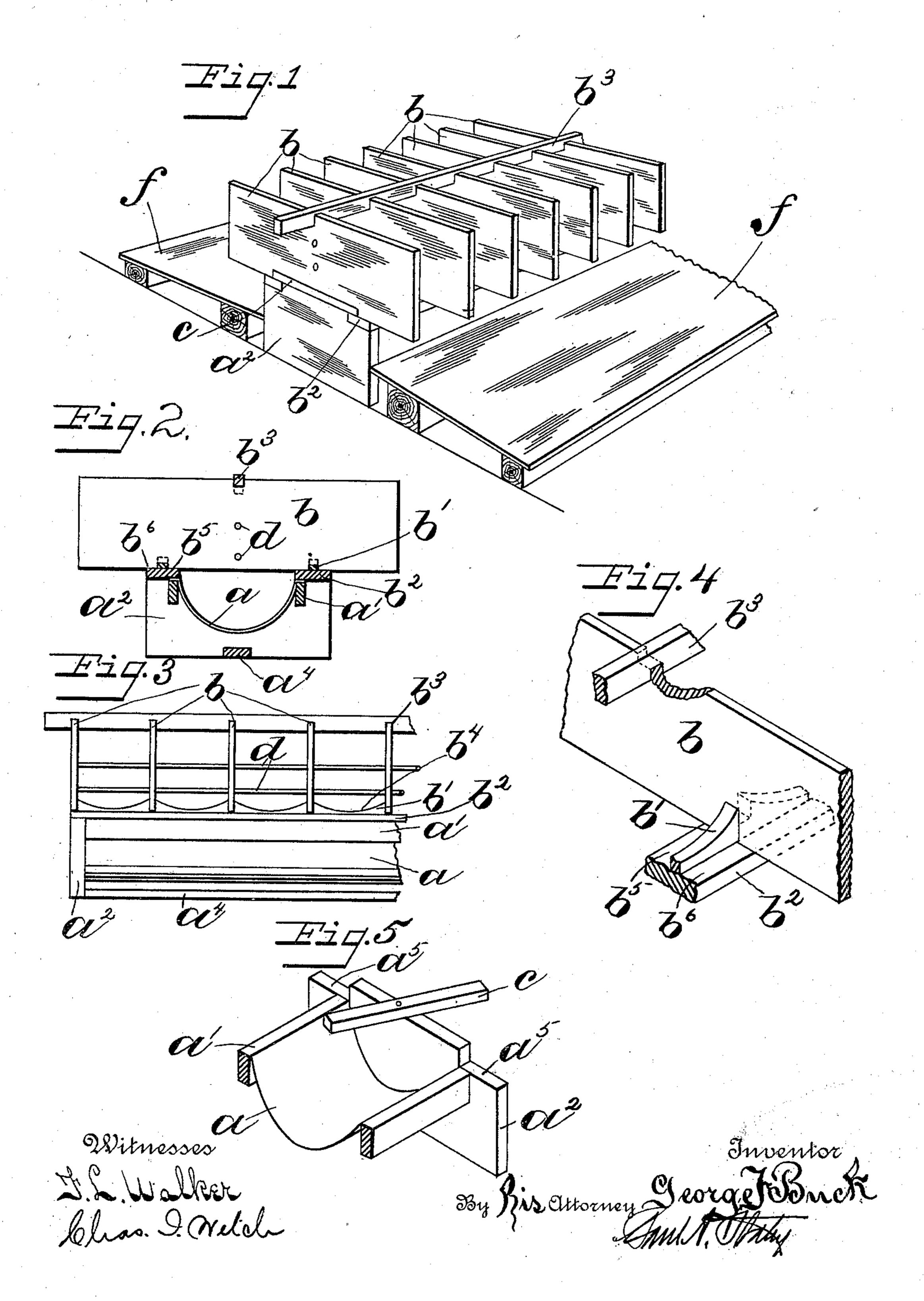
## G. F. BUCK.

## COMBINED FEED TROUGH AND RACK.

(Application filed Nov. 28, 1899.)

(No Model.)



## United States Patent Office.

GEORGE F. BUCK, OF KENTON, OHIO.

## COMBINED FEED TROUGH AND RACK.

SPECIFICATION forming part of Letters Patent No. 653,209, dated July 10, 1900.

Application filed November 28, 1899. Serial No. 738,603. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. BUCK, a citizen of the United States, residing at Kenton, in the county of Hardin and State of Ohio, have invented certain new and useful Improvements in a Combined Feed Trough and Rack, of which the following is a specification.

My invention relates to improvements in combined feed troughs and racks; and the object of my invention is to improve upon the constructions heretofore employed in devices of this character and to provide a feed trough and rack simple in construction and inexpensive to build.

My invention consists in the constructions and combinations of parts hereinafter described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my device. Fig. 2 is a transverse sectional view at x y in Fig. 3, and Fig. 3 a side elevation of same. Figs. 4 and 5 are detail views.

Like parts are represented by similar let-25 ters of reference in the several views.

In constructing my improved device I form the same in two parts. The lower part consists, essentially, of a sheet-metal trough a, extending the entire length of the device and supported at the sides by longitudinal supporting-bars a', which are secured at each end and at intervals throughout the length thereof to ground-supports  $a^2$ , preferably by gaining or mortising said bars to said supports, the end supports  $a^2$  also serving to close the ends of the trough. Said supports  $a^2$  may also be further connected at their bottoms by a longitudinal bar  $a^4$  to further strengthen the supporting parts of the structure.

The upper portion of my device or rack consists, essentially, of transverse partitions b, placed at suitable distances apart and supported on longitudinal bars b', preferably by gaining the said partitions in said bars, as shown in Fig. 4, the said bars b' being attached to and supported on longitudinal supports b<sup>2</sup>. The said partitions are further connected at their tops by a longitudinal connecting-bar b<sup>3</sup>, to assist in holding the same in a rigid position. These partitions are made substan-

tially rectangular and extend beyond the sides of the trough with square ends to prevent the stock from getting their bodies into the trough and, further, to more effectually prevent the stock from interfering with each other while feeding from trough. The rack thus formed is adapted to rest upon and be supported by the trough portion of the device. The tops of the end supports  $a^2$  are formed with recesses  $a^5$  at their respective 60 sides of a width and thickness equal to the width and thickness of the bars  $b^2$ , and the ends of said bars  $b^2$  are adapted to rest in these recesses, which will allow the bars  $b^2$  to stand flush with said supports  $a^2$ .

In order that the rack may be securely held on the trough portion of the device, but at the same time be adapted to be readily removed from the same to permit the trough to be cleaned, I provide means for locking the said 70 rack in position on the trough. Pivotally secured to the tops of the end supports  $a^2$  at their centers I provide a turn-button c, the ends of which, when turned to a position parallel with said supports, will project over the tops of the 75 longitudinal bars  $b^2$  when the same are in position on the said supports, and thus hold the said rack from displacement. When it is desired to remove the rack, the buttons are simply turned to a position at right angles with 80 the said end supports, thus allowing the rack to be readily lifted from the said trough portion.

The bars b' at points between adjacent partitions b of the rack are cut out on the arc of 85 a circle, as shown at  $b^4$  in Fig. 3, and the supporting-bars  $b^2$  are formed of a greater width than said bars a', so as to leave projecting shelves  $b^5$   $b^6$  on the respective sides of said bars b', this construction providing a broad 90 foot-rest at the side of the trough for animals feeding from the trough, and the bars b', attached to and resting on the bars  $b^2$ , form a shoulder or projection which prevents the feet of the animals from slipping into the 95 trough. To prevent the smaller animals from getting into the trough, I further provide longitudinal rods or wires d, which extend through the partitions b, at different points in the center thereof, as shown. I also prefer- 100 ably provide at each side of the trough platforms f, which may be of any suitable construction.

Having thus described my invention, I 5 claim—

1. In a feed trough and rack, the combination of a trough formed of sheet metal, supported on longitudinal supporting-bars, end supports for said bars, transverse partitions 10 above said trough extending beyond the sides thereof, supported on said end supports and means on said supports for securing said partitions thereon, substantially as specified.

2. In a feed trough and rack, the combina-15 tion of a trough supported on suitable supports, a rack above said trough consisting of transverse partitions extending beyond the sides thereof, supported on longitudinal supporting-bars, said supporting-bars being 20 adapted to rest on said trough-supports, and means on said trough-supports for locking the longitudinal bars thereon, and longitudinal wires or rods extending through said partitions at different points in the center there-

25 of, substantially as specified.

3. In a feed trough and rack, the combination of a trough formed of sheet metal supported on longitudinal supporting-bars, end supports for said bars, a rack above said feedtrough consisting of rectangular transverse 30 partitions at suitable distances apart, extending beyond the sides of said trough, with square ends supported adjacent to the sides of said trough on longitudinal bars attached to and resting on longitudinal supports of 35 greater width than said bars, said last-named supports being adapted to rest in recesses at respective sides of said end supports for the trough and a turn-bar pivotally attached to the top of said end supports adapted to en- 40 gage and lock said rack-supports, substantially as specified.

In testimony whereof I have hereunto set my hand this 23d day of November, A. D.

1899.

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GEORGE F. BUCK.

Witnesses: FRANK C. DOUGHERTY, THOMAS B. BLACK.