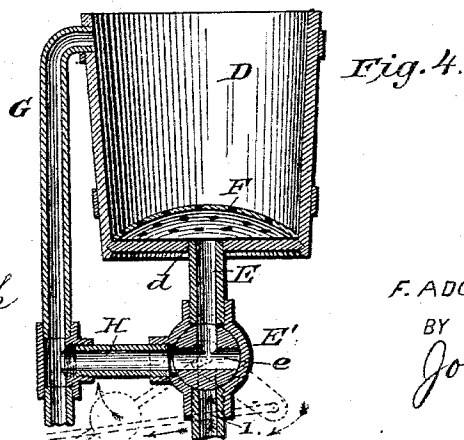
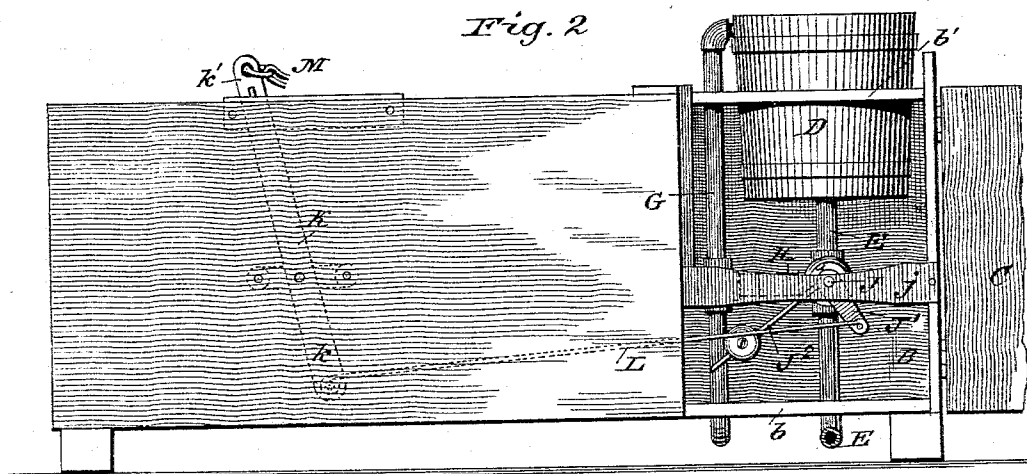
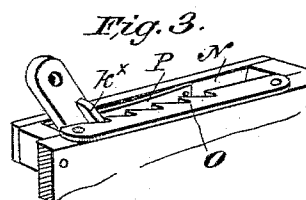
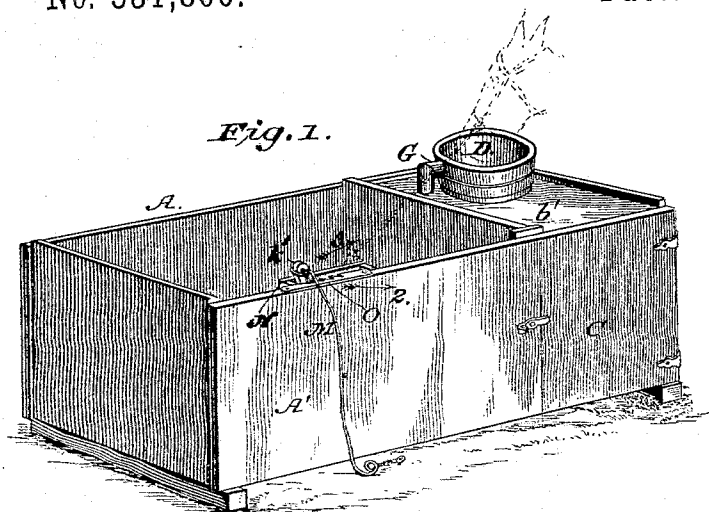


(No Model.)

F. A. KRIEGSTEDT.
STABLE BUCKET.

No. 531,800.

Patented Jan. 1, 1895.



WITNESSES:

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FRIEDRICH ADOLF KRIEGSTEDT, OF ALDEN, VIRGINIA.

STABLE-BUCKET.

SPECIFICATION forming part of Letters Patent No. 531,800, dated January 1, 1895.

Application filed April 16, 1894. Serial No. 507,752. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH ADOLF KRIEGSTEDT, residing at Alden, in the county of King George and State of Virginia, have
5 invented a new and Improved Stable-Bucket, of which the following is a specification.

My invention relates more particularly to that class of stable buckets, which have automatic means set in operation by the movement of the horse, to turn on and off the water supply, and it has primarily for its object to provide a bucket of this character having suitably arranged water feed and overflow means, as well as lever devices, all arranged
15 and combined to be set in operation only as the animal moves up to the bucket to drink, and which will not be set in operation by any other movement of the animal. Heretofore in devices of this kind, suitably arranged
20 valve operating lever devices have been provided, adapted to be set in operation by a pressing platform. Such devices, however, are open to the objection that the animal in its movements about the stable or stall frequently stands or walks over such pressing
25 platform when not desiring to drink, thereby setting in operation the valve-operating devices, and causing a great waste of water and unnecessary wear on the several parts of the mechanism. To overcome such objections, I
30 provide a valve operating mechanism, including an oscillating lever, to which the halter rope or tether strap is secured, and which is so arranged in connection with stop
35 or lock devices, that, unless the animal approaches the bucket and tries to reach it with his mouth, the pull action in any other direction will not shift or oscillate the lever.

A further object of my invention is to provide a bucket and feed devices therefor of a very simple and inexpensive nature, and which will positively and effectively serve for their intended purposes.

With other minor objects in view, my invention consists in such peculiar combination and novel arrangement of parts, as will hereinafter be first described in detail and then be pointed out in the appended claims, reference being had to the accompanying drawings, in
50 which—

Figure 1 is a perspective view of my improved stable bucket. Fig. 2 is a front view

thereof, parts being shown in dotted lines. Fig. 3 is a detail perspective view of the detent or lock devices hereinafter referred to, 55 and Fig. 4 is a detail section taken through the bucket proper and the feed and valve pipes.

In the practical construction of my improved stable appliance the same comprises a body portion A, which may be in the nature of a trough or box-like member, as shown, or consists merely of a front board A', which connects at one end with a chamber or compartment B, in which are located the valved pipes presently referred to and which has
60 preferably a hinged door C, such compartment having a bottom *b* and a top portion *b'* whereby the said valved pipes are the more readily protected from the cold in winter. Seated in the top portion *b'* and with its bottom extended therethrough is the bucket proper D, which in its general appearance is of the usual stable bucket pattern, and such bucket has an opening *d* in its bottom, through which projects the upper end of the feed or
65 water pipe E, which may connect with a water main, or with a reservoir or other supply, and to prevent squirting, and hay or straw from passing down into such pipe, an inverted dish-shaped perforated disk F is fitted in the bottom of the bucket over the water inlet, as
70 clearly shown in Fig. 4. At the upper end the bucket D has an overflow pipe connection G, which extends down through the bottom *b* and discharges the waste water into a waste or gutterway usually provided to receive it. 85

The feed pipe E has a valve chamber E' in which operates a three-way valve *e*, adapted when set in the position shown in full lines in Fig. 4 to close off the water supply entering in the direction indicated by the arrow 1
90 and to open up a communication between the bucket D and an off-take or lateral H, which connects the said pipe E with the waste or overflow pipe G; but when such valve is shifted to the position shown in dotted lines in such Fig. 4, it will close off the off-take H and open up a direct communication between the feed pipe proper and the bucket D. The shifting of this valve is accomplished in one
95 direction (the cut-off) by automatic means and in the other by the animal as it approaches the bucket to drink, and for such purpose, the valve is fixedly secured on a rock 100

shaft J, journaled at its free end in a bearing timber j, and at such end it has a crank arm J' and weighted arm J² arranged to normally rock the said shaft to the position shown in Figs. 2 and 4.

At the rear of the front or division board A' is pivoted a lever K, the lower end k of which has a pitman rod L, which connects with the crank J', while the upper end k' extends slightly above the board A', and has an eye to which is connected the halter chain or rope M, such end also being held to play in a guide N, having stops at the ends which properly limit the throw of such lever. At one side the lever has a detent k^x, which is adapted to engage with a toothed or lock plate O on the top of the board A', it being normally pressed outward in engagement with such toothed plate by a flat spring plate P.

It will be noticed by reference to Fig. 1, the board A' is disposed somewhat in advance of the bucket D, and hence should at any time the horse pass or repass at the front, or pull upon the chain or rope M, in a direction outward (as indicated by arrow 2) from the board A, it will cause the detent on the lever K to tightly engage the lock plate and thereby hold such lever from movement and the valve from operation. Should however the horse put his nose toward the bucket D, he will draw the lever away from the notched plate; and as the chain M is in practice just of a length sufficient to allow the horse to place his head in the bucket, when the lever is pulled forward, it follows that as the pull is in the direction indicated by arrow 3 the lever and the valve shaft will be operated, to set the valve to an open position (see dotted lines Fig. 4), where it will remain so long as the horse keeps on drinking. It is manifest that so soon as the horse steps back the counter-weight on the valve rock shaft will reset the valve and lever K to their normal positions.

From the foregoing description taken in connection with the drawings, it is thought the advantages of my improvement will readily appear. As the bucket proper is of the same size and shape of the ordinary bucket the animal will quickly learn the action, and owing to the simple manner in which the inflow and overflow pipes and valves are arranged, the same will serve to easily operate. The detent and lock devices provide a simple and effective means for holding the valve devices from operation in case the horse pulls on the halter chain as he steps backward. As the bucket is left entirely dry after each operation, it cannot freeze. It will also be obvious that the weight as also the crank arm on the rock shaft may be adjustably connected with such shaft, whereby to regulate the amount of water entering the bucket.

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

1. As an improvement in stable buckets of the kind described, the combination with the bucket, the feed and overflow pipes, and the off-take connecting such pipes, of a three-way valve, operating in the feed and off-take pipes, having a rock shaft weighted to rock in one direction, and having a crank member projected in an opposite direction, and an oscillating lever, having a pitman connection at its lower end with the crank member, and having at its upper end a holder, chain or strap, all arranged substantially in the manner shown, whereby as the said chain or strap is pulled toward the bucket the lever will be oscillated to rock the shaft and shift the valve to open up the water feed, as set forth.

2. In a stable bucket, substantially as described, the combination with the main frame, the bucket, the water feed pipe having a valve provided with a rock shaft, said shaft having a counter weight to rock it to set the valve to close the feed pipe, and having a crank arm, of a lever pivoted on the frame at a point to one side and forward of the bucket and held to oscillate, said lever having a pitman connection between its lower end and the crank arm on the rock shaft, and having a halter chain or rope connected with its upper end, all arranged substantially as shown, and for the purposes described.

3. In a stable bucket, substantially as described, the combination with the main frame, the bucket disposed at a point to the rear of the front board of such frame, the feed pipe having a valve provided with a rock shaft, a counter weight connected to such shaft to rock it in one direction and having a crank arm, of an oscillating lever pivoted to the front board of the frame, having a pitman connection between its lower end and the rock shaft crank and having a halter rope or chain at its upper end, a toothed plate on the front board and a detent on the lever, adapted to normally engage such toothed plate, all arranged substantially as shown, whereby such lever will be held from movement, when the draft on the halter chain is outward from the front board, as and for the purposes described.

4. An improved stable appliance for the purposes described, comprising a main frame having a closed compartment at one end, a water bucket held on the top of such compartment with its lower edge projected therein, a feed pipe projected with its upper end into the bottom of the bucket, a strainer held over the bottom of the bucket, an overflow pipe connected with the upper end of such bucket, a lateral or off-take connecting such overflow and the main feed pipes, and three-way valve operating in the main feed and off-take pipes, a rock shaft connected therewith, said shaft having a counterweight to rock it in one direction, and provided with crank arm, an oscillating lever pivoted at a point in advance of the bucket, a pitman connection between the lower end thereof and the crank arm, and a rope or halter chain connected to its upper

end, all arranged substantially as shown and for the purposes described.

5 In a stable appliance, substantially as described, the combination with the bucket, and the over-flow pipe of a feed pipe held to discharge into the bottom of the bucket, a branch pipe connecting such feed pipe with the over-flow pipe, a three-way valve operating at the juncture of the feed and branch
10 pipe, said valve having a rock shaft, provided with a counter-weight to normally rock it and

the valve in one position, and lever mechanism connected with such rock shaft arranged to be operated to rock such shaft reversely as the animal places its head in the bucket, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

F. ADOLF KRIEGSTEDT.

Witnesses:

R. POWELL COAKLEY,
D. FRANK COAKLEY.