

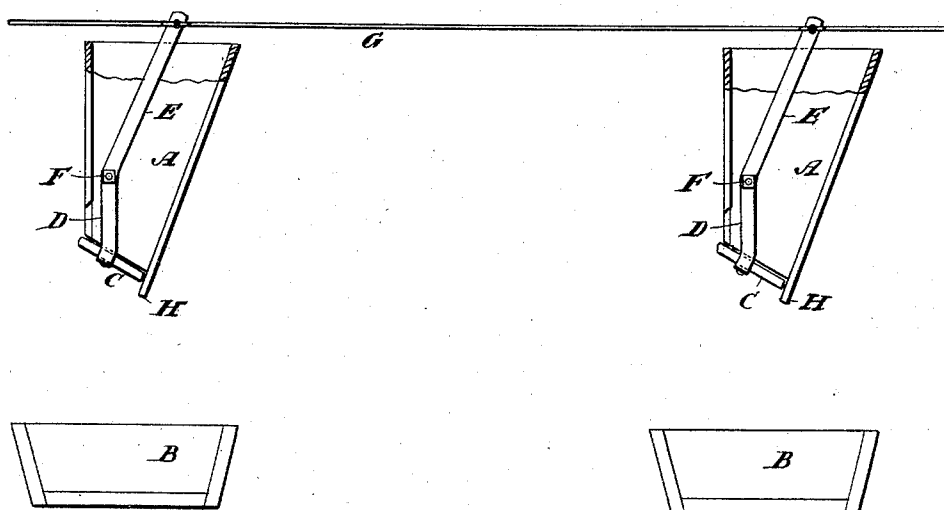
(No Model.)

G. F. ROBINSON.  
FEED TROUGH.

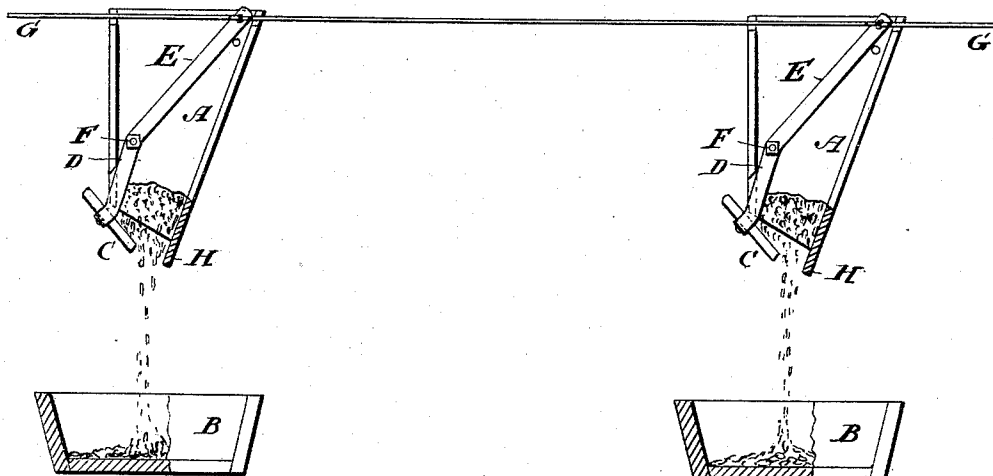
No. 476,071.

Patented May 31, 1892.

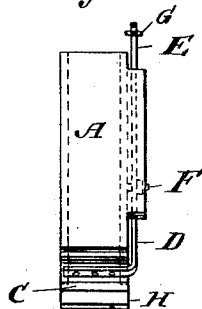
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Edward Wolff.*  
*William Miller.*

INVENTOR:  
*George F. Robinson.*  
BY  
*Van Santvoord & Hauff,*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

GEORGE F. ROBINSON, OF NEW YORK, N. Y.

## FEED-TROUGH.

SPECIFICATION forming part of Letters Patent No. 476,071, dated May 31, 1892.

Application filed May 21, 1891. Serial No. 393,616. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE F. ROBINSON, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Stock-Feeders, of which the following is a specification.

This invention relates to an improvement in feeders for live stock; and the invention consists in the details of construction set forth in the following specification and claim, and illustrated in the annexed drawings, in which—

Figure 1 shows the feeder closed. Fig. 2 shows the feeder open. Fig. 3 is an edge of a chute.

The chutes A (one or more) are placed over troughs or mangers B. The valves or lids C are each rigidly secured to the lower end of a lever comprising two arms D and E, fulcrumed by a pivot F on the chute A in such manner that when the lever is oscillated the valve C swings in the arc of a circle to open or close the mouth or lower end of the chute. The lever-arms E are connected by a rod or cord G with any suitable well-known mechanism (not shown)—as, for example, a magnet—so that when feeding-time arrives a clock (not shown) releases or devitalizes the magnet, allowing the lids C to swing or fall open, and all the troughs B are at the same time supplied with the proper amount of feed, after which the magnet or mechanism again comes into play and the cord or rod G draws the lids C shut. When the lids or valves C are in their closed position, the valve-supporting arm D hangs substantially vertical, so that the weight of the valve and of the feed thereon is supported or borne by the fulcrum or pivot F. Very little force is thus required to actuate

the lever for opening the valve, so that the power to be exerted by the rod or cord G on the actuating-arm E of the lever need not be large. As the lid or cover C swings up against the bottom of the chute to close the latter, said lid is able to readily close the chute without crushing any of the feed, which crushing might occur in case the lid had a sliding instead of a swinging movement. The chute has a flange H at its mouth, said flange being inclined toward the valve, so that the feed cannot rush laterally off the valve and shoot beyond the trough, but the feed is compelled to descend in a substantially vertical direction, so as to enter the trough.

What I claim as new, and desire to secure by Letters Patent, is—

A stock-feeder consisting of a chute and an oscillating lever pivoted intermediate its extremities and having a valve C rigidly attached to the lower extremity of the lever and swinging therewith in the arc of a circle when the lever is oscillated, said lower extremity of the lever standing, approximately, in a perpendicular position when the valve closes the discharge-mouth of the chute, and the chute being provided with a stop-flange H, inclined toward the valve to prevent lateral diversion of the feed and compel it to flow in a vertical direction between such stop-flange and the valve, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE F. ROBINSON.

Witnesses:

WM. C. HAUFF,  
E. F. KASTENHUBER.