Jan. 16, 1923. 1,442,382.

O. M. BULLOCK.

AUTOMATIC FEED BOX.

FILED JAN. 25, 1921. 2 SHEETS—SHEET 1.

Fig. 1.

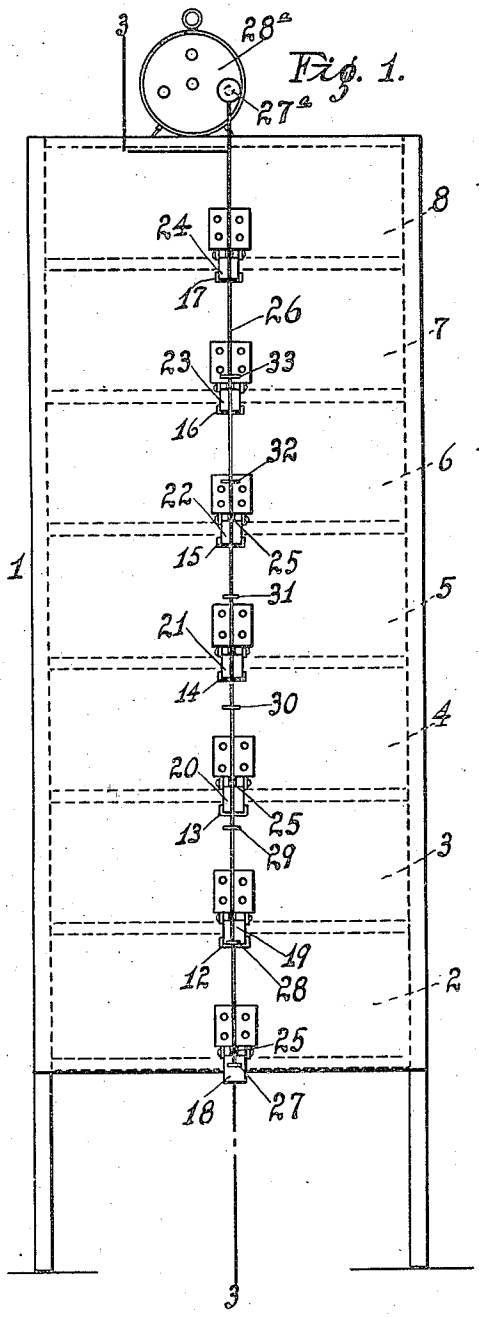
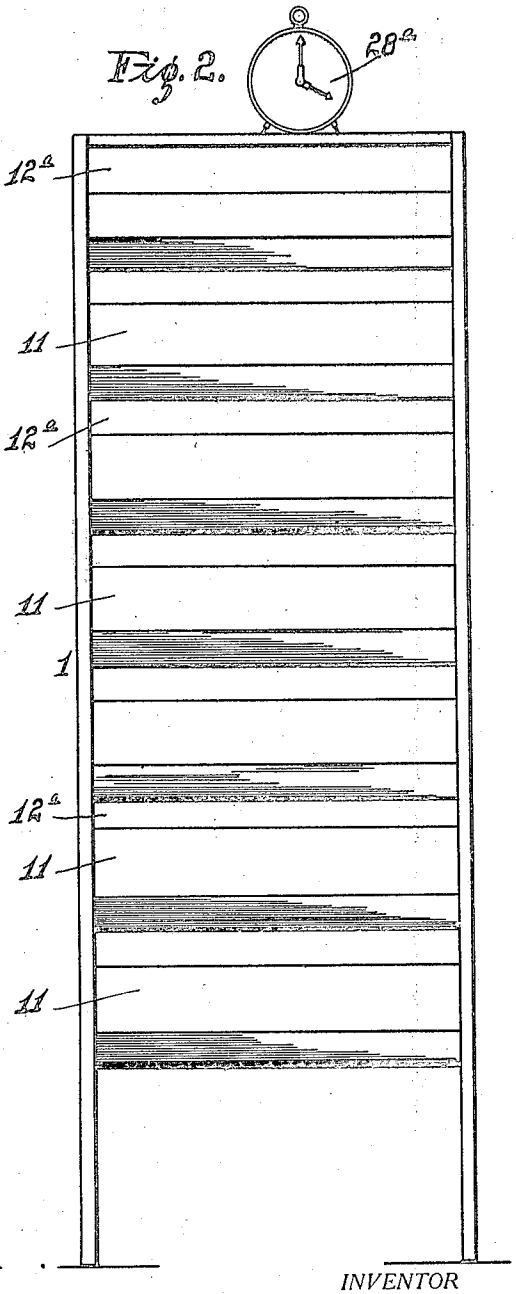



Fig. 2.




INVENTOR

Orin M. Bullock.

BY

Harry C. Schroeder

ATTORNEYS

Jan. 16, 1923. 1,442,382.

O. M. BULLOCK.

AUTOMATIC FEED BOX,

FILED JAN. 25, 1921. 2 SHEETS—SHEET 2.

Fig. 3.

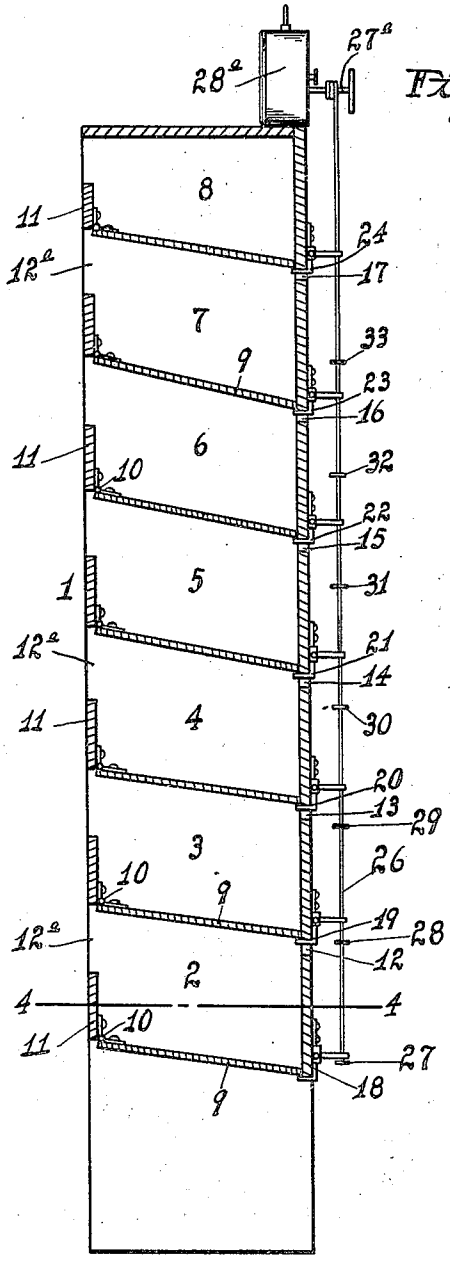
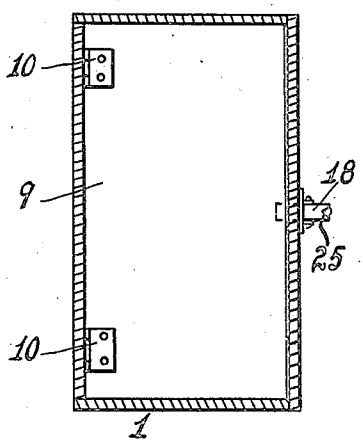



Fig. 4.




INVENTOR

Orin M. Bullock.

BY

Harry D. Schroeder

ATTORNEYS

Patented Jan. 16, 1923. 1,442,382

# UNITED STATES PATENT OFFICE.

ORIN M. BULLOCK, OF OAKLAND, CALIFORNIA.

## AUTOMATIC FEED BOX.

Application filed January 25, 1921. Serial No. 439,802.

*To all whom it may concern:*

Be it known that I, ORIN M. BULLOCK, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Automatic Feed Boxes, of which the following is a specification.

My invention is an automatic feed box which comprises a plurality of feed bins and automatic means for opening said bins successively at predetermined times to drop the feed therein on the ground.

Referring to the annexed drawings in which my invention is illustrated and which forms a part of this specification.

Figure 1 is a front elevation of my invention.

Figure 2 is a rear elevation of my invention.

Figure 3 is a vertical longitudinal section of my invention taken on line 3—3 of Figure 1.

Figure 4 is a horizontal section of my invention taken on line 4—4 of Figure 3.

In the drawing 1 indicates a casing which is divided into a plurality of superimposed feed bins 2, 3, 4, 5, 6, 7 and 8. The lower wall 9 of each bin is hinged by a hinge 10 to the lower edge of the rear wall 11 of the bin. The rear walls of the bin are about half the height of the bins, thus providing openings $12^a$ in the rear of the bins above said walls through which feed is placed in the bins. The front wall of the casing 1 is provided with a plurality of superimposed openings 12, 13, 14, 15, 16 and 17. Bell crank latches 18, 19, 20, 21, 22, 23 and 24 are pivoted to the front wall of the casing 1 so that one arm of latch 18 normally extends under the lower edge of the front casing wall and one arm of latches 19 to 24 inclusive normally project through the openings 12, 13, 14, 15, 16 and 17 respectively in engagement with the under side of walls 9 at their forward edges and hold said walls elevated, inclining slightly forwardly downwardly and the bins 2 to 8 inclusive closed. The outer end of the other arm of the latches 19 to 24 inclusive are provided with notches 25 to receive a vertical cord 26 secured at its upper end to the alarm spindle 27 of a standard eight day alarm clock 28, the alarm of which operates once each day for eight days, said clock being mounted on top of the casing 1. On the cord 26 are secured buttons 29, 30, 31, 32, 33, 34 and 35 under the latches 18, 19, 20, 21, 22, 23 and 24 respectively.

The operation of my invention is as follows:

The bins 2 to 8 inclusive being closed are filled with feed and the clock 28 is wound. The first day the alarm operates, the alarm spindle 27 winds the cord 26 thereon sufficiently to draw the button 29 into engagement with latch 18 and disengages the latch from the lower wall 9 of bin 2, which wall then drops by gravity on its hinge 10 and the feed in said bin drops on the ground. When the alarm operates the succeeding days the buttons 30, 31, 32, 33, 34 and 35 daily engage the latches 19, 20, 21, 22, 23 and 24 successively and the walls 9 of bins 3, 4, 5, 6, 7 and 8 drop on their hinges and the feed is dropped daily from said bins successively.

Having described my invention I claim:

1. An automatic feed box including a casing divided into a plurality of superimposed feed bins, the lower wall of each bin being hinged to its rear wall, a plurality of latches pivoted on the front wall of the casing and normally engaging the forward edge of said lower walls respectively and holding said walls elevated and closing said bins, an alarm clock on top of said casing, a cord secured to the alarm spindle of said clock, and buttons secured to said cord at different points to engage said latches successively from the lowermost to the uppermost latch and correspondingly release said latches from the lower wall of said bins so that said walls will drop successively and discharge the feed in said bins successively from the lowermost to the uppermost bin.

2. An automatic feed box including a casing divided into a plurality of superimposed feed bins, the front of said bins being closed by said casing and said casing having open-

ings communicating respectively with the rear of said bins, the lower wall of each bin being hinged at its rear to the rear of said casing, latches mounted on the front of said casing normally engaging the forward edges of the lower walls of said bins respectively and holding said walls in closed position, and means for automatically disengaging said latches from said lower walls to allow said walls to drop on their hinges and empty said bins successively from the lowermost to the uppermost bin.

In testimony whereof I affix my signature.

ORIN M. BULLOCK.