(No Model.) 2 Sheets—Sheet 1.

N. E. BARNSBACK & G. A. BUSH.

FEED RACK.

No. 375,329. Patented Dec. 27, 1887.

Fig. 1.

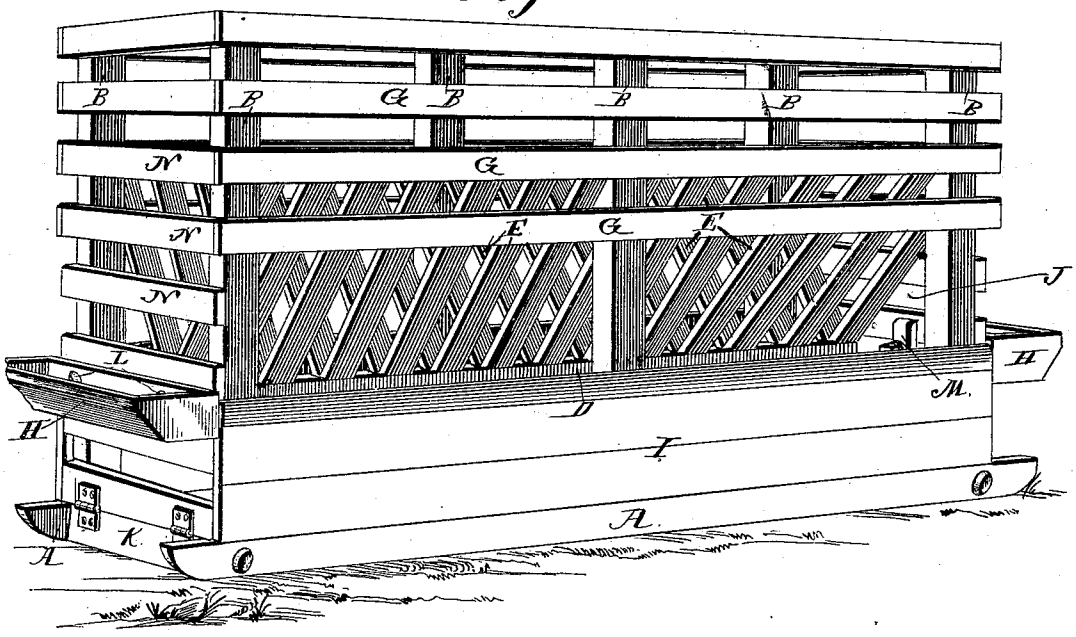
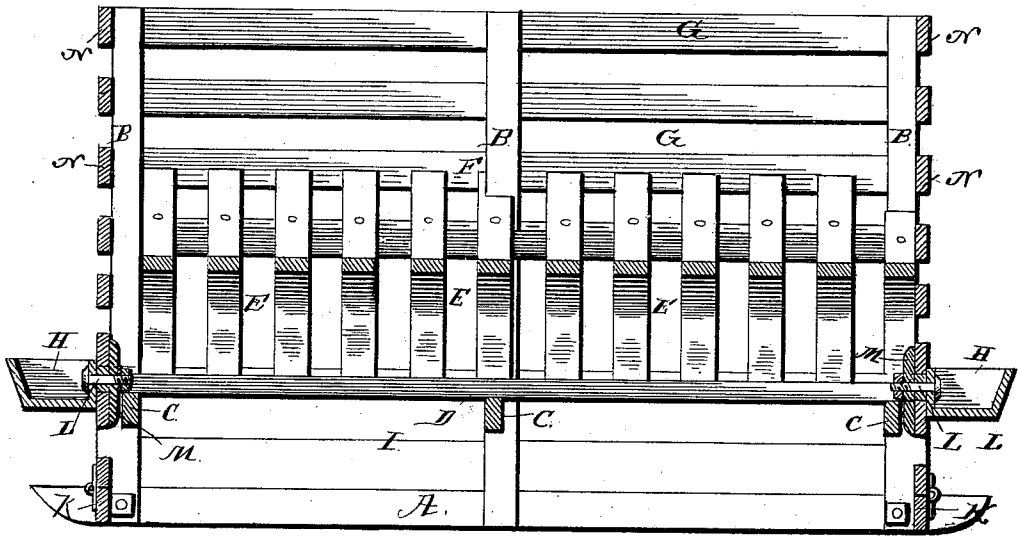


Fig 2.



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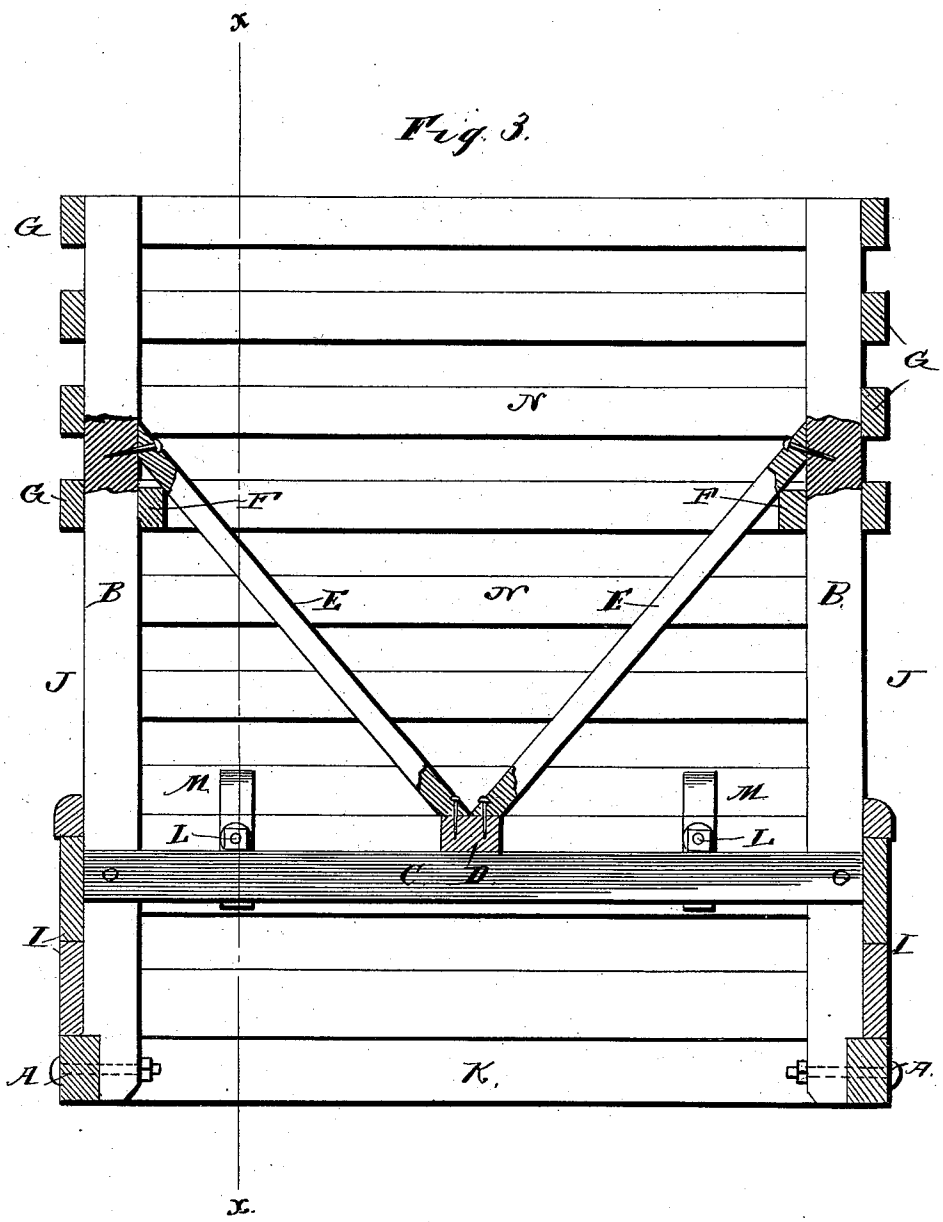
(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.



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UNITED STATES PATENT OFFICE.

NINIAN EDWARD BARNSBACK AND GEORGE ALONZO BUSH, OF VALLEY FALLS, KANSAS.

FEED-RACK.

SPECIFICATION forming part of Letters Patent No. 375,329, dated December 27, 1887.

Application filed July 21, 1887. Serial No. 244,902. (No model.)

To all whom it may concern:

Be it known that we, NINIAN EDWARD BARNSBACK and GEORGE ALONZO BUSH, citizens of the United States, residing at Valley Falls, in the county of Jefferson and State of Kansas, have invented a new and useful Improvement in Feed-Racks, of which the following is a specification.

Our invention relates to improvements in feed-racks; and it consists in certain novel features of construction, hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a feed-rack constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section of the same, taken on the line *x x* of Fig. 3. Fig. 3 is a vertical transverse section.

Referring to the drawings by letter, A A designate the runners, which have their under sides beveled at both ends, so that the device may be drawn over the ground from either end.

B B B designate posts, which are bolted to the runners at the ends and center of the same and extend up to the height desired for the rack. The lower ends of these posts are notched, as shown, so as to fit over the top and side of the runners, and thereby be supported partly by the runners and partly by the securing-bolts. Cross bars or beams C are secured to and extend between the posts B B, as shown. At a proper distance above the ground, and secured centrally to these cross-beams C, is a longitudinal beam, D, which extends the entire length of the rack.

E designates a series of inclined slats, which have their lower ends secured to the central longitudinal beam, D, and extend upward therefrom on opposite sides at equal angles. The upper ends of these slats are secured to the longitudinal beams F, secured to the inner sides of the posts, and the longitudinal rails G, secured to the outer sides of the posts. A number of these rails G are provided, extending to the top of the posts, and at the ends of the structure we secure the similar transverse rails N, which extend to near the plane of the longitudinal beam D, the space inclosed by the rails G and N and the slats E forming the bin or receptacle for the hay, straw, or other grain being fed.

Across the ends of the device we secure the troughs H for the reception of water or small feed. The lower portion of the device is inclosed by the weather-boarding or longitudinally-arranged planks I, which extend up to about the height of the troughs H, an open space, J, being left between the upper edge of the weather-boarding and the lower edge of the bottom rail, G, for the insertion of the head of the animal feeding. This weather-boarding, it will be seen at once, prevents the wind playing beneath the bin and scattering the grain which may be pulled therefrom and dropped by the animal feeding. At the lower edge of the weather-boarding we provide at the ends of the rack the hinged strips K, which are swung up when the device is being drawn over the ground, so that it will pass readily over stubble and other obstructions.

It will be seen upon reference to the drawings that the sides of the rack below the open spaces J are entirely closed by the weather-boarding and the runners; and when the device is at rest these hinged strips K are lowered so as to nearly close the ends of the rack, so that the loose feed which drops to the ground will not be scattered.

The troughs H are secured in position by the bolts L, which pass through the rear side of the same and the weather-boarding just back thereof, and then through the vertical braces M, which extend upward, back of and against three adjoining planks or sections of the weather-boarding, the bolt L extending through the middle plank or section.

In operation hay, straw, or other large feed is placed in the bin formed by the slats E and rails N and G, and the animals feed therefrom by inserting their heads through the spaces J and drawing the grain between the slats. Water or small grain—as shelled corn, &c.—is placed in the troughs H and fed therefrom in the usual manner.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that we have provided a very strong and durable feed-rack of very simple construction.

By our device a large number of animals can be fed at one time without crowding them, and at the same time some may feed from the bin and some from the troughs across the ends of the device. No hay or grain will be lost, as the weather-boarding will prevent the wind blowing away the grain that falls to the ground.

When so desired, the device may be provided with a cover, so as to protect the grain from the weather.

The several parts of the device are very firmly and rigidly secured, and its advantages will be readily appreciated.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A feed-rack having the runners A A, the weather-boarding I above the said runners, and the hinged strips K between the runners at the end of the rack, as set forth.

2. A feed-rack comprising the runners A A, the posts erected thereon, the weather-boarding secured to the lower portion of the posts, the cross-beams C, secured to the posts, and the longitudinal beam D, secured upon the cross-beams, the rails G, secured to the sides of the posts, an open space, J, being left between the rails G and the weather-boarding, the rails N, secured to the posts at the ends of the structure and extending to near the plane of the longitudinal beam D, the inclined slats supported by the said beam D, the troughs H, secured to the weather-boarding at the ends of the structure, and the hinged strips K between the runners and below said troughs H, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

NINIAN EDWARD BARNSBACK.
GEORGE ALONZO BUSH.

Witnesses:
D. C. NUTTING,
L. I. BELAND.