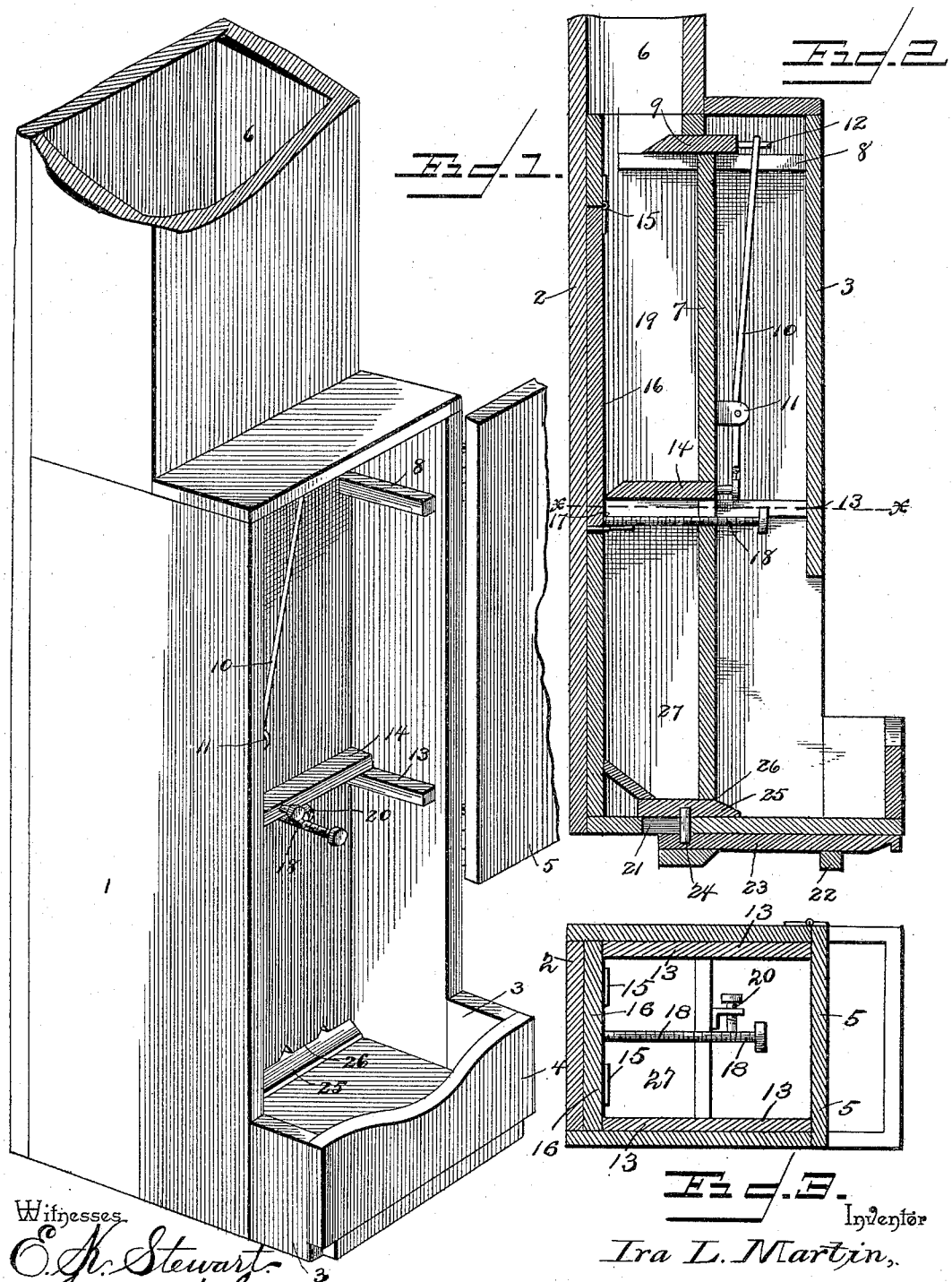
(No Model.)

I. L. MARTIN.

FEED BOX.

No. 493,832. Patented Mar. 21, 1893.



Witnesses.
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UNITED STATES PATENT OFFICE.

IRA L. MARTIN, OF AMITY, OREGON.

FEED-BOX.

SPECIFICATION forming part of Letters Patent No. 493,832, dated March 21, 1893.

Application filed November 30, 1892. Serial No. 453,645. (No model.)

To all whom it may concern:

Be it known that I, IRA L. MARTIN, a citizen of the United States, residing at Amity, in the county of Yam Hill and State of Oregon, have invented a new and useful Feed-Box, of which the following is a specification.

My invention relates to improvements in feed-boxes; the objects in view being to provide a box of cheap and simple construction adapted to be conveniently connected with a feed-chute leading from a feed-bin or supply arranged overhead, and to be so operated as to deposit into the feed-trough proper a predetermined quantity of feed, the remainder being kept safe out of the reach of the animals.

With these general objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective view of a feed-box embodying my invention. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a horizontal sectional view on the line *x*—*x* of Fig. 2.

Like numerals of reference indicate like parts in all the figures of the drawings.

The device comprises opposite side walls 1, connected by a rear wall 2, and the front edges of the side-walls near their lower ends are provided with forward extensions 3 connected by a cross-piece 4, the same combining to form a crib or feed-trough. Above the feed-trough there is hinged to one of the side walls a door 5 adapted to close the front of the box, with the exception of an opening between the lower edge of the door and the trough. The upper end of the box, in rear of its transverse center is connected with a chute 6, which may lead to any suitable source of supply, as for instance, a bin located in the loft or other position above.

A partition 7 extends transverse the box subdividing the same, as shown, and combining with the back-wall to form a grain-receiving chute. At the upper end of the partition there is a pair of horizontal ways 8, and upon the same is mounted for sliding a horizontal cut-off 9. A hand-lever 10 is fulcrumed in bearings 11 upon the front of the partition, and the upper end of said lever is loosely connected at 12 to the front edge of the cut-off 9. About midway the partition 7 the same is provided with an opening, and at the sides of the same a pair of horizontal ways 13 are located, the same supporting a horizontal cut-off 14 provided at its front end with a knob or handle. To the rear wall of the box near the upper end of the upper compartment thus formed by means of the cut-off 14, there is hinged at 15 a flap or partition 16, and to the lower end of the same there is loosely hinged at 17 a rod 18 whose front end extends through the opening in the partition 7. This rod is provided with graduations, as shown, whereby when drawn out and the measuring-compartment 19 thus has its capacity increased or diminished through the medium of the flap, the same will be indicated by the scale on said rod. In this manner the operator will be enabled to measure a predetermined quantity of feed by drawing out the rod 18 and adjusting the same through the medium, in this instance, of a set-bolt or screw 20. The bottom of the feed-trough has a slot 21, and upon its underside ways 22, in which slides a bar 23 having a pin 24 projecting upwardly therefrom and through the aforesaid slot, the upper end of the pin being connected with a sliding cut-off 25 adapted to close or open the feed-opening 26, which is formed by the partition 7 terminating short of the bottom of the box.

The operation of the invention will be readily understood from the foregoing description in connection with the accompanying drawings, and may be briefly stated as follows: By opening the door 5 access may be had to the lever 10, which being operated draws the cut-off 9 outward, thus opening up communication between the supply and the measuring-chamber 19. The feed falls through the chute 6 into the measuring-chamber, and when this has become filled the cut-off 9 is closed so that a body of feed completely fills the measuring-chamber. The operator now draws the cut-off 14 out and permits the feed to fall from the measuring-chamber into the feed-chamber 27. When this has been accomplished the feed may be discharged into the feed-trough in regulated quantities by means of the slide 25, the same being operated to open or close the feed-opening 26. When it is desired to admit a smaller quantity of feed

than the capacity of the measuring-chamber, the operator draws upon the rod 18 until the scale upon the same indicates the proper quantity when it is secured by means of the set-screw 20, the cut-off 9 is then opened, and the feed passes as before into the measuring-chamber, but it will be seen that the wing or partition 16 has been swung to an inclined position so that the capacity of the measuring-chamber has been decreased to agree with the scale upon the rod 18. When this has been accomplished the cut-off 9 is closed and the cut-off 14 opened, the feed falling into the chamber 27 as before.

From the foregoing description in connection with the accompanying drawings it will be seen that I have provided a cheap and simple construction of feed-box adapted to be readily set for depositing in the feed-trough a predetermined quantity of feed, and also regulating the flow of the same thereto; and furthermore, that the feed is kept safe from the animals, who cannot gain access thereto or in any way overeat themselves.

It will be understood that instead of making the device of wood the front and other exposed portions may be made of cast iron or covered with sheet iron to prevent being injured by cribbing of the animals.

Having described my invention, what I claim is—

1. The combination with the box terminating at its lower front end in a feed-trough, a vertical partition subdividing the box, upper and lower horizontal ways, cut-offs mounted in the ways forming upper and lower compartments, the lower one communicating with the trough, of a flap hinged to a wall of the upper compartment between the cut-offs, and means for adjusting the flap in an inclined position, substantially as specified.

2. The combination with the box, provided at its front lower end with a trough and in rear of the same subdivided by a transverse partition, of upper and lower cut-offs mounted in the ways and dividing the box into upper and lower compartments the lower one communicating with the said trough, a partition or flap hinged to the upper compartment, and a rod loosely connected to the lower end of the flap and passing through the front wall or subdividing partition, substantially as specified.

3. The combination with the box having its lower front edge extended to form a trough, a vertical partition subdividing the box into front and rear compartments and terminating at its lower end short of the bottom forming the discharge-opening, upper and lower cut-offs located in the rear compartment and forming upper and lower compartments, a slide mounted in the bottom of the lower compartment and adapted to close the feed-opening, and a rod for operating the slide, substantially as specified.

4. The combination with a box terminating at its lower end in a trough and provided with upper and lower cut-offs forming upper and lower compartments, the lower one communicating with the trough, of a flap hinged to the rear wall of the upper compartment, and means for adjusting the same thereto, substantially as specified.

5. The combination with a box, and upper and lower cut-offs subdividing the same into upper and lower compartments, and a trough located in front of and communicating with the lower compartment, of a flap hinged to the rear wall of the upper compartment, and a rod passing through the front of the box and provided with a scale, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

IRA L. MARTIN.

Witnesses:
CARRY S. MARTIN,
B. H. SPRINGER.