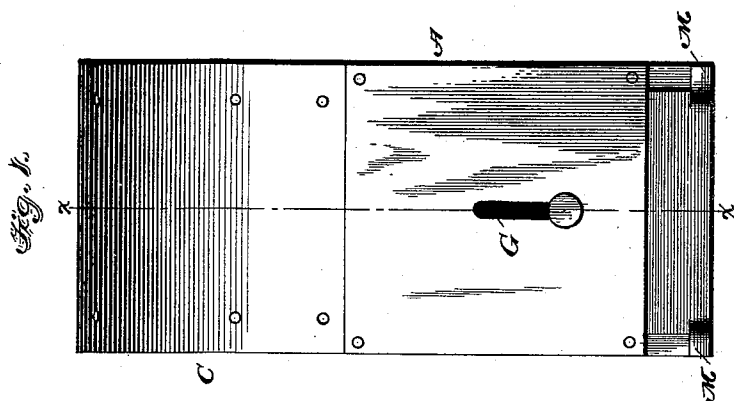
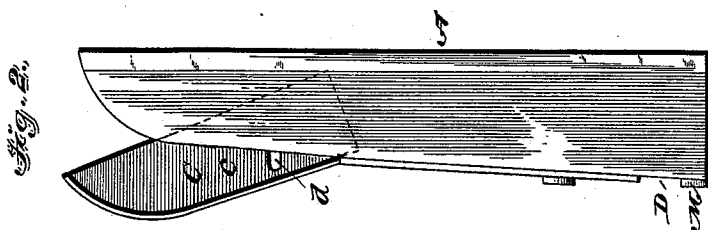
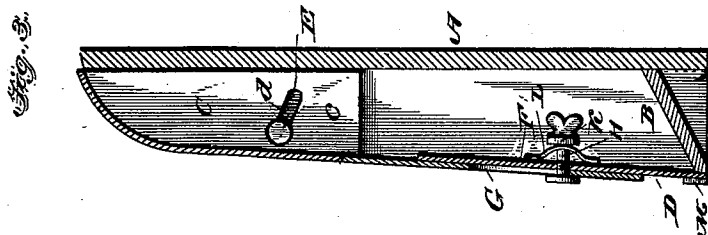


(No Model.)

A. A. MORRIS.
REGULATOR FOR FEED BOXES.

No. 484,039.

Patented Oct. 11, 1892.



Witnesses

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Inventor

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By *his* Attorneys

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UNITED STATES PATENT OFFICE.

ALFRED A. MORRIS, OF SANDY HILL, NEW YORK.

REGULATOR FOR FEED-BOXES.

SPECIFICATION forming part of Letters Patent No. 484,039, dated October 11, 1892.

Application filed December 26, 1891. Serial No. 416,215. (No model.)

To all whom it may concern:

Be it known that I, ALFRED A. MORRIS, a citizen of the United States, residing at Sandy Hill, in the county of Washington and State of New York, have invented certain new and useful Improvements in Regulators for Feed-Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to devices for regularly feeding grain to horses or cattle in limited quantities; and the object of the invention is to provide a simple and compact device which can be used on any ordinary feed-trough and used for either ground feed or grain in the kernel.

With these ends in view my invention consists in the peculiar construction and arrangement of parts, which will be hereinafter fully pointed out and claimed.

I have illustrated my invention in the accompanying drawings, in which—

Figure 1 is a front elevation; Fig. 2, a side elevation showing the cover open; and Fig. 3 is a vertical sectional view on the line *xx* of Fig. 1.

Like letters of reference denote corresponding parts in the several figures of the drawings, referring to which—

A designates the inclosing case or shell of my improved feed-regulator. This shell or casing is made of greater width at the bottom than at the top to insure the ready and easy passage of the contents without liability to clog up the box, and the bottom B is inclined from the rear to the front of the case or shell A for the purpose of facilitating the discharge of the feed.

The front of the case or shell A at the upper part thereof is cut away a suitable distance, and this space is closed by a cover C. The sides *c c* of this cover extend within the shell or casing A, and each side is provided with an inclined slot *d*, through which slots are fitted headed pivot-pins E, which are attached to the inner side walls of the case or shell A and which fasten the cover in place on the shell and permit the cover to be opened a limited distance sufficient for placing the feed in the receptacle. It will be no-

ticed that when the cover C is opened it, in connection with the upper end of the case or shell A, forms a hopper into which grain or feed can readily be poured.

The lower part of the front of the case or shell A is provided with an opening D opposite to the inclined bottom B of the shell, and said opening is adapted to be closed by a vertically-movable feed-slide F. A slot G is formed in the front of the case or shell above the discharge-opening D at the base thereof, and through this slot and the feed-slide extends a threaded bolt H, the head of which bears against the outer face of the shell A on both sides of the slot G therein. The inner threaded end of the bolt H receives a nut K, and a leaf-spring L is arranged around the pin H between the nut K and the inner face of the feed-slide, the ends of the spring bearing closely against the slide F and forcing it closely against the front of the case A. The feed-slide F is provided at its lower exposed edge with projecting lugs or ears M M, which extend over the edges of the sides of the case A and serve to keep the bottom of the slide from being forced into the interior of the case or shell.

The operation of my invention is as follows: The cover being moved outwardly to open the top of the case or shell, the desired amount of feed or grain can be readily poured into said case. The feed-slide is pushed up to the desired height and held in position by the leaf-spring L. As the animal consumes the grain or feed at the base of the shell the grain or feed in the case is fed downwardly by gravity.

It will be seen that I have provided a simple device for regularly feeding grain or feed which will prevent wasting of the same, which can be readily filled and is not liable to clog, and in which the quantity allowed to escape can be regulated by a slide which is positively and securely held in place.

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

1. In a feed-regulator, the combination of a longitudinally-tapered case or shell, a cover having its sides pivoted to and adapted to lie within the sides of the case, a vertically-movable feed-slide, and a spring for holding said

slide at any desired elevation, substantially as described.

2. In a feed-regulator, the combination of a longitudinally-tapered case or shell provided with an inclined bottom and having its front cut away at the upper and lower ends, a cover pivotally connected to the sides of the case and arranged to close the upper end thereof, a feed-slide arranged within the shell and adapted to close the opening at the base thereof, said slide having the projecting lugs which extend over the edges of the sides of the shell, and a spring for holding said slide at the desired elevation with relation to the bottom of the regulator, substantially as described.

3. In a feed-regulator, substantially as described, the longitudinally-tapered receptacle having the opening in the upper part thereof, the vertical cover having its upper end bent to close the upper end of the receptacle and provided with the sides which fit between the sides of the case and are formed with slots, the pivots passing through said slotted sides of the cover, and an adjustable gate at the lower discharge end of the receptacle, as and for the purpose described.

4. In a feed-regulator, the receptacle provided with the opening in the upper and front

part thereof, the vertical cover arranged to close the open front and top part of said receptacle and having the side pieces joined to the receptacle by a pin-and-slot connection concealed within the receptacle and adapted to permit of a limited outward adjustment of the cover, and a regulating-gate at the discharge-opening of the receptacle, as and for the purpose described.

5. In a regulator for feed-boxes, the combination of a receptacle provided with an inclined bottom and the slotted front, which is cut away at its lower end to form a discharge-opening, a regulating-gate arranged within and adapted to close the discharge-opening of the receptacle, said gate being provided with projecting lugs or ears, which ride against the front edges of the receptacle, a bolt connected to the gate and extending through the slot in the front of the receptacle, and a flat leaf-spring fitted around the bolt and having its ends bearing against the gate, substantially as described.

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

ALFRED A. MORRIS.

Witnesses:

ANDREW G. HAINES,
CHAS. T. BEACH.