## A. M. SMITH.

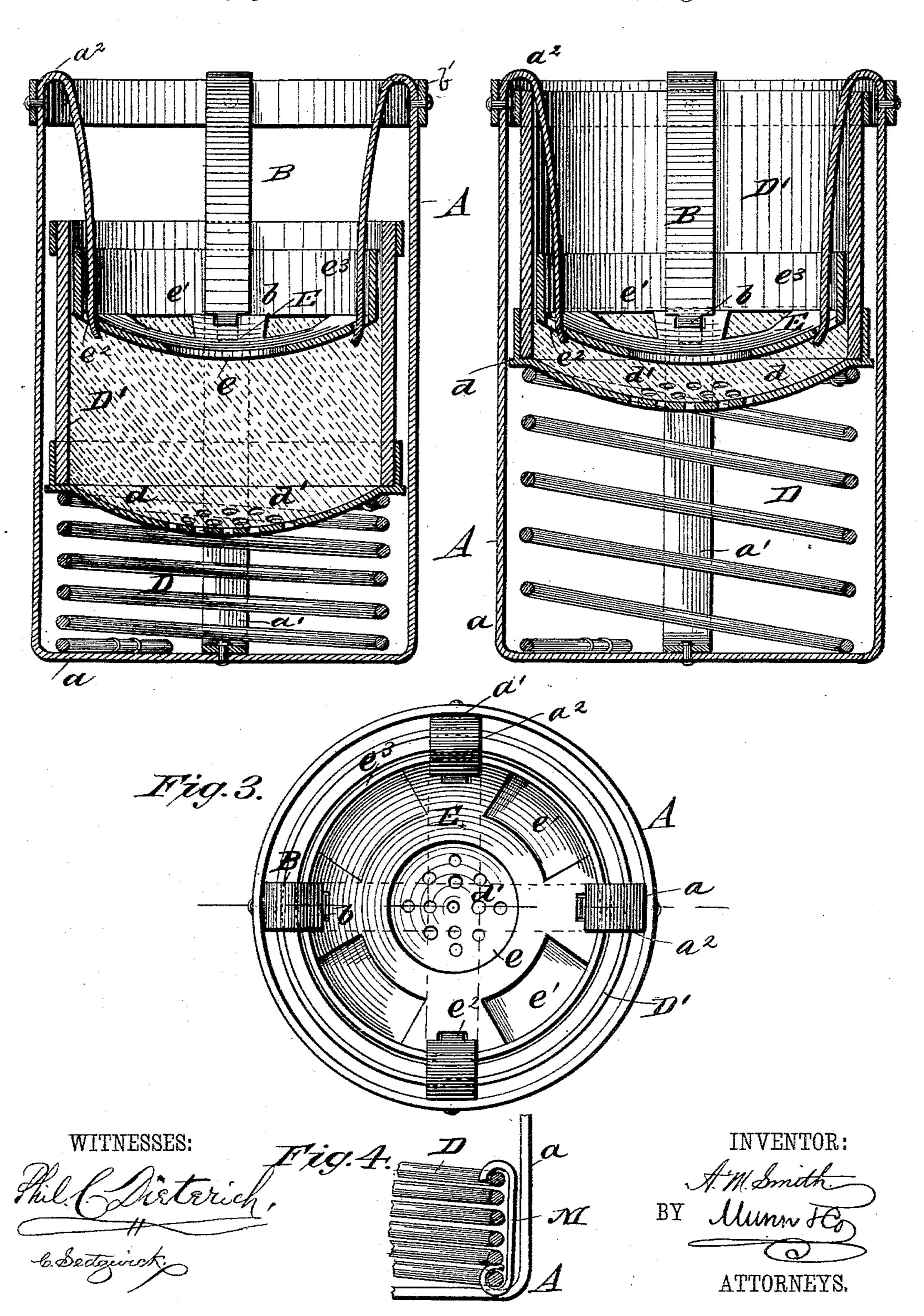
## FEED BUCKET.

No. 387,821.

Patented Aug. 14, 1888.

Fig.I.

Tig.2



## United States Patent Office.

ALBERT M. SMITH, OF WESTERLY, RHODE ISLAND.

## FEED-BUCKET.

SPECIFICATION forming part of Letters Patent No. 387,821, dated August 14, 1888.

Application filed December 23, 1887. Serial No. 258,811. (No model.)

To all whom it may concern:

Be it known that I, ALBERT MORTIMER SMITH, of Westerly, in the county of Washington and State of Rhode Island, have invented a new and Improved Feed-Bucket, of which the following is a full, clear, and exact description.

My invention relates to an improvement in feed-buckets specially designed for horses, and has for its object to provide an economical, simple, and durable bucket, wherein ample ventilation will be provided, and wherein, also, the horse will be unable to obtain more feed at a time than he can conveniently eat,

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out

in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a central vertical section through the bucket when substantially filled with grain or other food, and Fig. 2 is a similar view illustrating the position of the parts when the bucket is substantially empty. Fig. 3 is a plan view, and Fig. 4 is a detail section illustrating the locking device.

In carrying out the invention, A represents a frame, consisting, essentially, of the two Ushaped metal strips a and a, the said metal being preferably a spring metal—such as brass or steel—having their horizontal members crossed centrally and secured to one another in any convenient manner, whereby one

strip is at right angles to the other.

The vertical members of the several U40 shaped strips are bent over upon themselves inward, as illustrated at a², the said bend being made at a point in the strips which is designed to represent the top of the bucket. The ends B carried over are projected perpendicularly downward a distance preferably equaling less than half the height of the bucket, and are provided upon their extremities at the center with an integral lug, b, as illustrated in Figs. 1 and 2. The frame is completed by passing a ring, b', around the vertical members at the top and uniting the ring and members thereto in any suitable manner.

In the lower portion of the frame a spiral spring, D, is placed, resting upon the horizontal members of the strips a a', either secured 55 thereto or simply laid thereon, as in practice it may be found most desirable. The spring is, however, in any event allowed to expand freely upward. Upon the spring the bottom d of a cylindrical feed-receptacle, D', is made 60 to bear, the body of which receptacle is preferably made of wood and of a diameter to permit free vertical play in the frame. The bottom of the feed-receptacle is preferably of metal-galvanized iron, for instance-being 65 more or less dished, and provided centrally with a series of perforations, d', or having one large aperture cut therein and covered with a strip of wire-gauze or similar reticulated material. The feed-receptacle in its move- 70 ments within the frame slides between the frame proper and the inwardly-inclined arms B, ample space being provided for that purpose, and the said arms being so carried as not to come in contact with the said recepta- 75 cle, as illustrated in Figs. 1 and 2.

Within the feed-receptacle a circular, more or less cup-shaped, detachable partition, E, is provided, of less diameter than said receptacle, having a central opening, e, a series of slots, 80 e', near the periphery, and an aperture, e<sup>2</sup>, intervening each of the aforesaid slots. The partition E is further provided with an upwardly-

extending peripheral flange, e3.

In operation, when it is desired to fill the 85 feed-receptacle, the partition E is revolved until the slots e' register with the several arms B, whereupon the partition is carried upward to the top of the bucket between the said arms and the frame. The grain or other feed 90 is now poured in the receptacle, the weight whereof compresses the spring. When the feed-receptacle has been filled, the partition E is allowed to drop down upon the grain and turned around until the lugs b upon the arms 95 B engage the apertures e<sup>2</sup>, as shown in Fig. 1. The bucket may be suspended from the head of the horse in any approved manner.

It will be observed that in order to obtain the feed the horse must bring his lips substantially in contact with the partition, and that the pressure exerted by the spring upon the receptacle will allow only a sufficient quantity of food to escape through the central opening,

e, and the slots e' to afford a good mouthful. It will also be observed by reference to Fig. 2 that the partition will always maintain the same relative position with respect to the feed 5 while any remains in the receptacle, since, as the feed is withdrawn, the spring forces the receptacle upward while the partition remains stationary.

A hook, M, may be pivoted upon the lower ic coil of the spring at each side to engage the upper coil, as shown in Fig. 4, and retain the spring in a closed position, or the hooks may be made to engage a flange upon the bottom of the receptacle, if found more desirable.

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

1. In a feed-bucket, the combination, with a frame having inwardly-extending arms, a 20 spring held in said frame, and a feed-receptacle resting upon said spring, of a detachable apertured partition held within the receptacle, substantially as and for the purpose herein set forth.

2. In a feed-bucket, the combination, with

a frame having integral inwardly-extending perpendicular arms, a spring supported in said frame, and a feed-receptacle provided with a ventilated bottom resting upon said spring, of a detachable partition held within 30 the receptacle provided with a central orifice and a series of peripheral slots, substantially as and for the purpose herein set forth.

3. In a feed-bucket, the combination, with a skeleton frame having the members thereof 35 bent inward at the top and provided with lugs at their extremities, a coiled spring supported in said frame, and a feed-receptacle provided with a ventilated bottom resting upon said spring, of a flanged detachable partition 40 held within said receptacle, provided with a central orifice, a series of peripheral slots, and apertures intervening said slots adapted to receive said lugs, substantially as and for the purpose herein set forth.

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Witnesses:

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