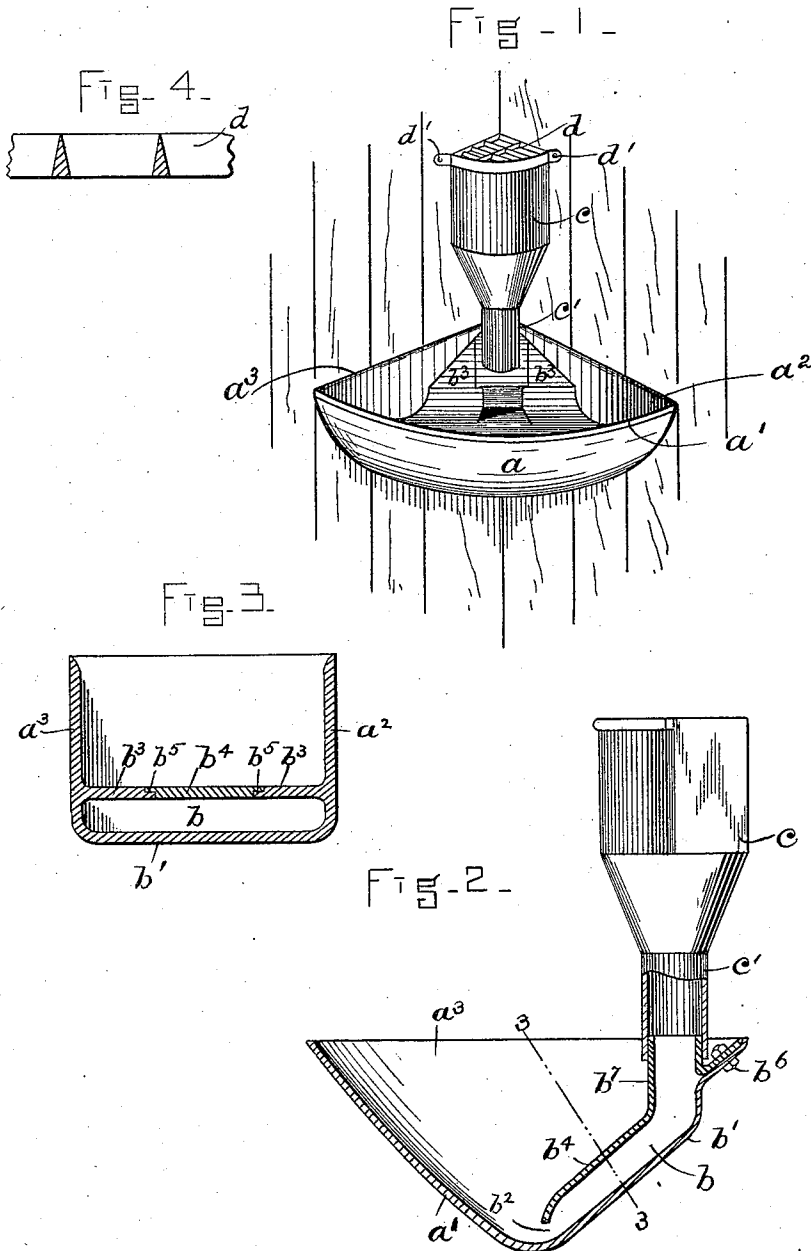


(No Model.)

C. B. EMERY.  
FEED TROUGH.

No. 574,312.

Patented Dec. 29, 1896.



WITNESSES—

Wm. H. Varnum.

Geo. H. Cushman

INVENTOR—

Charles B. Emery  
by C. L. Gooding  
his atty.

# UNITED STATES PATENT OFFICE.

CHARLES B. EMERY, OF BOSTON, MASSACHUSETTS.

## FEED-TROUGH.

SPECIFICATION forming part of Letters Patent No. 574,312, dated December 29, 1896.

Application filed May 8, 1896. Serial No. 590,689. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES B. EMERY, a citizen of the United States, residing at Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented a new and useful Improvement in Feed-Troughs, of which the following is a clear, full, and exact specification.

The object of my invention is to provide a novel, simple, and economical feed-trough in which the feed is gradually fed to the trough from a source of supply in such manner that waste is prevented.

To this end the invention consists in the novel features of construction and arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved feed-trough. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a transverse section of the feed-trough on the line 3 3 of Fig. 2, and Fig. 4 is a detail cross-section of the grating-cover.

In the drawings, the reference-letter *a* indicates the feed-bowl of the trough, the front wall of which is curved, as shown at *a'*, and which inclines from the top to bottom, as shown. The side walls *a<sup>2</sup>* and *a<sup>3</sup>* are arranged at a right angle to each other, so that the feed-trough bowl is substantially triangular in configuration and may accurately fit into the corner of a stall.

The rear bottom *b'* of the bowl is inclined, as shown, so that the feed may pass thereover with the required freeness from the source of supply to the end at which it is taken by the animal. At a suitable distance above the rear bottom *b'* inwardly-extending flanges *b<sup>3</sup>* are provided, in the upper edges of which are formed recesses *b<sup>5</sup>*. Fitting into said recesses *b<sup>5</sup>* and supported by the flanges *b<sup>3</sup>* is a partition *b<sup>4</sup>*, which may readily be removed from the bowl for the purpose of cleaning out the bowl. While I have shown the cover as fitting recesses in and supported by flanges *b<sup>5</sup>*, extending from the side walls of the trough, I do not wish to confine myself to the specific form, as other means for supporting the partition in proper position in the trough will suggest themselves and be within the scope of my invention.

The partition *b<sup>4</sup>* is formed at its upper end with a tubular throat *b<sup>2</sup>*, from which extends a tubular neck *c<sup>2</sup>*, the rear wall of which is turned outwardly, as shown at *b<sup>3</sup>*, to form a lug through which and the wall of the trough a bolt *b<sup>6</sup>* is passed and confined to secure the removable partition firmly in place when in use.

Fitting upon the tubular neck *c<sup>2</sup>* of the removable partition is the correspondingly-tubular lower end *c'* of the hopper *c*. The hopper outwardly has substantially the same configuration as the trough *a*, that is, it has a curved front wall and two converging side walls, as will be apparent from Figs. 1 and 2 of the drawings, so that it also may accurately fit in the corner of a stall.

The letter *d* represents a grated cover, the bars of which are triangular in shape and disposed with the pointed side upward to avoid any lodgment of grain on the bars.

The provision of the partition *b<sup>4</sup>*, which, as shown, extends nearly but not quite to the wall joining the front and rear walls, forms a chamber *b* for the passage of feed, having a mouth *b<sup>2</sup>*, from which the feed emerges to the trough.

It will be obvious that the tubular part *c'*, which feeds the tubular neck of the removable partition, may be extended, forming a pipe, to any height, so that, if desired, the trough may be filled from any floor or bin above the stall-floor; also, that the specific hopper may be omitted and the feed charged into the open upper end of the extended pipe *c'*.

The feed in passing to the front, at which the animal takes it from the trough, passes through the throat *b<sup>2</sup>*, along the chamber *b*, formed by the bottom *b'* and the partition *b<sup>4</sup>*, and emerges at the mouth *b<sup>2</sup>*, as will be apparent.

By my invention I provide a feed-trough in which the food is delivered gradually to the point where it is taken by the animal, thus preventing any liability of waste, which is often occasioned by the animal's tossing the feed about and out of the trough, the partition by which this gradual feed is effected being readily removable, so that the trough may be properly cleaned, and provided with a tubular neck adapted for connection with a source of supply, which may be a hopper

arranged in proximity to the feed-trough bowl, as shown in the drawings, or a pipe extending to a floor or bin above the stall-floor. This is especially convenient, as in some cases  
5 it is desirable to have a hopper in the stall with the feed-trough, in which case the food is stored in the hopper and bed, as may be required. Under other circumstances it may be desirable to supply a trough from a bin or  
10 other source located on a different floor.

Except as otherwise specified in the claims appended hereto I do not confine my invention to the details of construction described.

Having thus described my invention, what  
15 I claim is—

1. In a feed-trough, the combination with a bowl, of a removable partition secured thereto and provided at its upper end with a tubular neck adapted to connect with a source  
20 of supply substantially as described.

2. In a feed-trough, the combination with a bowl, of a partition having at its upper end a tubular neck provided with a flange adapted to be removably secured to the bowl whereby  
25 said partition may be removed, said tubular neck being adapted to connect with a source of supply, substantially as described.

3. In a feed-trough, the combination with a

bowl, of inwardly-extending flanges provided with recesses on their opposing faces, a removable partition supported by said flanges and fitting said recesses and formed at its upper end with a tubular neck for connecting with a source of supply, and means for removably securing said partition to said bowl,  
30 substantially as described. 35

4. In a feed-trough, the combination with a bowl, of a removable partition provided at its upper end with a tubular neck, a flange extending from said neck and detachably secured to the bowl, and a feeding-hopper removably connected with said tubular neck,  
40 substantially as described. 45

5. In a feed-trough, the combination of a bowl having a downwardly-inclined bottom, a partition arranged in parallelism with said inclined bottom and formed at its upper end with a tubular neck, a feed-hopper fitted on said neck and provided at its upper end with a grating comprising bars triangular in cross-section having their angular sides arranged  
50 uppermost, substantially as described.

CHARLES B. EMERY.

Witnesses:

GEO. H. CUSHMAN,  
WM. H. VARNUM.