

(No Model.)

H. S. CRABTREE.

FEED RACK.

No. 327,070.

Patented Sept. 29, 1885.

Fig. 1.

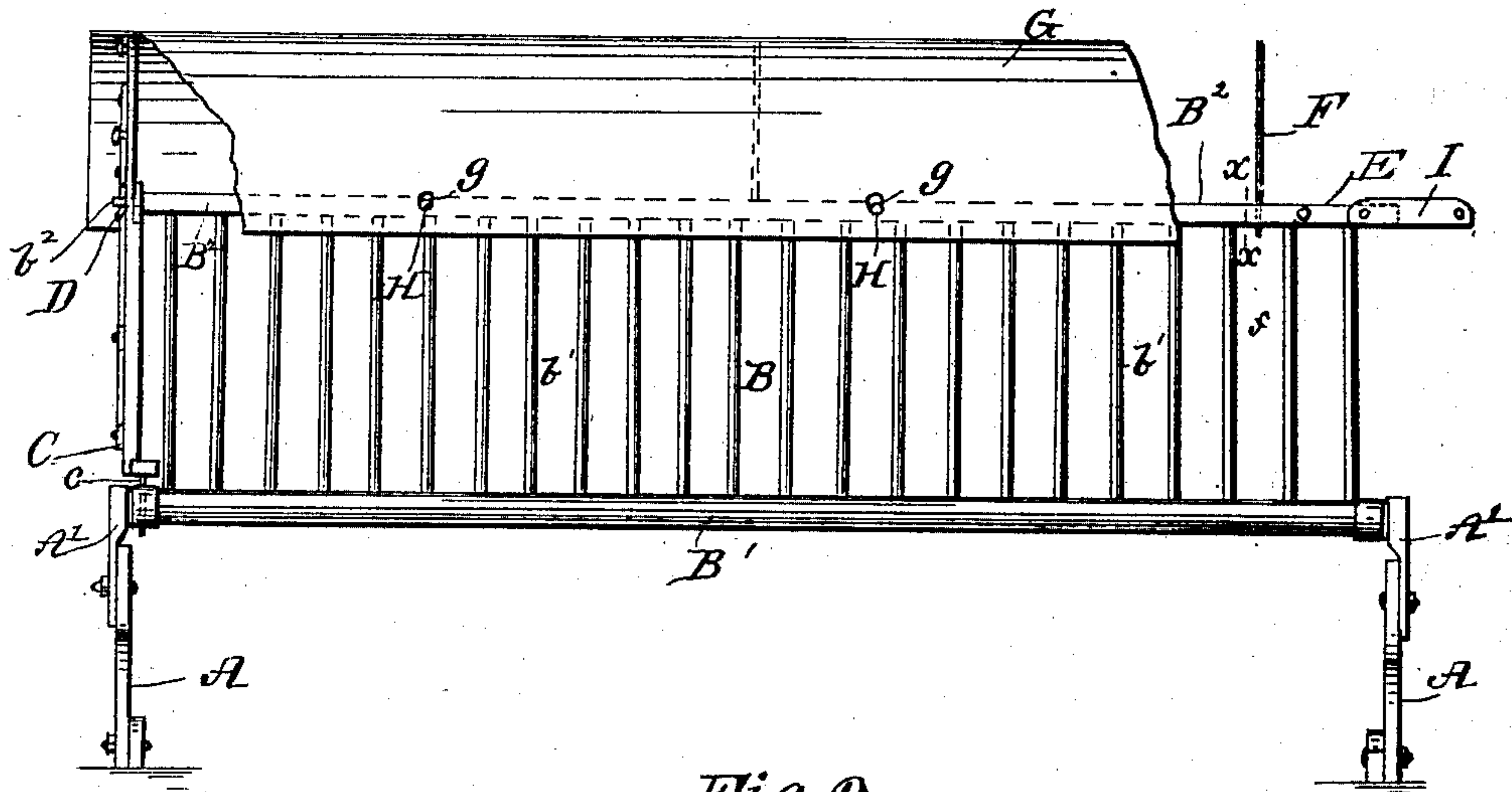


Fig. 2.

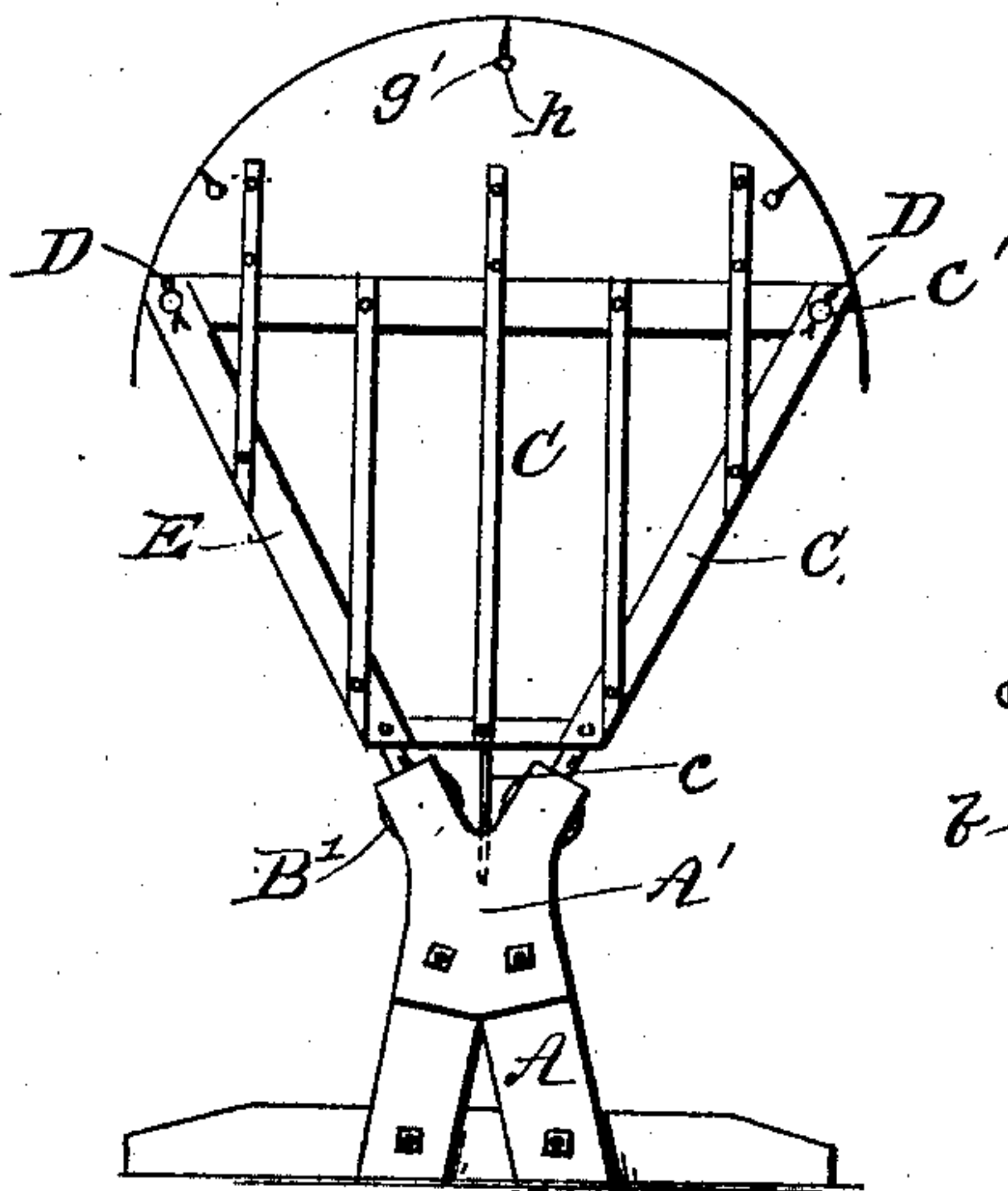


Fig. 3.

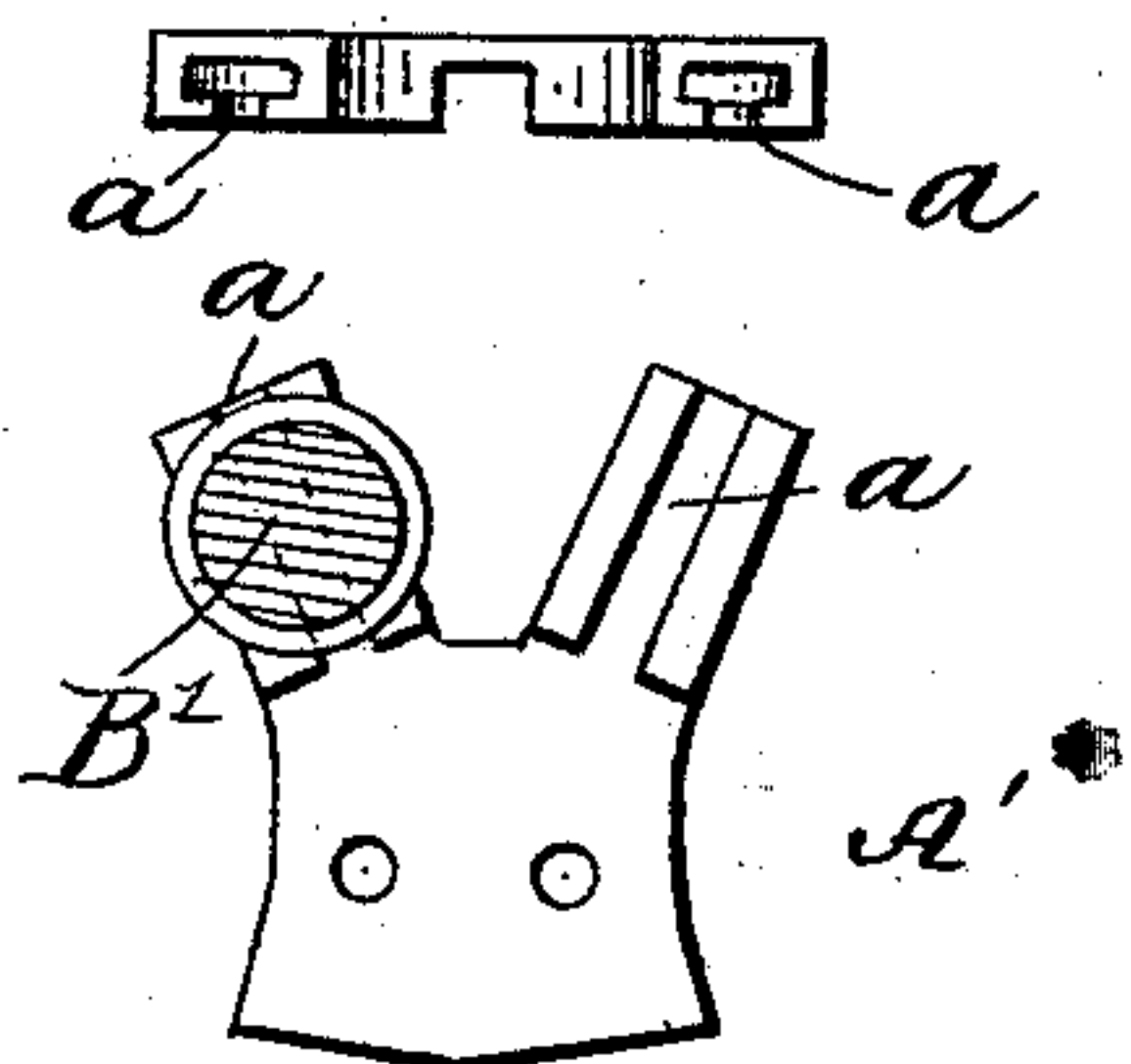


Fig. 4.

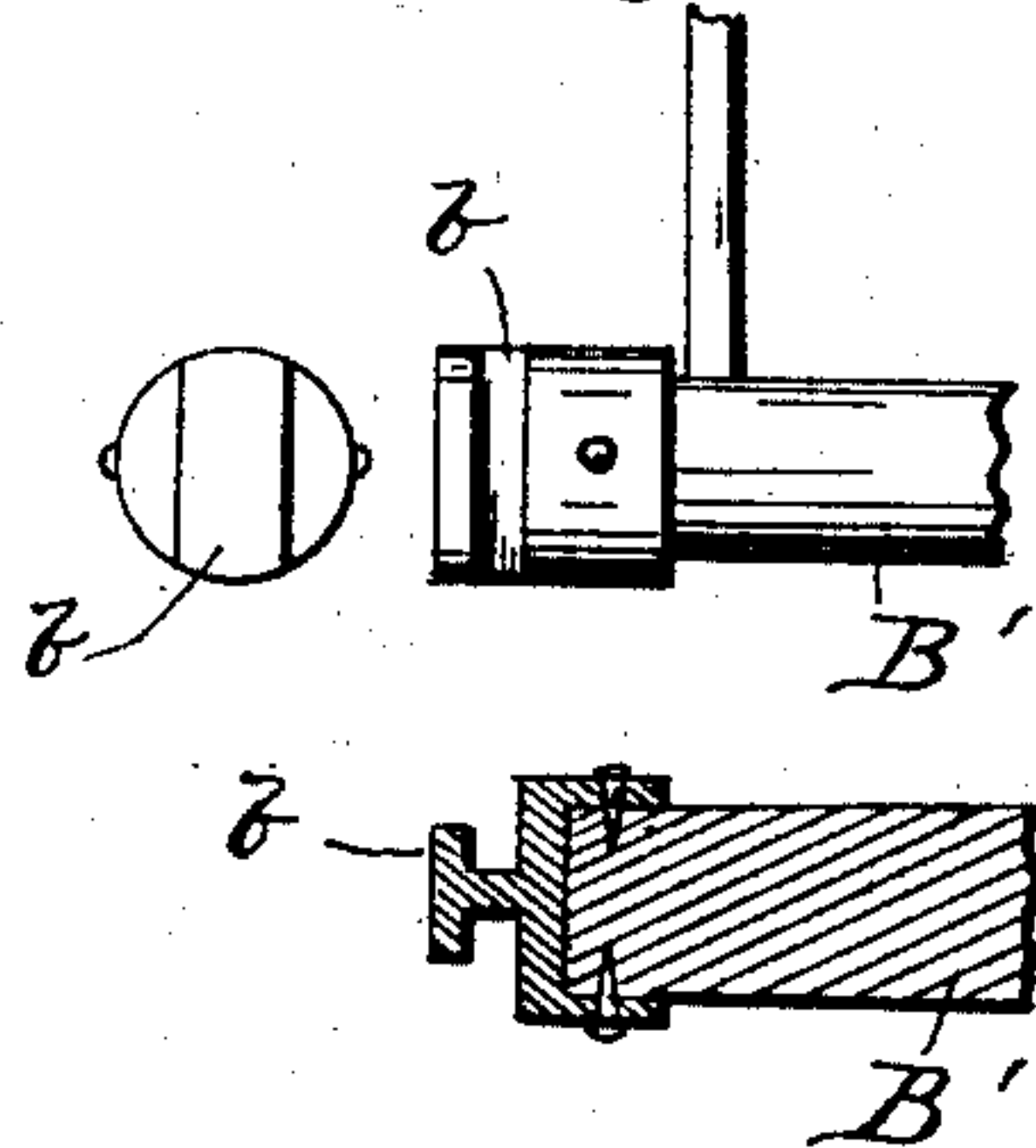


Fig. 5.

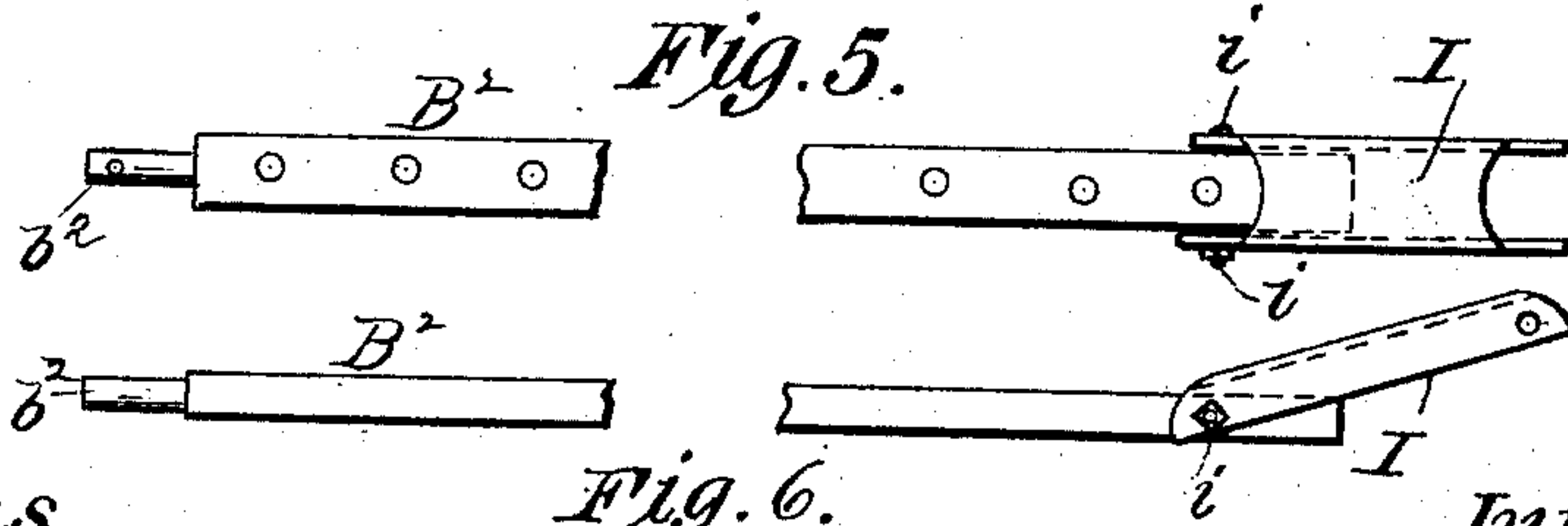
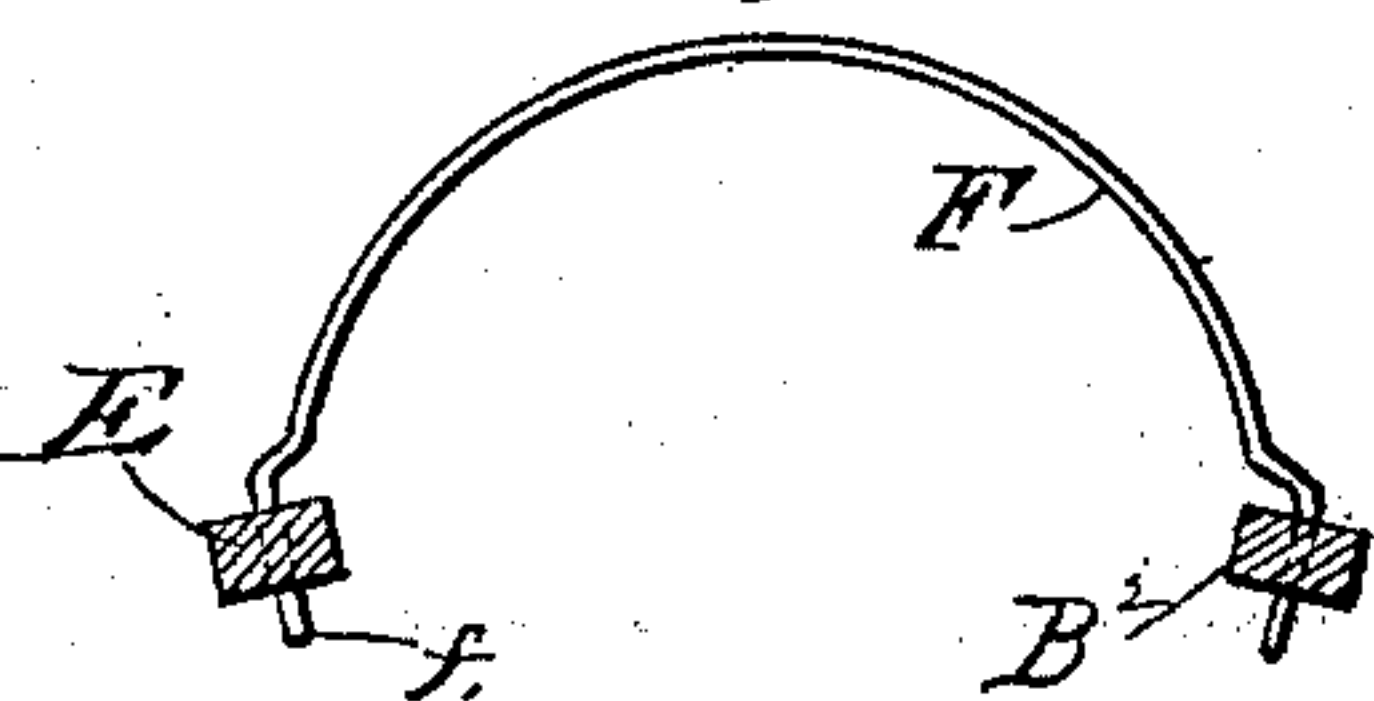


Fig. 6.



Witnesses

Samuel R. Turner

O. B. Impier

Inventor

Hamilton S. Crabtree

By R. B. & A. L. Lacey
Attys

UNITED STATES PATENT OFFICE.

HAMILTON S. CRABTREE, OF ANNA, ILLINOIS.

FEED-RACK.

SPECIFICATION forming part of Letters Patent No. 327,070, dated September 29, 1885.

Application filed April 7, 1885. (No model.)

To all whom it may concern:

Be it known that I, HAMILTON S. CRABTREE, a citizen of the United States, residing at Anna, in the county of Union and State of Illinois, have invented certain new and useful Improvements in Feed-Racks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention is an improvement in feed-racks for feeding stock; and it consists in certain novel constructions and combinations of parts, which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a side view, and Fig. 2 an end view, of my feed-rack. Fig. 3 is a detailed view of a portion of the foot piece or support. Fig. 4 is a detailed view of the end portion of one of the slat-frames. Fig. 5 is a detailed view of the upper bar of one of the slats, and Fig. 6 is a detached section on about line X X, Fig. 1.

The feet or supports A are provided in their upper inner sides with T-shaped grooves *a a*. These grooves extend in directions at angles to each other. This angle is preferably such as shown most clearly in Fig. 3, with both the grooves diverging toward their upper ends. It is manifest, however, that one of these grooves may be vertical and the other inclined, or at any other suitable angle, without departing from the principles of the invention. These grooves may be formed in the main portion or body of the supports A, but are preferably formed in a casting, A', as shown.

The slat-frames B are formed with the lower bars, B', and the upper bars, B². The bars B' are provided at their opposite ends with T-shaped tenons *b*, fitted to the grooves *a* of the supports. The bars B' and B², it will be seen, are connected with suitable slats or cross-bars, *b'*.

In practice I connect the upper ends of the two opposite slat-frames together so they can be conveniently detached when desired. This is accomplished by means of the end frames, C, provided with openings C', through which

tenons *b*² on the end of the bars B² pass. These tenons are held, when inserted through the openings C', by keys D, as shown. The side bars of these frames C converge toward their lower ends at an angle equal to the angle of convergence of the slat-frames B, and are connected by cross-pieces, as shown in Fig. 2, the said lower ends and connecting-pieces being free from the slat-frames.

By forming the grooves *a* at an angle to each other it will be seen that the tenons *b* of the opposite slat-frames cannot be removed from said grooves when the upper ends of such slat-frames are connected together, because the removal of such tenons involves the movement of the slat-frames in a line with the grooves, and cannot consequently be had when such grooves diverge if the slat-frames are connected.

Owing to the oblong shape of the tenons *b*, which fit snugly the grooves *a*, when the upper edges of the slat-frames are held together either by the end frames, C, or the bows F, said slat-frames cannot be separated from their supports, as any vertical strain or force exerted to effect such separation will cause the tenons to bind in their grooves and lock the parts more securely together.

The end frame, C, simply serves to prevent the loss of feed, and also as means to unite the ends of the upper cross-bars, B², the lower end of said frame being prevented from swinging outward by a pin, *c*, which depends from its lower cross-piece a sufficient distance to engage the inner face of the support A'.

The upper cross-bars, B², of the slat-frames are provided at suitable intervals with sockets E, into which are fitted the ends *f* of the elastic bows F, which support the cover G. These bows may be sprung into engagement with the sockets E, and when the roof is applied will be held in such sockets by the roof or cover G, as well as by their own tension. This roof or cover is preferably made of canvas or other suitable textile material, and is provided with suitable openings, eyelets, or button-holes, *g*, on its sides, which engage pins or studs H on the cross-bar of the slat-frame. It may also be provided at its ends with loops *g'*, which engage with suitable studs, *h*, on the end one of the elastic bows, or the side cover might be tacked to the end one of the elastic

bows and only removably secured to the slat-frames, if desired.

In the use of my invention it is my intention to employ a series of the feed-racks constructed substantially as described, and connected together so as to form a continuous line. To connect these feed-racks, I provide the link-connection I, made in box form, as shown, and bolted or otherwise secured at i to the meeting ends of the adjacent feed-racks, as shown clearly in Figs. 1 and 5. By the use of several of these feed-racks in series a wind-break may be formed by which to protect the sheep or other animals from the wind, and they may be connected and so disposed in the field as to form an inclosure for such stock in one corner.

It will be noticed that each part of the feed-rack is separable from the others, and when the parts are connected as shown a firm and secure construction is provided. By thus constructing the feed-rack in detachable sections or parts it can be taken to pieces and easily carried to any part of a field or elsewhere desired and set up by one man.

The cover need only be used when the feed-rack is out of cover, as in a barn-yard or field. When used in a stable or barn, the cover may be removed.

It will be seen that either the bows F or the end frames may serve as connections for the upper edges of the slat-frames, or that a separate bar might be extended between such upper edges and detachably connected therewith.

The feed-rack when completed serves efficiently its purpose, and may be employed to feed hay, fodder, or similar forage to the stock.

Having thus described my invention, what I

claim, and desire to secure by Letters Patent, is—

1. The combination of a support provided with T-shaped grooves oppositely inclined relatively to each other with slat-frames correspondingly inclined, and having at their lower converging ends bars provided with T-shaped tenons fitted into the grooves of the support, and end frames uniting the diverging ends of said slat-frames, as and for the purposes set forth.

2. The combination of the support provided with oppositely-inclined T-shaped grooves, the slat-frames correspondingly inclined, having bars on their lower converging ends provided with T-shaped tenons fitted into said grooves, and the end frame uniting the upper ends of the slat-frames and provided with a depending pin to engage the support, substantially as and for the purposes specified.

3. A feed-rack consisting of the following elements in combination: a support having oppositely-inclined T-shaped grooves, slat-frames correspondingly inclined, T-shaped tenons attached to the lower ends of the cross-bar of the slat-frames and fitted into the grooves of the support, an end frame uniting the ends of the upper cross-bar of the slat-frames and provided with a depending pin to engage the support, and bows joining the divergent sides of the slat frames and adapted to form a support for a cover, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

HAMILTON S. CRABTREE.

Witnesses:

JESSE WARE,
THOS. C. COZBY.