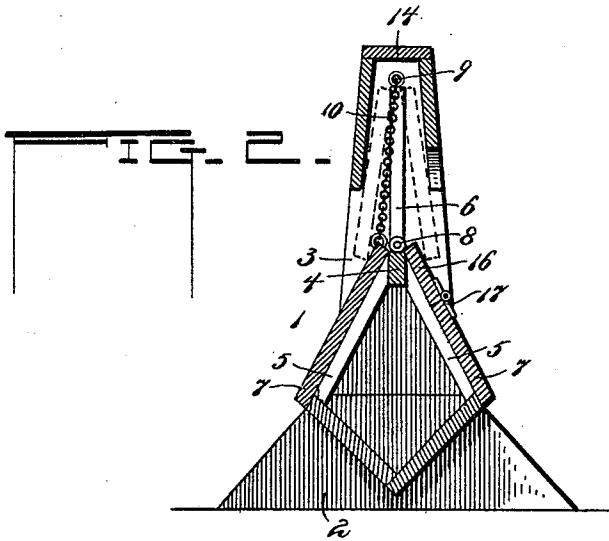
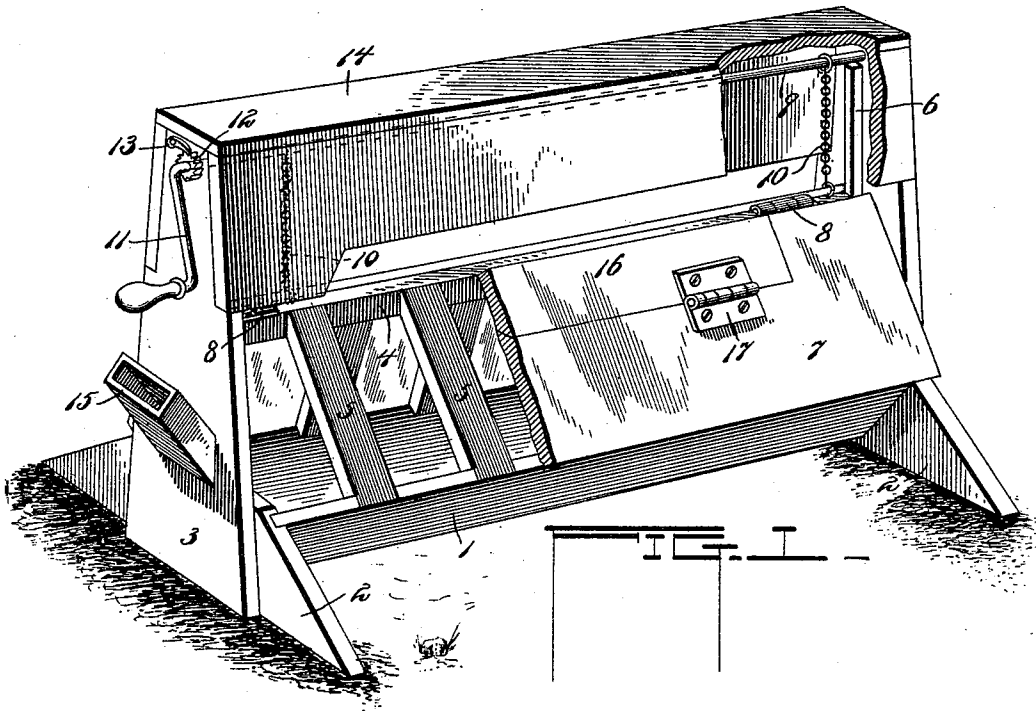


(No Model)

J. W. FARR.
FEED TROUGH.

No. 582,629.

Patented May 18, 1897.



Inventor

Witnesses

Milton O'Connell
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UNITED STATES PATENT OFFICE.

JOHN W. FARR, OF MARION, INDIANA.

FEED-TROUGH.

SPECIFICATION forming part of Letters Patent No. 582,629, dated May 18, 1897.

Application filed January 27, 1897. Serial No. 620,921. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. FARR, a citizen of the United States, residing at Marion, in the county of Grant and State of Indiana, have invented a new and useful Feed-Trough, of which the following is a specification.

The invention relates to improvements in feed-troughs.

The object of the present invention is to facilitate the simultaneous feeding of a number of head of live stock and prevent the same from interfering with each other, and also to provide simple and efficient means for simultaneously uncovering the several feeding-spaces of the trough and for again covering the same to prevent access of the stock thereto.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of the improved feed-trough with one of the covers partly broken away to show the interior arrangement. Fig. 2 is a cross-section through the same, showing in dotted lines the positions of the covers when elevated.

Similar numerals of reference designate corresponding parts in both figures of the drawings.

Referring to the drawings, 1 designates a trough of any desired length having a V shape in cross-section or composed of side walls set at an angle to each other and supported at their ends by cross-pieces 2, forming also, in addition to the ends of the trough, the supporting-bases for the trough. At each end of the trough 1 and secured to one of the base-pieces 2 is a vertical end standard 3, which is connected with the opposing standard by means of a horizontal bar 4, forming the ridge-piece of the trough. From the ridge-piece 4 the division slats or bars 5 extend downward in an inclined plane and attach at their lower ends to the upper edge of the trough-wall upon one side of the device. The slats or bars 5 are arranged in zigzag order, or, in other words, those on one side of the trough alternate with those on the other side for the purpose of preventing the

animals from interfering with each other when they insert their heads between division bars or slats from opposite sides of the trough. 55

Upon the inner surfaces of the standards 3 are vertical guides 6, and the trough is covered by two slanting doors or covers 7, which extend from the upper edges of the trough-walls upward and inward to the ridge-piece 4, at which point the covers 7 are connected by suitable hinges 8. The covers 7 are not attached to the trough nor to the ridge-piece 4, but simply rest loosely thereon, and their upper edges rest against and ride upon opposite sides of the vertical guides 6. 65

In the tops of the standards 3 is journaled a horizontal shaft 9, which is connected at each end with the trough-covers 7 by chains 10 or other suitable flexible connections. The shaft 9 is provided at one end with a crank-handle 11 for winding it up, and also has a ratchet-disk 12, with which a pawl or detent 13 engages for preventing retrograde movement of said shaft. By turning the shaft 9 the covers may thus be elevated for giving the stock access to the trough, the covers being upheld during the feeding by means of the pawl and ratchet referred to. When the feeding is through with, the pawl is thrown out of engagement, after which the covers may be lowered in a manner readily understood. 75

A casing or housing 14 is provided above the feed-trough to receive the leaves or covers 7 when the latter are elevated, and it also prevents stock from jumping over the feed-trough. The housing or casing consists of side boards secured to the side edges of the standards, in suitable recesses thereof, and a top board arranged upon the upper ends of the standards. 85

At one end of the trough is arranged a short feed-chute 15, by means of which the feed, when of a liquid nature, may be introduced into the trough, and one of the sections or leaves of the jointed cover is provided with a hinged section or door 16, arranged at the top of the cover, adapted to swing downward in opening, and connected with the same by hinges 17, arranged at the lower edge of the section or door 16. This hinged door or section 16 enables dry feed to be readily placed in the trough and uniformly distributed. 95

By the construction above described it will be seen that the stock cannot obtain access to the trough when the covers are placed thereon, that they are prevented from getting 5
bodily into the trough, and also that the trough is kept dry and in good sanitary condition by being properly covered; also that the animals are prevented from feeding while the trough is being filled, and that when the 10
feeding time comes access to the trough is afforded simultaneously to all the stock. The mechanism for elevating the covers is very simple, and with its aid a single person standing at one end of the trough can easily elevate both covers. 15

It will be understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the 20
advantages of this invention.

What I claim is—

1. In a feed-trough, the combination with the trough proper, and the upwardly-converging division-bars superposed thereon, of 25
the inclined covers arranged over said bars and preventing access to the trough, said covers being hinged together at their upper edges, and hoisting mechanism connected with the upper edges of the covers, extending upward therefrom and adapted to lift the same vertically simultaneously, substantially as described. 30

2. In a feed-trough, the combination with the trough proper, and the end standards extending above the same, of movable covers 35
for said trough hinged together at their upper edges, a shaft located above the trough and covers and journaled in said standards, means for operating said shaft, and connections between said shaft and covers whereby 40
the latter may be hoisted, substantially as described.

3. In a feed-trough, the combination with the trough proper and the end standards extending above the same, of a jointed cover for 45
said trough comprising the reversely-inclined leaves or sections having pivotal connection at their upper edges, a crank-shaft journaled at the upper ends of the standards, one or more 50
flexible connections interposed between said shaft and cover, and vertical guides arranged on the inner faces of the standards and interposed between the sections or leaves of the jointed cover, substantially as described.

4. In a feed-trough, the combination with 55
the trough proper, and end standards extending above the same, of a jointed cover for said trough comprising the reversely-inclined leaves or sections hinged together at their upper 60
edges, a housing or casing located above the trough, supported by said standards and arranged to receive the jointed cover when the latter is elevated, said leaves or sections being adapted to swing inward as they are 65
lifted vertically and means for raising and lowering the cover, substantially as described.

5. In a feed-trough, the combination with the trough proper, standards rising from the ends of the trough, and a chute arranged at one end of the latter, of a jointed cover for the 70
trough comprising reversely-inclined leaves hinged together at their upper edges, one of the leaves being provided at its top with a hinged section or door arranged to swing 75
downward, and means for raising and lowering the jointed cover, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN W. FARR.

Witnesses:

P. B. MANLEY,
W. D. LETT.