

(No Model.)

L. D. WALLACE.

2 Sheets—Sheet 1.

FEED RACK.

No. 344,426.

Patented June 29, 1886.

Fig. 1.

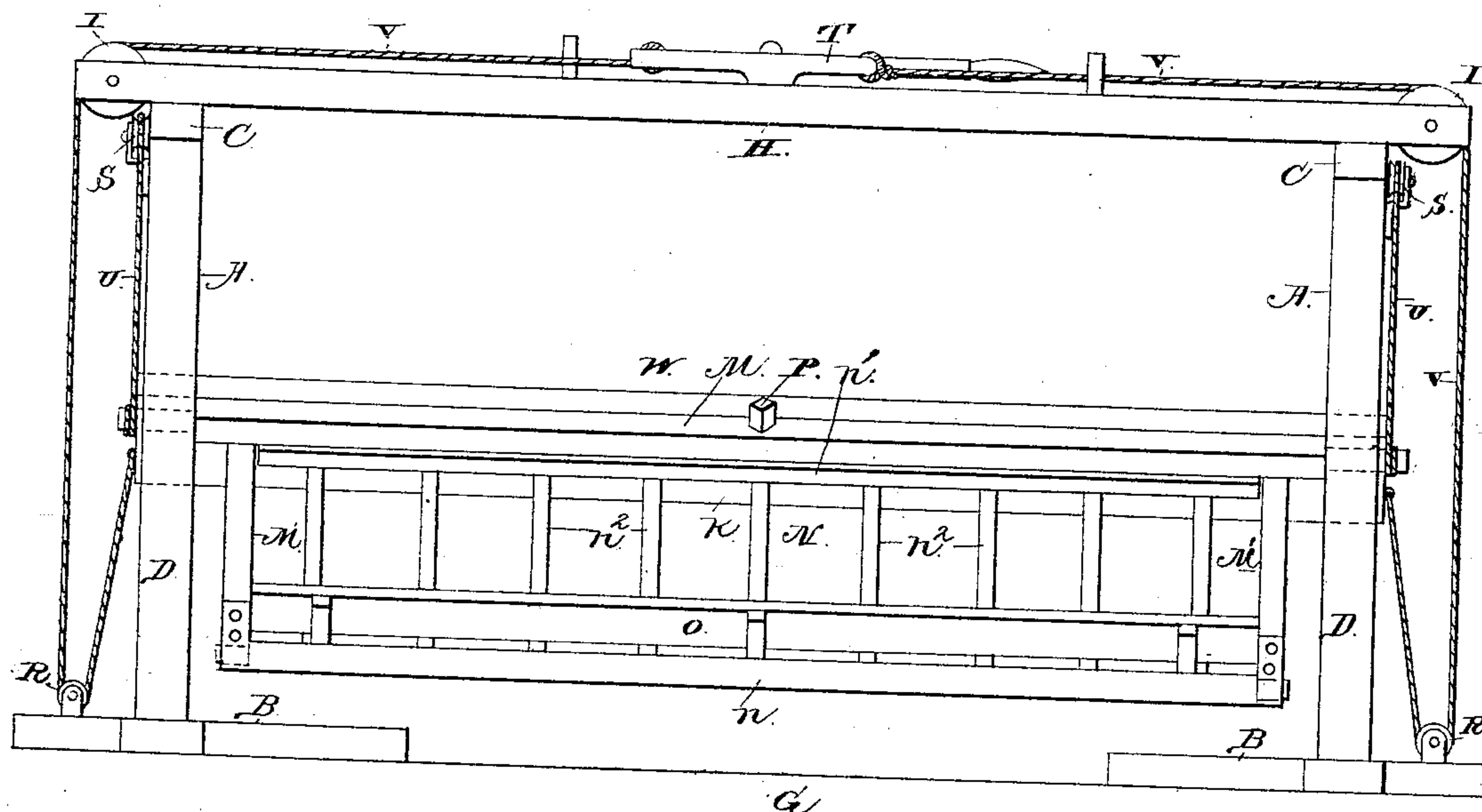
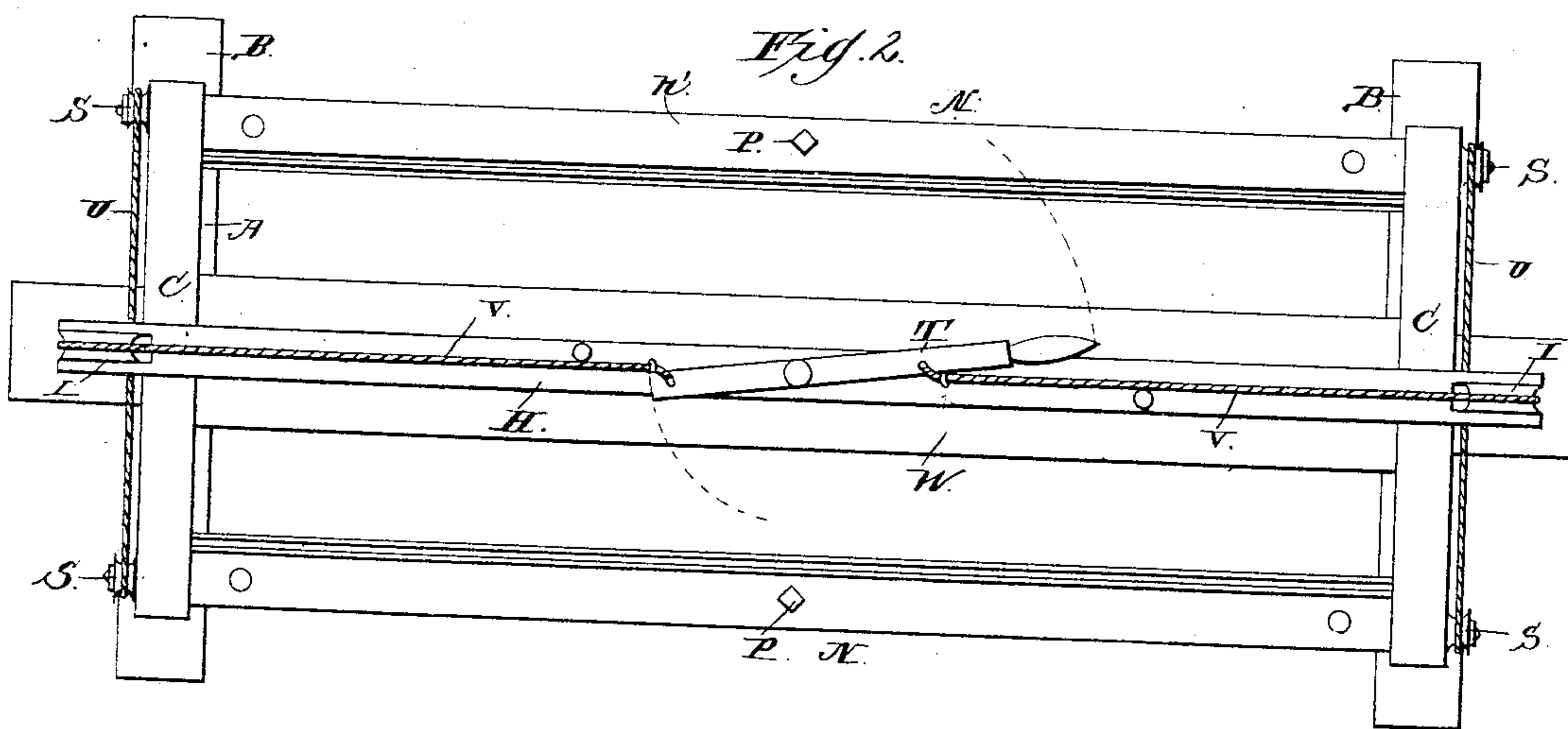


Fig. 2.



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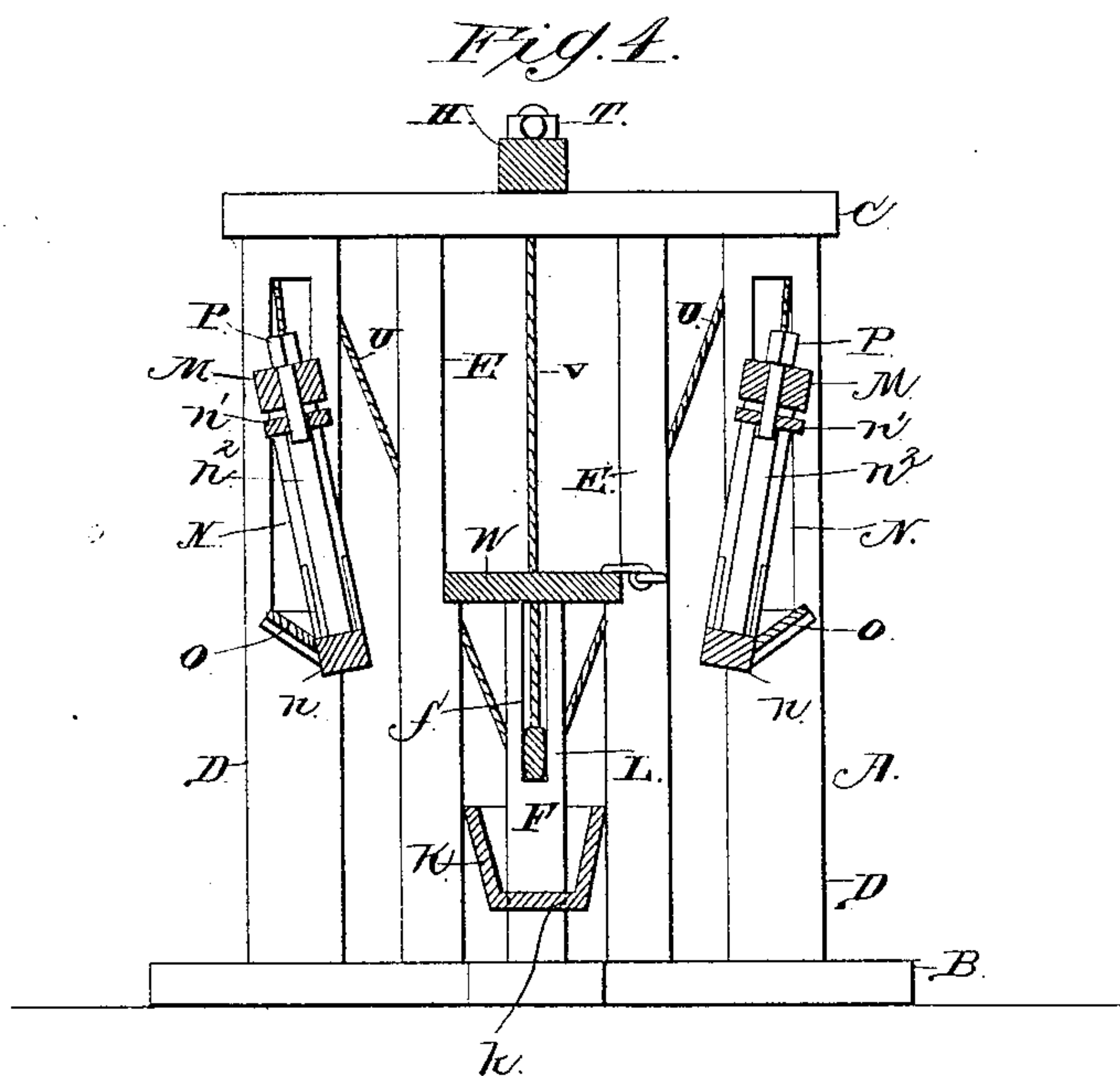
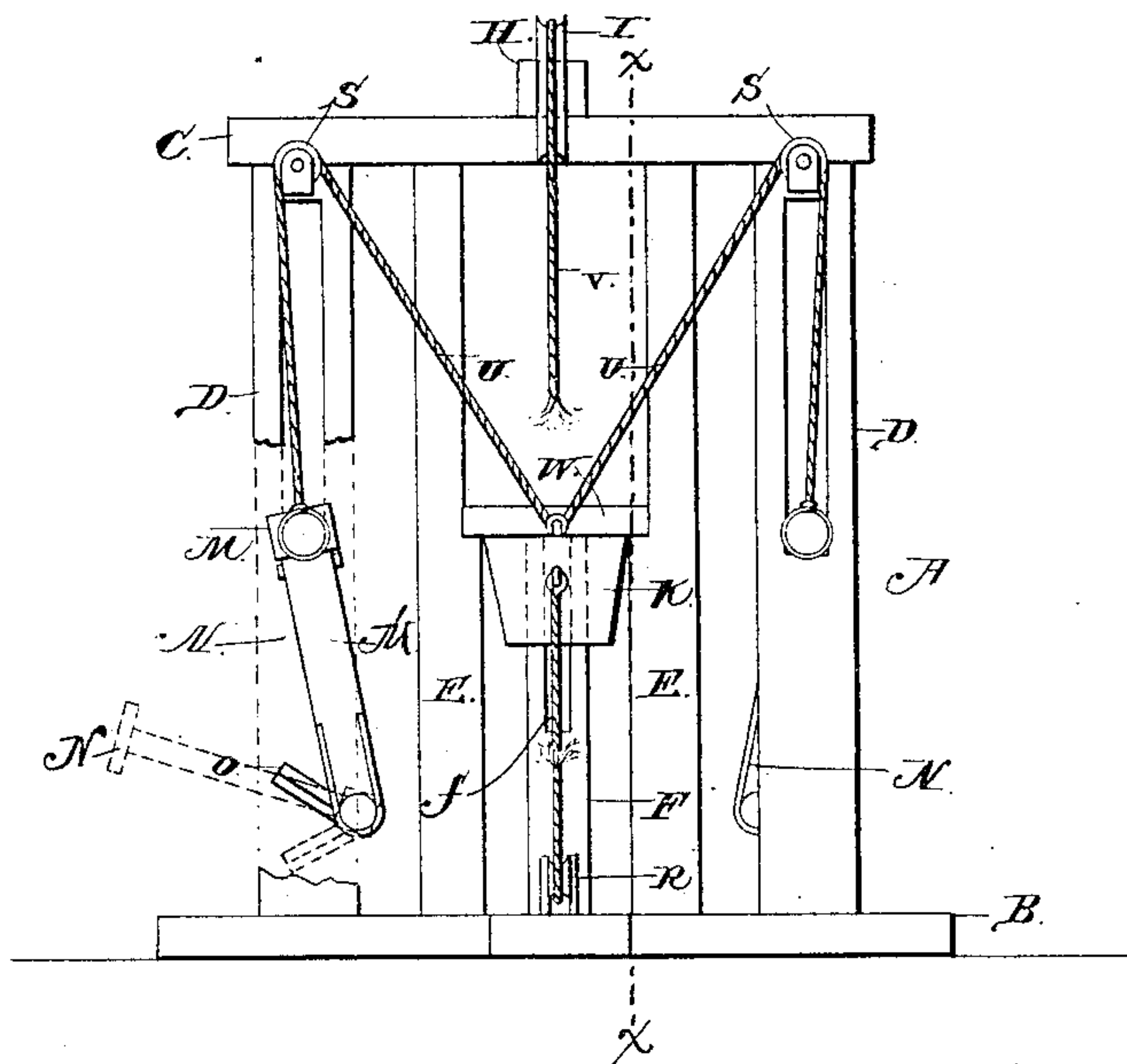
2 Sheets—Sheet 2.

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Fig. 3. Patented June 29, 1886.



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UNITED STATES PATENT OFFICE.

LEVI D. WALLACE, OF EAST SPRINGFIELD, OHIO.

FEED-RACK.

SPECIFICATION forming part of Letters Patent No. 344,426, dated June 29, 1886.

Application filed March 30, 1886. Serial No. 197,178. (No model.)

To all whom it may concern:

Be it known that I, LEVI D. WALLACE, a citizen of the United States, residing at East Springfield, in the county of Jefferson and State of Ohio, have invented a new and useful Improvement in Feed-Racks, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in feed-racks; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side view of my invention. Fig. 2 is a top plan view of the same. Fig. 3 is an end view, partly in section, showing the feed-trough and the racks in their initial position. Fig. 4 is a sectional view with the feed troughs and rack in another position.

A represents a pair of vertical frames, which are arranged at a suitable distance from each other, and composed each of the sill B, the top cross-beam, C, the posts D, slotted at their upper ends, the uprights E at a proper distance from the posts D, and the central vertical standard, F, which is only about half the height of the uprights E and posts D, and has its upper end slotted, as at *f*. These vertical frames are secured either on the ground or on a suitable platform, G, and they are connected on their upper sides by a horizontal longitudinal central beam, H, the ends of which project beyond the outer sides of the frames A, and are provided with sheaves I.

K represents a feed-trough, which is provided with openings *k* in its ends, to receive the standards F. This feed-trough is provided with a longitudinal central partition-board, L, the ends of which fit in the slots *f* in the upper ends of the standards F.

M represents longitudinal rocking bars, the ends of which are reduced and fitted in the slots of the posts D, and from the lower side of the said rocking bars, near the outer ends thereof, depend arms M', in the lower ends of which are hinged racks N. These racks consist of the lower pivoted bar, *n*, the upper bar, *n'*, and the vertical rungs *n''*, which connect the said bars. From the outer side of each rack, at the lower edge thereof, projects an

inclined board, O, the function of which is to receive any hay which may be drawn from between the rungs and dropped by the animal eating it, thereby returning the hay to the rack, and preventing it from being trampled and wasted. The racks N are normally secured in the position shown in Fig. 4 in solid lines by pins P, which pass through openings made in the bar M and in the bar *n'*.

R represents sheaves, one of which is secured to the sill B or platform G at each end of the rack, in the center thereof, and S represents sheaves which are secured on the outer sides of the cross-beam C, near the outer ends thereof.

On the center of the beam H, on its upper side, is fulcrumed a hand-lever, T.

U represents ropes or chains, which are connected at their centers to the ends of the feed-trough, and have their ends passed through or over the sheaves S and secured to the projecting ends of the bars M, whereby the weight of the racks secured to the said bars M causes the latter to descend in the slot of the standards D, and normally raise the feed-trough to the upper end of the standards F, as shown in Fig. 3.

V represents ropes or chains, which have one end attached to the ends of the trough K, and pass under the sheaves R and over the sheaves I, and have their inner ends attached to the lever T.

W represents the cover for the feed-trough, which is hinged at one edge to the uprights E, and fits over the trough when the latter is raised to its normal position.

The operation of my invention is as follows: When it is desired to feed grain to the sheep, the cover W is opened and the trough is filled with grain. The hand-lever T is then turned, which causes the ropes V to lower the feed-trough and the ropes U to raise the racks N, thereby permitting the sheep to pass under the racks, and affording them ready access to the grain-trough. When it is desired to feed hay to the sheep, the trough is raised, the racks are lowered, and the pins P are withdrawn from the beams M, thereby permitting the racks to turn outwardly from the arms M' to the position shown in dotted lines in Fig. 3, and the racks are secured in this position by passing the pins P through openings made in

the bars *n*, and into aligned openings made in the platform. The hay is then readily thrown into the space between the racks until it is filled, and the racks are again closed against the beams *M* and sheep admitted thereto. The rungs are sufficiently close together to prevent the sheep from passing their heads between them, and as the sheep eat the hay they advance toward the trough, thereby inclining the racks inwardly, thus permitting free access of the sheep to all the hay in the rack, and enabling them to eat it all. By providing the vertically-movable partition-board *L* for the feed-trough the sheep on one side of the rack are prevented from interfering with those on the other side thereof.

A feed-rack thus constructed is cheap and simple, enables the sheep to be fed both grain and hay without wasting any of the feed, and prevents the sheep from crowding and jostling one another.

Having thus described my invention, I claim—

1. The combination of the frame having the sheaves *S* with the vertically-movable central trough, the vertically-movable feed-racks on opposite sides of the trough, and the ropes *U*,

passed over the sheaves *S* and attached to the feed racks and trough, whereby when the trough is lowered the racks are raised, and vice versa, substantially as described.

2. In a feed-rack, the combination of the central feed-trough, the racks at each side thereof, the fulcrumed lever, and ropes or chains connecting the trough and the racks with the said lever, substantially as described.

3. In a feed-rack, the combination of the vertically-movable feed-trough, the vertically-movable beams *M* on opposite sides thereof, and the racks *N*, hinged to arms which depend from the said beams, substantially as described.

4. In a feed-rack having the vertically-movable side racks, the combination of the vertically-movable feed-trough and the central longitudinal partition-board therein, substantially as described.

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

LEVI D. WALLACE.

Witnesses:

JAMES E. WALLACE,
M. M. O'CONNELL.