

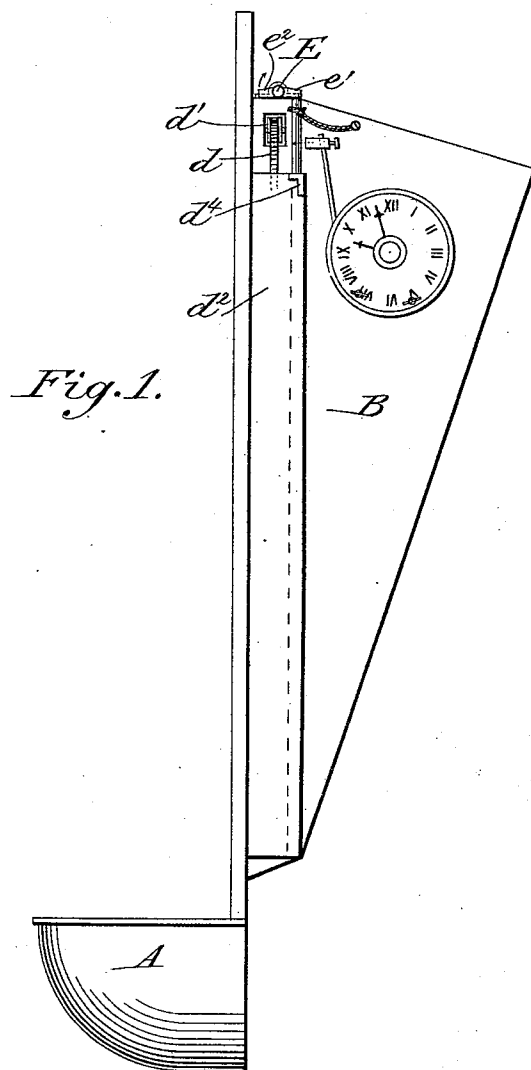
(No Model.)

2 Sheets—Sheet 1.

J. H. CARPENTER.
AUTOMATIC STOCK FEEDER.

No. 449,631.

Patented Mar. 31, 1891.



Attest:

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Inventor

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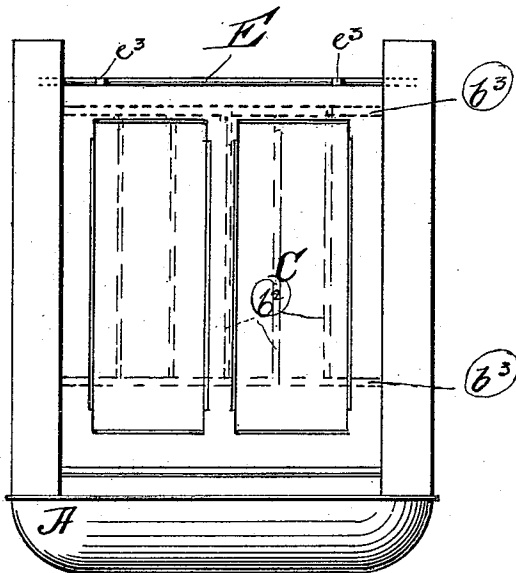


Fig. 2.

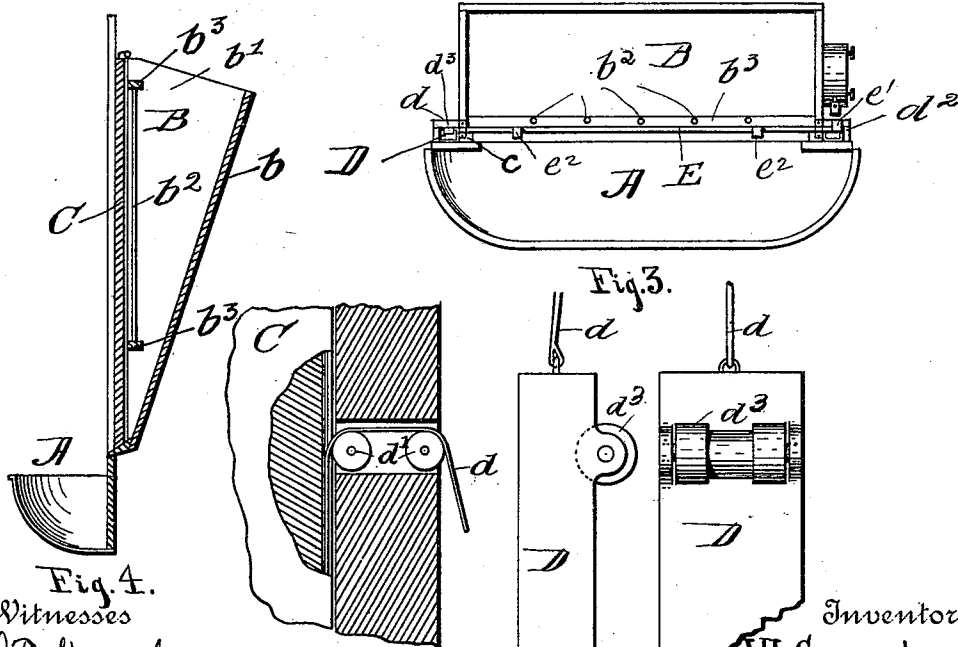


Fig. 3.

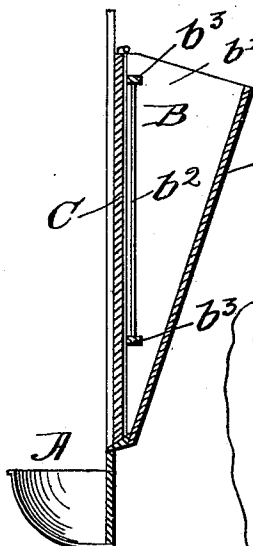


Fig. 4.

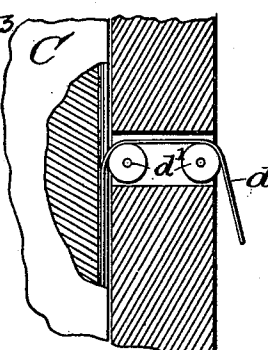


Fig. 5.

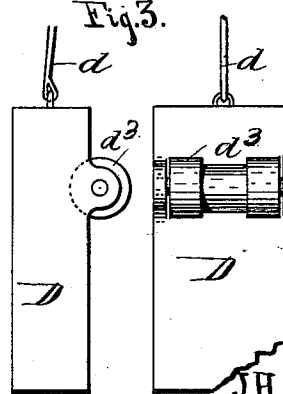


Fig. 6.



Fig. 7.

Witnesses
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UNITED STATES PATENT OFFICE.

JAMES HOWARD CARPENTER, OF WEST POINT, GEORGIA, ASSIGNOR OF ONE-HALF TO MORRIS HERZBERG AND JAMES A. ERWIN, OF SAME PLACE, CHARLES R. KING, OF ATLANTA, GEORGIA, AND KIT WILLIAMS, OF NEW ORLEANS, LOUISIANA.

AUTOMATIC STOCK-FEEDER.

SPECIFICATION forming part of Letters Patent No. 449,631, dated March 31, 1891.

Application filed September 18, 1890. Serial No. 365,433. (No model.)

To all whom it may concern:

Be it known that I, JAMES HOWARD CARPENTER, a citizen of the United States, and a resident of West Point, in the county of Troup and State of Georgia, have invented certain new and useful Improvements in Automatic Stock-Feeding Machines; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to devices for automatically exposing food at a set time and in a suitable position wherefrom the stock can readily eat the same, the exact time of such exposure being governed at will by the person having the care of the stock.

The invention consists of the several details hereinafter described in the specification, and enumerated in the claims.

In the accompanying drawings, Figure 1 is an end elevation of the device, showing the parts in their relative position previous to the exposure of the feed. Fig. 2 is a front elevation of the device, showing the sliding door closed and the other parts also in the position shown in Fig. 1. Fig. 3 is a plan of the device as shown in Fig. 2. Fig. 4 is a vertical cross-section of Fig. 1, showing the interior construction. Fig. 5 is a detail of the door-jamb, showing the double wheels carrying the cord. Figs. 6 and 7 are detail views, respectively in edge and side elevation, of the weight-carrying muffling-roller.

In the figures like reference-marks indicate corresponding parts in all the views.

A is the feed-trough, and B the hopper, both of which may be of any improved form applicable in the premises. The hopper B in the construction shown has a sloping back *b* and ends *b'*, the front being provided with a grating *b²*, which is composed of wood or metal bars vertically placed and at suitable distance apart, their upper and lower ends being suitably fastened in cross-bars *b³*, the

lower one of which cross-bars is preferably at a short distance from the bottom of the hopper, for a reason which will be obvious on the description of the operation of the device. The front of the hopper B is normally closed and access thereto by the stock prevented by means of a door C, which in the construction shown slides in guides *c*, vertically arranged on the front of the hopper B. I do not confine myself, however, to the use of the sliding door opening by sliding upward, as it might open in any way that would not endanger the stock in any way. In opening, this door will be raised by the weights D, which are hung on the free ends of the cords *d*, the other ends of which cords are fastened to the edge of the door near its bottom, the same passing upwardly through a groove in the edge of the door, thence over the pulleys *d'*, and downwardly within the boxes *d²*. In order that the weights may not cause the usual rattling sound as they descend suddenly on the release of the door, a roller *d³* is employed, which is of rubber or other suitable material, and is carried and revolves between lugs projecting from the side of the weight which is most apt to hit the sides of the boxing in descending, and may obviously be duplicated on any or all sides, if desired.

The shaft E is journaled on the top of the hopper or in other suitable position thereon, and is adapted to revolve freely in its journals, except when held by the pin *e*, which rests upon a metallic plate *d⁴*, preferably on the top of the weight-box *d²*, its upper end resting under the end of the lever *e'*, which obviously prevents its revolution in a direction which would depress the end of said lever. The shaft E also has the oppositely-projecting levers *e²*, which press on the top end of the door C and prevent its upward movement, except at such time as the shaft E shall revolve to the extent necessary to cause the said levers to lie substantially parallel to the back side of the said door, when the weights D will force it upwardly. In the construction shown a clock is employed for the purpose of knocking the pin *e* out from un-

der the lever e' , the alarm-bell hammer being employed for that purpose, which, as is well understood, is caused to reciprocate at any time which may be set, the setting being performed by the movement of certain well-known devices incorporate in the movement for that purpose. I do not, however, confine myself to the particular means shown, as this might be equally well accomplished in many ways.

The operation of this device is as follows: The door C being closed, the feed, usually consisting of some ground or cereal food and hay or fodder, is placed in the order named in the hopper, the door being secured down in the manner as specified. The clock is then set to "strike" at the desired time, and as that time arrives will knock out the pin e , allowing the shaft E to revolve partially and the door to fly open, which will allow the ground or cereal food to descend the inclined bottom of the hopper, while the hay or fodder is retained therein by the bars exposed to view and ready access of the stock, said ground or cereal food falling into the feed-trough.

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

1. In a stock-feeder, the combination of the hopper, the sliding cover, the rollers journaled in the sides of the hopper, the weights

attached to the lower end of the door by cords passing over the rollers, the shaft journaled between the upper ends of the sides of the hopper and provided with levers adapted to engage with the top edge of the door, and the pin seated with its lower end on a sustaining-bracket and having a lever of the shaft resting on its upper end, substantially as described.

2. In a device of the class specified, the hopper B, and the door C, normally forming one side of said hopper and adapted to be opened, and the shaft E, having levers e^2 bearing on or over the door, and means for preventing the revolution of said shaft, substantially as and for the purpose specified, and a feed-trough suitably placed.

3. In a device of the class specified, the hopper B, and the door C, normally forming one side of said hopper and adapted to be opened, and the shaft E, having levers e^2 bearing on or over the door, and means for preventing the revolution of said shaft, consisting of the lever e' , secured thereto, and the pin e , substantially as and for the purpose specified, and a feed-trough suitably placed.

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

JAMES HOWARD CARPENTER.

Witnesses:

A. P. WOOD,
JOHN W. GREEN.