

(No Model.)

T. L. BISSELL.  
AUTOMATIC TIME STOCK FEEDER.

No. 317,708.

Patented May 12, 1885.

Fig. 1.

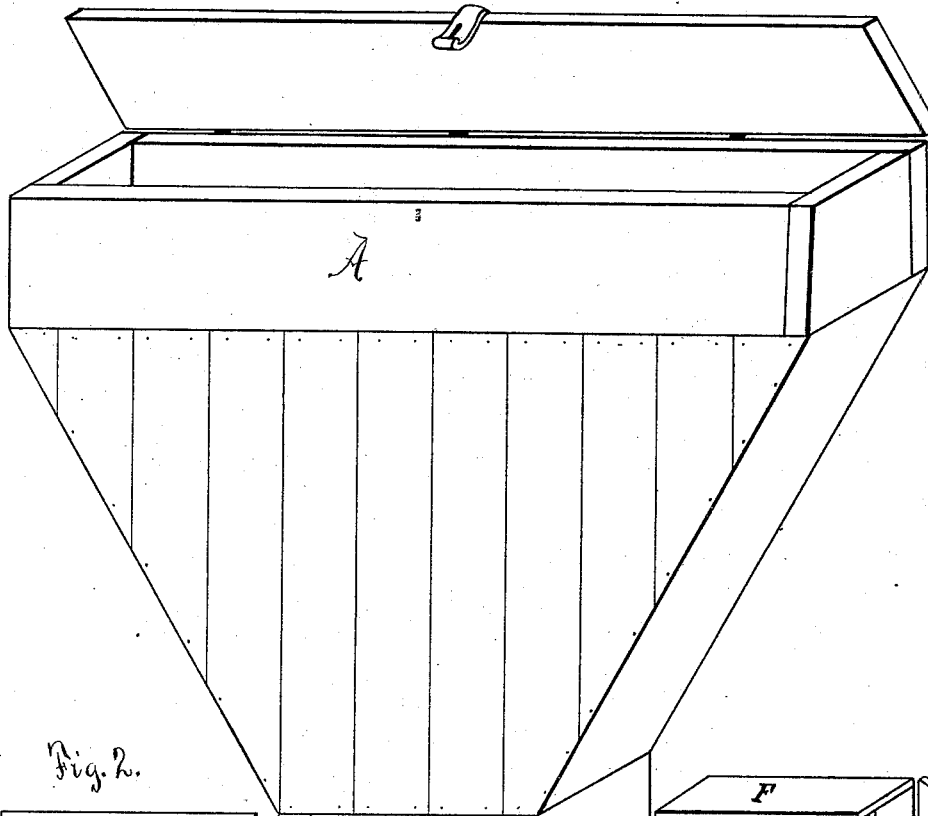
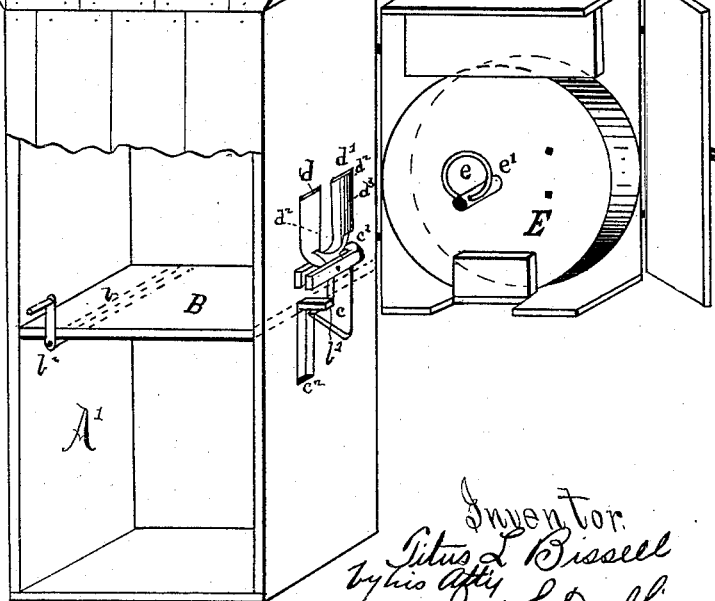
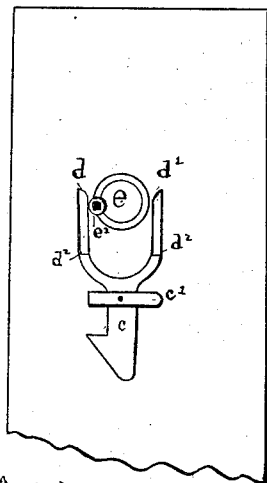


Fig. 2.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

TITUS L. BISSELL, OF CHARLESTON, SOUTH CAROLINA.

## AUTOMATIC TIME STOCK-FEEDER.

SPECIFICATION forming part of Letters Patent No. 317,708, dated May 12, 1885.

Application filed December 8, 1884. (No model.)

*To all whom it may concern.*

Be it known that I, TITUS L. BISSELL, a citizen of the United States, residing at Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Automatic Time Stock-Feeders; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to automatic time stock-feeders; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a perspective view of the same with the time-clock thrown back. Fig. 2 is a detail view showing the eccentric in connection with the trigger.

The object of the feeder is to insure the feeding of stock at times when the personal attention of the owner is impossible or inconvenient, and thus at once to enhance the comfort of the animal, save the time and labor of the master, and lessen the opportunities of stealing.

My feeder consists of a funnel-shaped box, A, with a square chute, A', having near its lower opening a trap-door, B, which is rigidly secured to and works on a horizontal bar, b, and when closed is held in place by a trigger, c, pivoted to the outer surface of the chute A' in a U-shaped bearing, c'. The trigger-rod b' is rigidly secured to the lower face of the said trap-door B, and projects from the end of same through slot c<sup>2</sup>, cut in the side of chute A'. The trap-door B is opened by pressing against the arm d of the trigger c, thus freeing the trigger-rod b' and allowing it to fall through the slot c<sup>2</sup>, cut for its passage in the side of said chute.

The power necessary to operate the trigger c is supplied by means of an eccentric, e, affixed to the winding arbor or shaft e' of an alarm-clock, E, and so adjusted as to act at the hour proposed for the alarm.

Secured vertically by hinges to the trigger side of the chute A' is the clock-case F, with its back toward the said chute. The clock E is

so placed in this case and in such a position that when the case is closed against the trigger-face of the chute A' the arm d of the trigger c is within the circle described by the eccentric e. The arms d and d' are made with flanges d<sup>2</sup>, so as to widen the same, and the inner faces of said arms are perfectly flat or slightly concave; but the said flanges d<sup>2</sup> have their inner face, d<sup>3</sup>, beveled, which makes more certain entrance for the eccentric e when the clock is shut against the said chute. The inner faces of the arms d and d' are made perfectly flat or slightly concave, so that when the pressure is applied the eccentric will not slip from contact with the arm d of the trigger c.

My invention should be used as follows: Close the trap-door B by putting the trigger-rod b' in the notch of the trigger c, fill the feeder, wind the alarm, and set for the hour when it is desired to feed the stock, close the clock-case, and hang the feeder over the trough. Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an automatic time stock-feeder, the combination, with the chute A', having the slot c<sup>2</sup>, the trap-door B, hinged on the horizontal bar b, having the crank-handle b<sup>2</sup> and the trigger-rod b', with trigger c, pivoted to the face of the slotted side of said chute A' in the U-shaped bearing c', and having arms d and d' and eccentric e, secured on the winding arbor or shaft e' of the alarm-clock E, and working between said arms and operating said trigger, substantially as shown and described.

2. In an automatic time stock-feeder, the combination of the alarm-clock E, bearing on its winding arbor or shaft e' eccentric e, eccentric e secured on said winding arbor or shaft e', and the trigger c, pivoted to the slotted side of chute A', its arms d and d' embracing said eccentric, its lower end holding up the trigger-rod b' of the trap-door B, all arranged to drop said trap-door, substantially as shown and described.

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

TITUS L. BISSELL.

Witnesses:

WM. C. MILLER,  
T. A. HEYNERIM.