

(No Model.)

E. B. FRENCH.
FEED TROUGH.

No. 473,735.

Patented Apr. 26, 1892.

Fig 1.

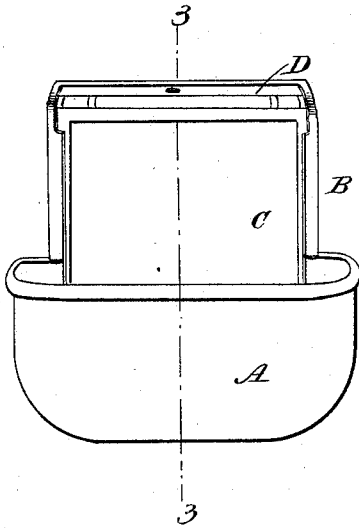


Fig 2.

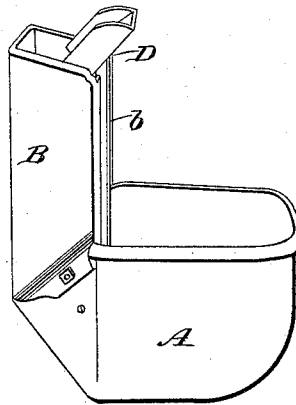


Fig 4.

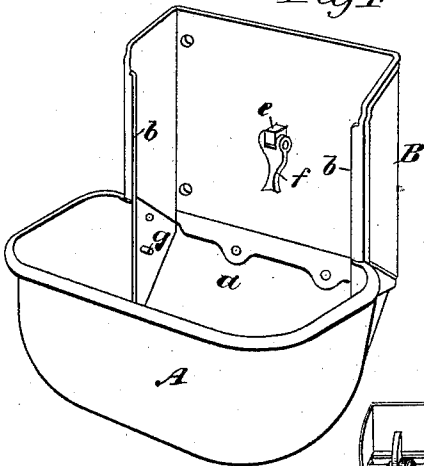


Fig 3.

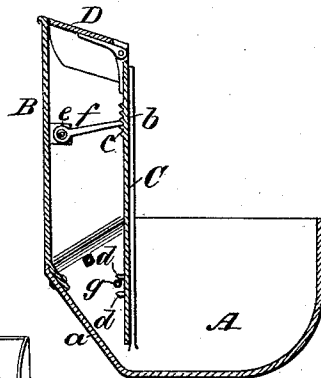
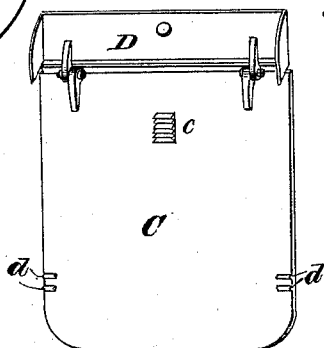


Fig 5.



WITNESSES:

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EARL B. FRENCH, OF OAKLAND, CALIFORNIA.

FEED-TROUGH.

SPECIFICATION forming part of Letters Patent No. 473,735, dated April 26, 1892.

Application filed August 12, 1891. Serial No. 402,414. (No model.)

To all whom it may concern:

Be it known that I, EARL B. FRENCH, of Oakland, in the county of Alameda and State of California, have invented a new and Improved Feed-Trough, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a front elevation of my improved feed-trough. Fig. 2 is a perspective view showing the lid of the trough open. Fig. 3 is a vertical transverse section. Fig. 4 is a front perspective view showing the partition removed, and Fig. 5 is a rear view of the partition and the lid.

Similar letters of reference indicate corresponding parts in all the views.

The object of my invention is to provide a simple feed-trough in which the feed will be supplied gradually, so that the animal will be compelled to eat his food slowly and thoroughly masticate it, thereby securing the full value of the food.

My invention consists of a feed bowl or trough having a side reservoir separated from the bowl by a removable partition and ratchet mechanism for holding the partition in position in the reservoir, all as will be hereinafter more fully described.

The feed-trough consists of three principal parts: the bowl A, the reservoir B, and the partition C. The bowl A, which is oblong in form, is provided with a rounded bottom and an inclined rear side *a*. To the inclined rear side is secured the reservoir B by means of bolts or rivets, as shown. The upper portion of the reservoir B is inclined and the forward portion is provided with inwardly-turned ledges *b* for receiving the partition C, which is slid down behind the said ledges.

To the upper end of the partition C is hinged the lid D, which is open-ended and is provided with end flanges adapted to shut down inside of the reservoir. The cover D, when swung open, as shown in Fig. 2, serves as a chute for conducting the grain to the hopper. The inner face of the partition C is provided with a ratchet *c* and with two pairs of lugs *d*. To a lug *e*, projecting forward from the back of the reservoir, is pivoted a pawl *f*, which is adapted to engage the ratchet *c* on the inner face of the partition, and studs *g*

project inwardly from the sides of the reservoir within the ledges *b*. These studs are arranged with reference to the lugs *d*, so that when the partition is pushed inwardly the said lugs *d* will engage the studs *g* and prevent the partition from further movement in that direction and from being raised. When the partition is inserted in its place in the reservoir, a small space is left between the lower end thereof and the bottom of the reservoir for the escape of feed from the reservoir into the bowl A, and the pawl *f* occupies an inclined position in the reservoir, as shown in Fig. 3, so that when the partition is pushed inwardly by the animal the tendency is first to raise it by the action of the pawl and thus increase the flow of feed to the bowl of the trough. A further movement brings the lugs *d* into engagement with the studs *g* and prevents any further lifting of the partition. When the trough is used for feeding roots and vegetables, the partition C is removed.

It will be observed that my improved feeding-trough is to a certain extent automatic in its action, while at the same time it is controllable by the animal feeding from the trough.

The movement of the partition by the animal prevents the trough from clogging, and the adjustment of the partition provides for different kinds of food.

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

1. In a feed-trough, the combination, with a bowl, of a hopper at one side of the bowl, and having a vertically movable and swinging partition extending down to within a short distance of the bottom of the bowl, substantially as and for the purpose set forth.

2. In a feed-trough, the combination, with a bowl, of a hopper at one side of the bowl, a swinging partition in the front of the hopper and extending down to within a short distance of the bottom of the bowl, and means for imparting a vertical movement to the said partition when pressure is applied thereto to swing it inward, substantially as described.

3. In a feed-trough, the combination, with a bowl and a hopper at one side of the bowl and discharging into the said bowl, of a cover having flange sides and open ends and hinged

to the front of the hopper, whereby the cover is made to serve both as a cover and a chute, substantially as described.

4. The combination, with the bowl A, provided with the reservoir B, of the partition C, furnished with the ratchet *c*, and the pawl *f*, connected with the reservoir and adapted to engage the ratchet, substantially as specified.

10 5. The combination of the bowl A, the reservoir B, provided with the studs *g*, the partition C, provided with the ratchet *c* and lugs

d, and the pawl *f*, adapted to engage the ratchet, substantially as specified.

6. The combination of the bowl A, the reservoir B, having inwardly-turned edges *b* and the studs *g*, the partition C, provided with the ratchet *c* and lugs *d*, and the lid D, hinged to the partition C, substantially as specified. 15

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Witnesses:

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