

(No Model.)

Z. W. SMITH.
STANCHION.

No. 406,785.

Patented July 9, 1889.

Fig. 1.

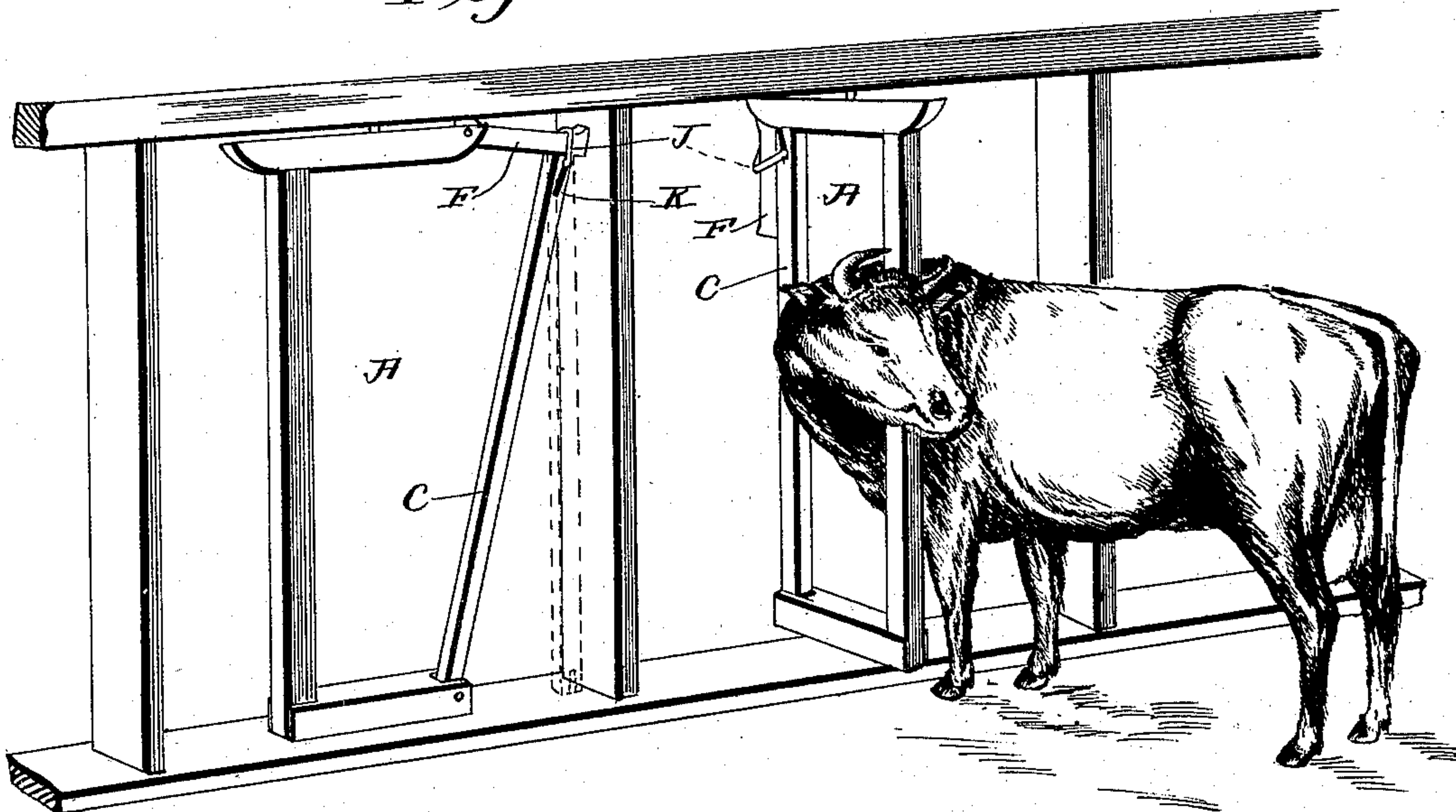


Fig. 2.

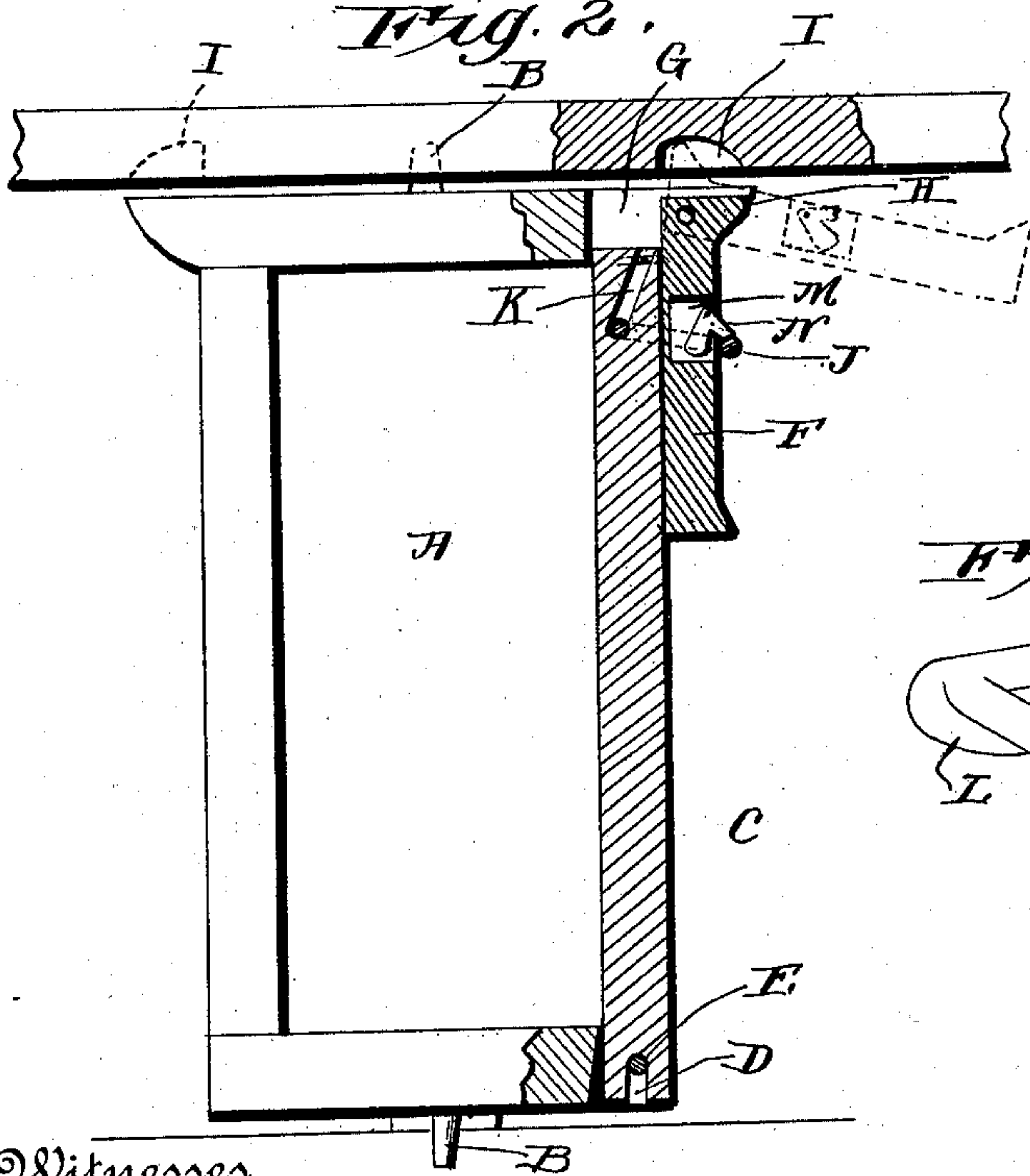


Fig. 3.

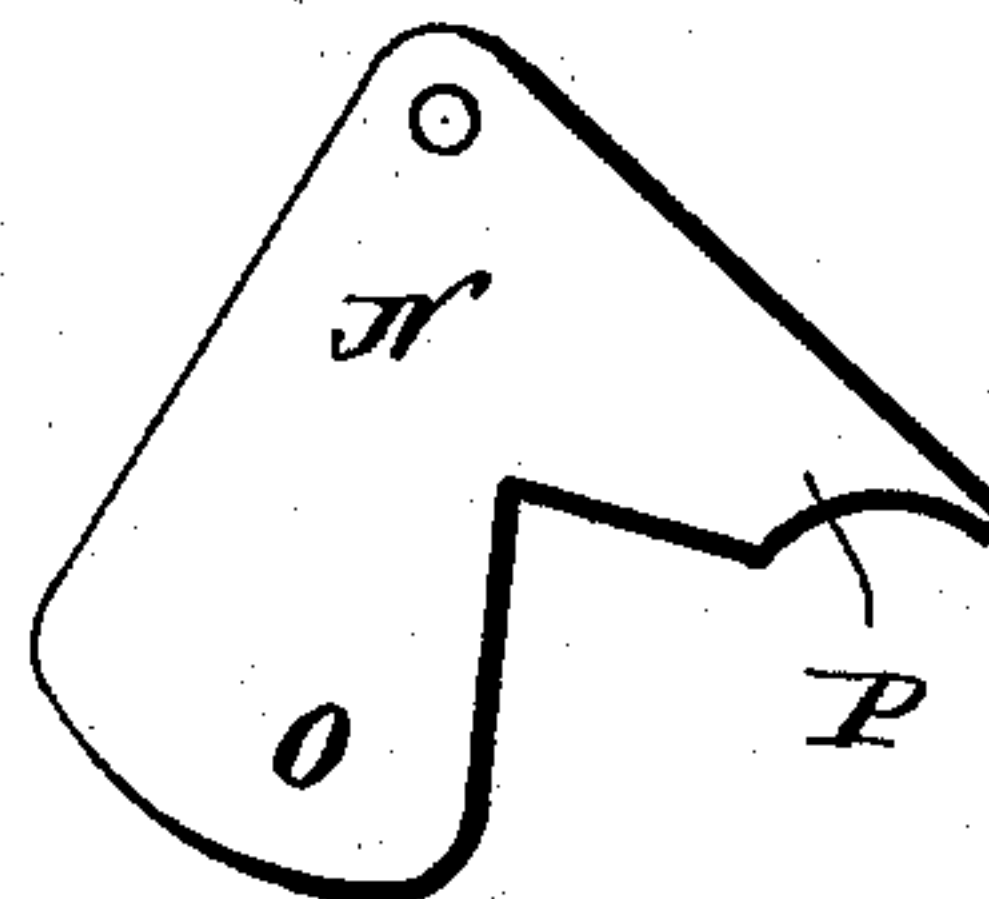
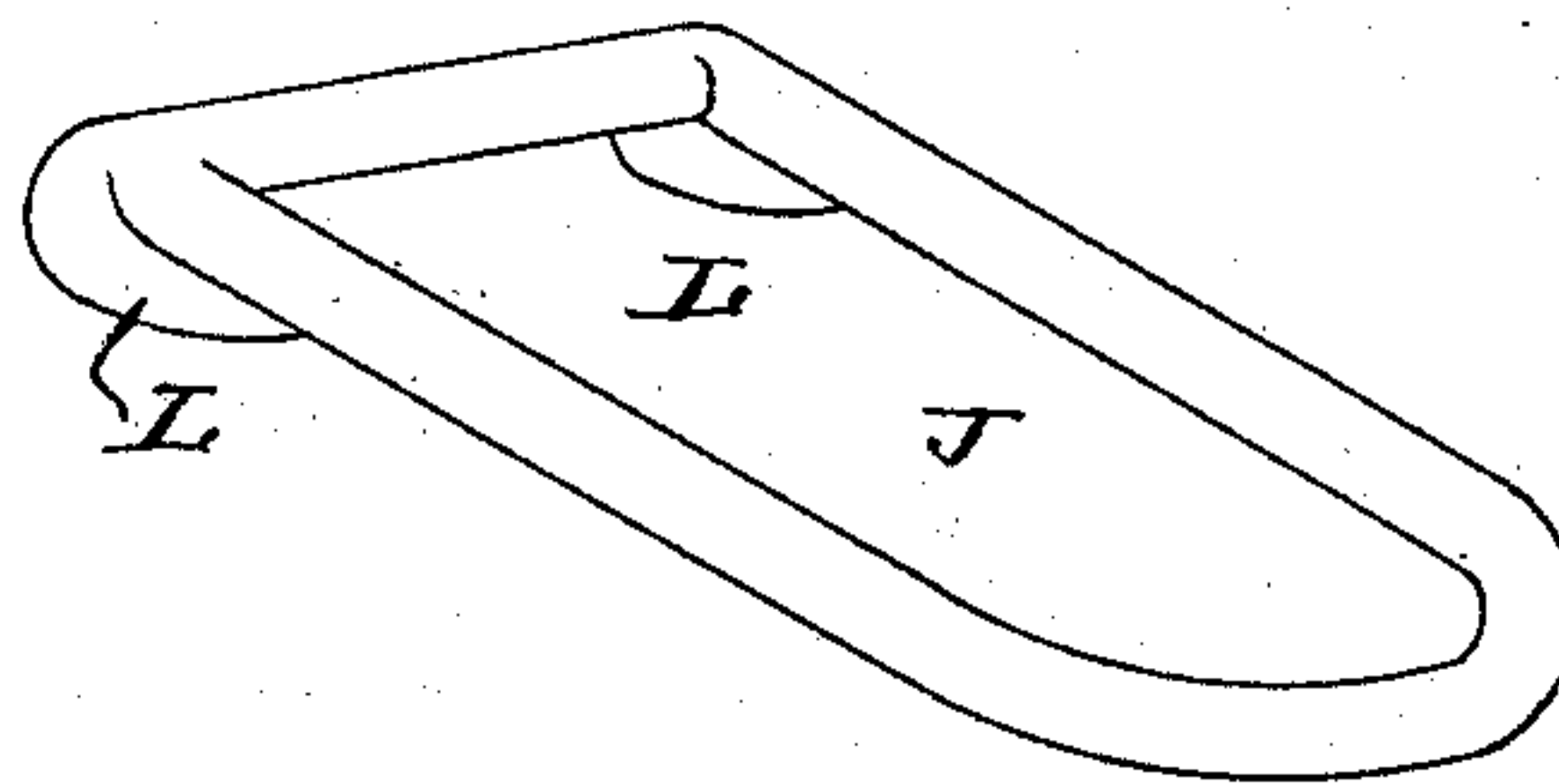


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

ZALMON W. SMITH, OF ADDISON, NEW YORK, ASSIGNOR TO FRANK G. PARSONS AND JACOB V. GRAHAM, OF SAME PLACE.

STANCHION.

SPECIFICATION forming part of Letters Patent No. 406,785, dated July 9, 1889.

Application filed March 6, 1889. Serial No. 302,054. (No model.)

To all whom it may concern:

Be it known that I, ZALMON W. SMITH, a citizen of the United States, residing at Addison, in the county of Steuben and State of New York, have invented new and useful Improvements in Stanchions, of which the following is a specification.

My invention relates to improvements in stanchions; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view showing two of my improved stanchions, one of them being opened and the other one closed over the head of a cow. Fig. 2 is a view, partly in front elevation and partly in vertical section, of the improved stanchion on a larger scale. Fig. 3 is a detail view of the locking bell-crank lever, and Fig. 4 is a detail view of the link.

The stanchion A is pivotally mounted between the floor and roof of the barn by means of the pivots B, as clearly shown, and one of the side bars C of the stanchion is removable and also adapted to be swung upward to permit the removal of the animal. The lower end of this side bar C is provided with a longitudinal notch or open-ended slot D, which engages the transverse pin E, secured in the lower cross-bar of the stanchion, and at its upper end is connected with a latch F, the said latch being pivoted near one end to the end of the upper cross-bar of the stanchion in a slot G in the same and provided with an upwardly-projecting point or tooth H, adapted to engage a recess or socket I in the under side of the beam or roof in which the upper end of the stanchion is pivoted, as shown in Fig. 1 and in dotted lines in Fig. 2. The extremity of this tooth is rounded or curved outward, so that it will more readily enter the said recess and will not be apt to bind against the top of the same. A recess or socket I is provided on each side of the upper pivot, so that the stanchion may be locked whether it be turned to one side or the other. The side bar C of the stanchion is connected with this latch F by means of a link J, passing around the latch and having one end engaging a slot K in the upper end of the said side bar. This link is provided at one end with the lugs or

offsets L, which engage against the sides of the side bar and thereby hold the link in the slot in the same, so as to prevent its twisting or slipping from its operative position.

The latch F is provided at an intermediate point of its length with the recess M, in which I pivot a locking-lever N, which is adapted to engage the end of the link J and thereby lock the said link against the latch, as shown in Fig. 2, so as to prevent the link moving thereon, and consequently lock the latch to the side bar so that the said side bar cannot be swung outward to release the animal. This locking-lever is substantially a triangular plate, which is pivoted at its upper end, and is cut away so as to provide the weighted arm O and the concave recess P, adapted to engage the end of the link more securely.

From the foregoing description the construction and arrangement of the parts of my device will be understood, and it is thought that the operation and advantages of the device will be easily comprehended. When the stanchions are open, the side bar C is swung outward, as shown in Fig. 1, thereby throwing the lower end of the latch F upward, and consequently causing the point or tooth H of the same to enter the recess I and thereby lock the stanchion against movement on its pivots. In this position the head of the cattle can be easily inserted between the two side bars of the stanchion, and the side bar C is then swung backward to the position shown in Fig. 2, so as to secure the animal. When the side bar C is swung inward, the latch F will be drawn downward, as shown in Fig. 2, and the link J will automatically fall to the lower end of the slot K and pass over the projecting end or arm of the locking-lever N and be engaged by the same, as shown in Fig. 2. The position of this locking-lever and the lower end of the slot K is such that when the link is engaged by the locking-lever it will be made to bind firmly in the said slot and around the latch, so that the latch cannot be moved outward to release the side bar.

When the side bar is locked in the position shown in Fig. 2, and the stanchion thereby closed, the stanchion can move freely on its pivot so as to give the animal a limited lib-

erty. When the stanchion is open, however, the point or tooth H, engaging the recess I, will effectually prevent movement of the stanchion on its pivots, and consequently
5 hold it securely while the animal is being fastened. This feature of my device also facilitates the removal of the animal. Should the animal be taken suddenly sick, the stanchion can be opened and the side bar then lifted so
10 as to disengage the notch D from the pin E, and allowed to hang loosely, as shown in dotted lines in Fig. 1. The animal can then be very easily removed, as will be readily understood.

15 It will be observed that I have provided a very simple and efficient stanchion, which can be easily operated, to secure and release the animal, and which will allow free movement of the head of the animal. The locking-lever
20 N, when it engages the link J, effectually closes the recess M, so as to prevent seeds and small particles of dust entering the same to accumulate therein and destroy the efficiency of the lock. The concave recess P in the edge
25 of the locking-lever engages the link so that the lever cannot slip thereon, and consequently the efficiency of the lock will be increased. The lugs L on the link maintain it in its proper position on the side bar, so that
30 as the side bar is swung inward and the latch is lowered the locking-lever will effectually engage the link and the closing of the stanchion be assured.

Having thus described my invention, what I
35 claim, and desire to secure by Letters Patent, is—

1. In a stanchion, the combination, with the supporting-frame having the recesses I in its top, of the stanchion-frame mounted therein

and provided with a swinging side bar, and a
40 latch pivoted to the upper end of the stanchion-frame, adapted to engage the recesses I, and connected with the swinging side bar, as set forth.

2. The combination of the supporting-
45 frame having the recesses I, the swinging stanchion having the swinging side bar C, and the latch pivoted to the stanchion and adapted to be operated by the swinging side bar to engage the recesses I, the said latch
50 being provided with a point or tooth to enter one of the said recesses, and having a rounded extremity, as set forth.

3. The combination of the stanchion having the swinging side bar C, provided at its up-
55 per end with the slot K, the latch F, pivoted to the stanchion, the link engaging the slot K and passing around the latch, and having the lugs L engaging against the side of the bar C, and the locking-lever pivotally mounted
60 on the latch and having a concave recess in its edge engaging the link, as set forth.

4. The combination of the stanchion having the swinging side bar C, the latch F, pivoted to the stanchion and having a recess M,
65 the link mounted on the side bar and passing around the latch, and the locking-lever pivoted in the recess M and having a weighted arm O, and a concave recess P, adapted to engage the link, as set forth.
70

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

ZALMON W. SMITH.

Witnesses:

J. H. SIGGERS,
E. G. SIGGERS.