves v facing in therefor at the front of the sides a' b' of the bin, may be adjusted at any desired height from the bottom edge of the inclined bottom of the bin, and retained rigidly in its adjustments, by the binding bolt J which passes through the said side walls of the bin, and is provided with the threaded thumb-screw K, by means of which the grooved walls are drawn inward clamping upon the said slide. The bin A, as thus constructed is prepared to fittingly attach thereto the open feed box D, hereinbefore mentioned, to receive the feed as it thus comes in regulated quantity through the adjustable opening e of the bin's bottom.

The feed box is provided with a flat bottom F which in the normal position of the box is inwardly extended, evenly meeting the horizontal bottom of the bin, and beneath the projecting bottom edge of the inclined bottom thereof, thus effectually closing the operative joint, between the bin and box, at this point, by the hinges h strapped to the under sides across the meeting line of the two bottoms.

As this feed box projects laterally on a level with the bottom of the feed bin, it is provided with the lower raised wall Y, opposite said bin, and like side walls s, s, which project inwardly past the front outside edges of the bin, and vertically cut off at an acute angle, after being so cut, these sides as shown in the drawings are continued as cleats along across the lower edge side of the bin, but forming in their connection therewith the acute angular edges v at the front and recess t, for reception of the corresponding angular ends of the walls of the box. Fulcrumed to the bottom side of the horizontal bottom of the bin is the button g, which upon its pivot r is permitted to turn to either a longitudinal position beneath the bin, or lateral one beneath the bin and box, and in which lateral position the box in its useful adjustment is held supported thereon.

In the drawings Fig. 2, shows the feed box swung downward upon its hinges away from the front of the bin, and in inverted position underneath it, and lodged or held there by

the independent spring hook *l* snapping over the front edge wall of the box. Said hook for the purpose designed may have many equivalents in design and structure. I therefore do not wish to confine myself to the particular form of this element completing the structure, its operative manner, or location for the purpose designed, but consider myself entitled to any means employed for merely holding the feed box as thus inverted beneath the feed bin.

I am aware feed bins have been made having the adjustable feed delivery opening, and inclined bottom for delivery of the feed through said opening, in connection with feed receiving boxes affixed thereto, such in itself as a broad feature of combination I do not claim. But

What I do claim and wish to secure by Letters Patent of the United States is:

1. A feed bin having vertical side walls, one of which is vertically adjustable a bolt J arranged to pass through the wall of the bin a nut *k* on the bolt to impinge the wall and hold the vertical wall in an adjustable position, a feed box hinged to the vertical side walls at the bottom of the bin, and a hinged cover for the feed bin as set forth.

2. The herein described feed-bin consisting of the vertical sides and back and an inclined bottom, a feed box secured to the bottom by hinges, a retaining spring secured to the wall underneath the feed bin, a button to hold the feed box in a horizontal position, an adjustable front to the feed bin and means for holding it in adjustment and a hinged cover for the feed bin substantially as set forth.

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Witnesses:
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