

No. 657,397.

Patented Sept. 4, 1900.

S. A. CURTIS.
CATTLE STANCHION.

(Application filed May 2, 1900.)

(No Model.)

Fig. 1.

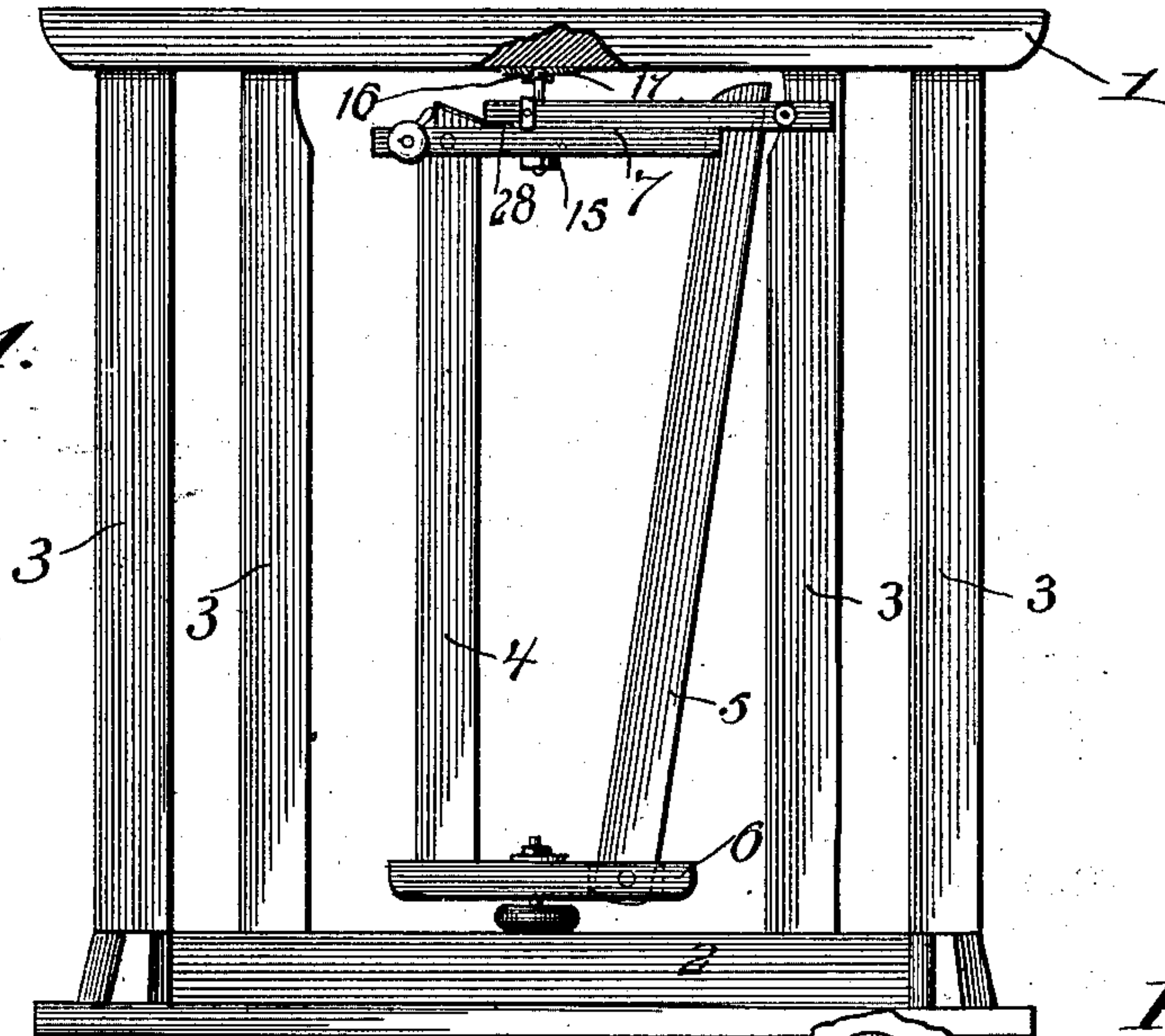


Fig. 2.

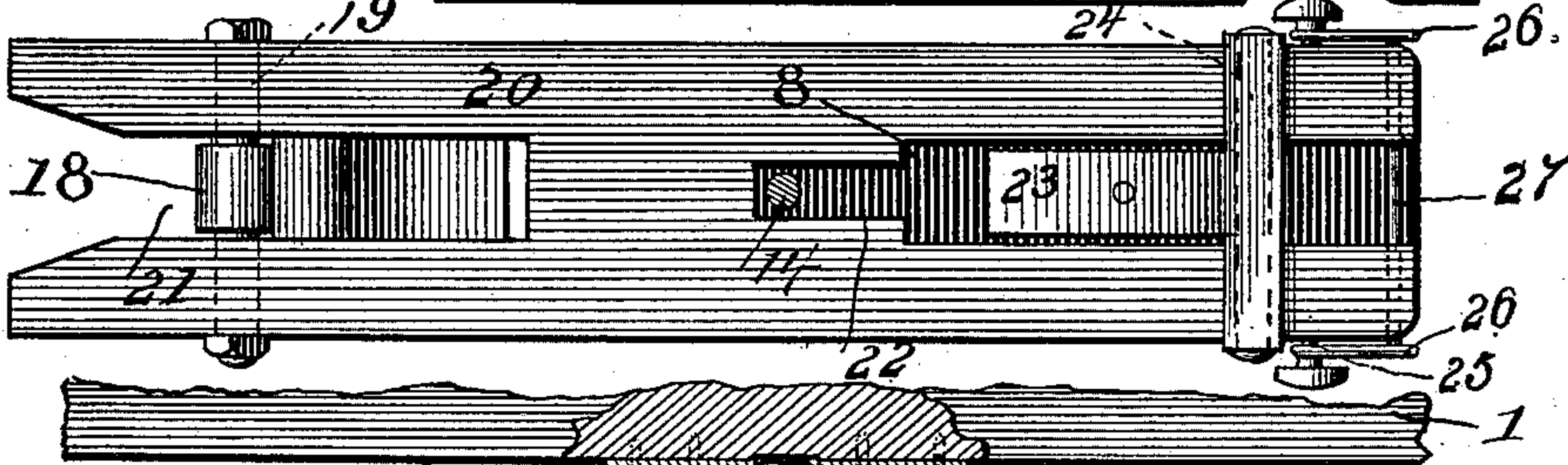


Fig. 5.

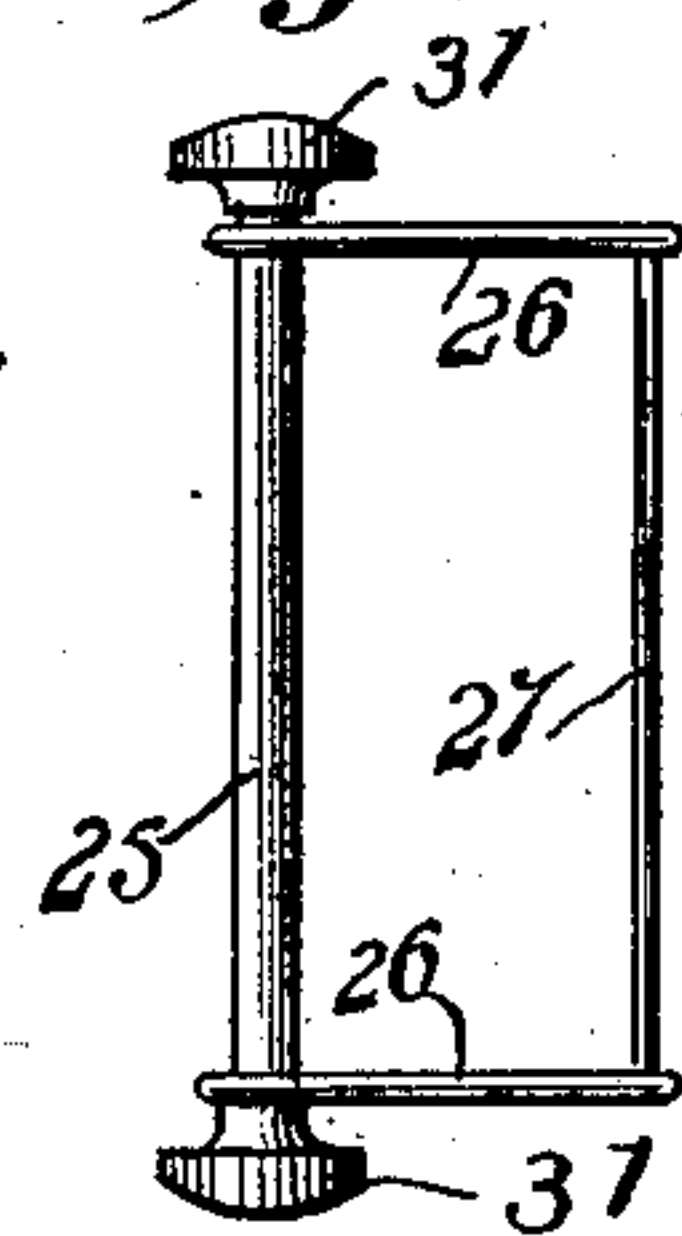


Fig. 3.

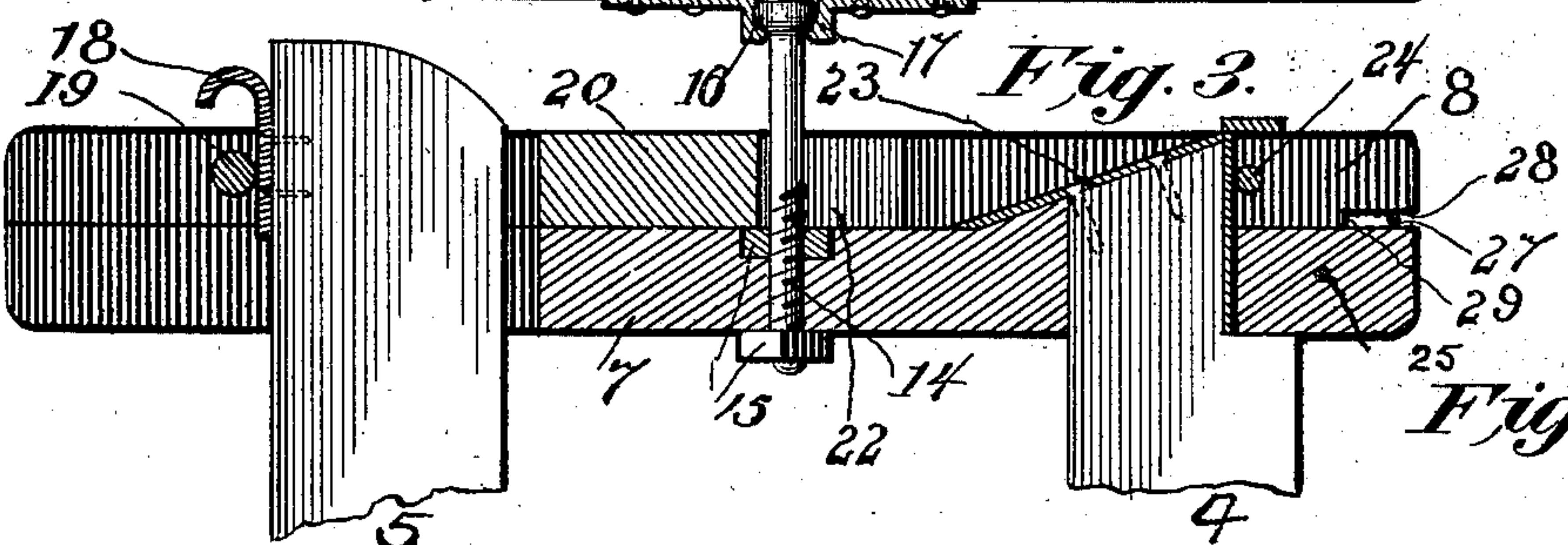


Fig. 6.

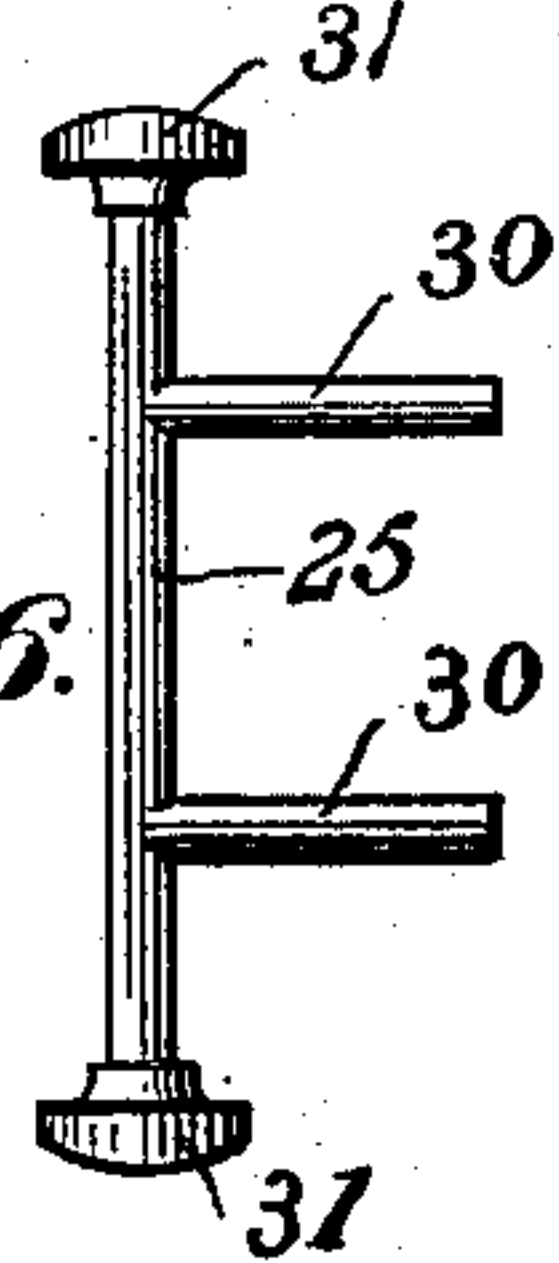
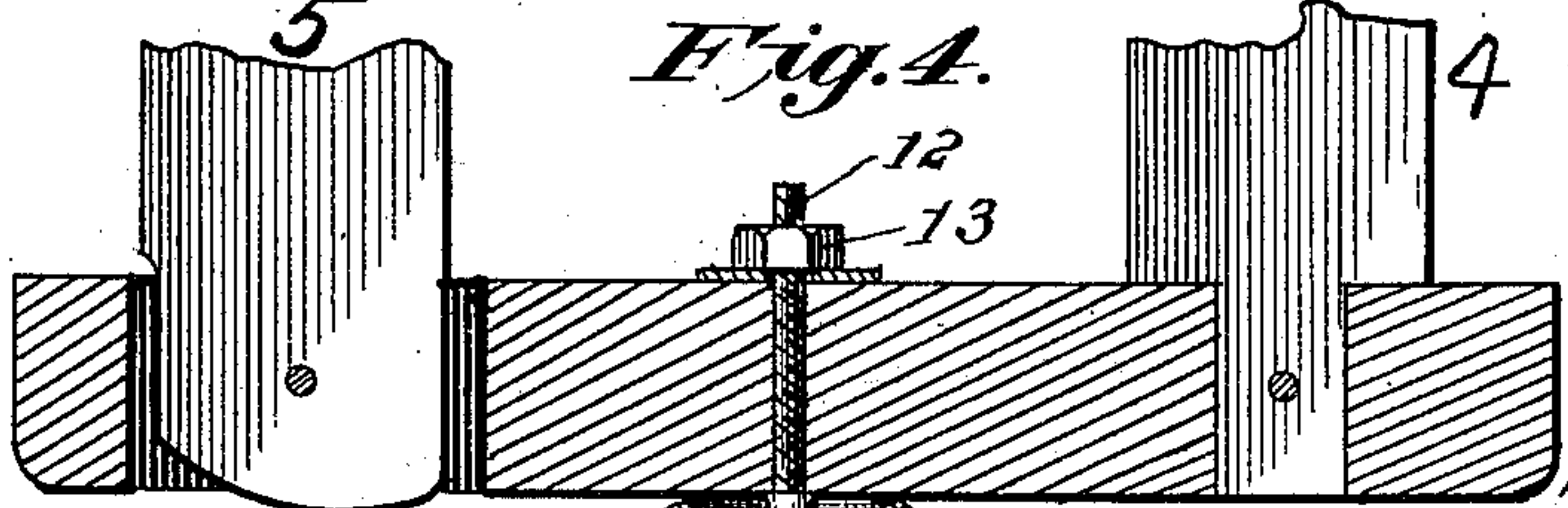


Fig. 4.



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SAMUEL ALLEN CURTIS, OF EATON, NEW YORK.

CATTLE-STANCHION.

SPECIFICATION forming part of Letters Patent No. 657,397, dated September 4, 1900.

Application filed May 2, 1900. Serial No. 15,249. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL ALLEN CURTIS, a citizen of the United States, residing at Eaton, in the county of Madison and State of New York, have invented certain new and useful Improvements in Cattle-Stanchions; and I do hereby 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.

My invention relates to improvements in cattle-stanchions, and has for its general object the improvement of their construction and operation.

The special object of the invention is to provide a cattle-stanchion of such a construction that while the cattle will be securely held against backing out of the stall the head and neck will be free to move within reasonable limits in almost any direction.

With these objects in view my invention consists in the improved construction, arrangement, and combination of parts of a cattle-stanchion, as hereinafter fully described and afterward specifically claimed.

In the accompanying drawings, Figure 1 is a view in side elevation of a cattle-stanchion constructed in accordance with my invention. Fig. 2 is a sectional view through the upper pivot-pin of the movable panel, showing said panel in plan view. Fig. 3 is a central vertical sectional view through the movable panel, the picket thereof being shown in elevation. Fig. 4 is a central vertical sectional view through the lower end of the movable panel. Fig. 5 is a detail plan view of the latch-operating mechanism detached, and Fig. 6 is a detail view of a modified form of the latch mechanism.

Like numerals of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings by numerals, 1 and 2 indicate the stationary upper and lower beams or supports for the stanchion, and 3 the stationary pickets secured in the opposite ends thereof.

4 and 5 indicate the pickets of the movable panel of the stanchion, the former being rigidly fixed in the lower cross-bar 6 and the up-

per cross-bar 7, and the latter pivotally connected at its lower end in the lower cross-bar 6 and arranged to slide longitudinally of the upper cross-bar 7 in the end slot 8 in the said cross-bar. The movable panel is loosely swiveled at its lower end in a metallic socket 9, secured by means of a bolt or pin 10 to the lower supporting-beam 2 of the stanchion, a ball or head 11 of a bolt 12, which passes through the lower cross-beam, projecting into said socket, the bolt being held in position by a nut 13. The head or ball 11 is of much less diameter than the socket 9, so that the panel is not only permitted to rotate on this head, but also to move laterally in any direction from side to side of said socket. In the upper cross-bar 7 of this panel is secured a bolt 14 by means of nuts 15, which bolt projects above the panel and is finished at its upper end in ball form, as at 16, said ball being mounted in a socket formed in the plate 17, secured to the under side of the upper stanchion support or beam 1.

Near the upper end of the pivoted picket 5 of the movable panel is secured a hook 18, which engages over a pin 19, secured transversely in a latch-bar 20 and passing across an end slot 21 in said latch-bar. The bolt 14 passes through a slot 22 in the opposite end of said latch-bar, by means of which the latch-bar is permitted to move longitudinally upon the upper cross-bar 7 of the movable panel. Upon the upper side of the said upper cross-bar 7 is secured a triangular tooth or slide way 23, and a transverse pin 24, secured in the latch-bar 20 and crossing the slot 22, engages on said tooth or slide way when the latch-bar is moved longitudinally, causing the latch-bar to rise when moved in one direction, the transverse bar engaging the vertical face of the tooth or slide and preventing the opposite movement of the latch-bar. In the latter position the cross-bar 7 and latch-bar 20 are locked together, as shown best in Fig. 3, and in order to permit of the longitudinal movement of the latch-bar, and consequently of the pivoted picket 5, the latch-bar must be raised high enough to permit the pin 24 to clear the tooth or slide 23. For this purpose I have provided a pin 25, which is pivotally mounted transversely in the cross-

bar 7 at a short distance from its end and which carries a ball formed of radial arms 26 and a cross-rod 27, the cross-rod being normally located, when the bar 7 and latch 20 are locked together, in a rabbet or groove 28 in the under side of the end of the latch-bar. By turning the pin 25 the rod 27 bears under the latch-bar 20 and raises it high enough for the pin 24 to clear the point of the tooth 23, which leaves the latch free to be moved longitudinally. The further turning of the pin 25 causes the rod 27 to push against the inner wall 29 of the rabbet or groove 28 and to push the latch-bar, and with it the pivoted picket 5, to the left, as shown in Figs. 2 and 3, or to the right, as shown in Fig. 1, from the position shown in the two former figures to that shown in the latter. In this position the opening between the fixed picket 4 and the pivoted picket 5 of the movable panel is wide enough for the passage of the heads of the cattle, or when the latch-bar is moved to and locked in the positions shown in Figs. 2 and 3 the space between these pickets is only wide enough for the neck and prevents the withdrawal of the head. The cattle are prevented from backing out of the stall when the latch-bar and pivoted picket are in positions shown in Figs. 2 and 3, but, owing to the pivoting of the movable panel and the laterally-moving ball-pivot 11 at the lower end of the panel, are free to move their heads either up or down between the pickets 4 and 5, or to twist sidewise by turning the panel upon the pivots and to move the head laterally within the limit of the lateral movement of the ball or head 11 in the socket 9. By this means the objectionable rigidity of the stanchions is obviated and the cattle given almost as much liberty of movement as though haltered. When desired, the movable panel may be held when open, as in Fig. 1, against rotation on its pivots by a still further movement of the latch-bar 20 to the right, as shown in Fig. 1, in which position the rigid picket 3 is engaged in the slot 21 of the latch-bar. This position is desirable when the cattle are about to enter the stanchions or to be released therefrom.

In Fig. 6 I have shown a modification of the latch-operating mechanism of Fig. 5, two radial arms 30 being used nearer together than the arms 26, (shown in Fig. 5,) the cross-bar 27 being dispensed with. The pin 25 is provided on each end with heads 31 to facilitate turning it.

The simplicity of construction and the advantages attending the operation of the invention will be obvious to those skilled in the art, and while I have specifically described the different parts of my invention I desire it to be understood that slight changes might be made in the construction and arrangement without departing from the spirit and scope of the invention.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In a cattle-stanchion, the combination with top and bottom supports, of a movable panel comprising a stationary and a pivoted picket, said panel being pivoted between the upper and lower supports, and a larger socket for the lower pivot, wider than said pivot to permit of the lateral movement in any direction of the lower end of the panel, substantially as described.

2. In a cattle-stanchion, the combination with upper and lower supports, of a socket on the under side of the upper support, and a larger socket on the upper side of the lower support, a movable panel, comprising a stationary and a movable picket, and upper and lower cross-bars, a bolt secured in the upper cross-bar, and provided with a head seated in the upper socket, and a bolt secured in the lower cross-bar, and provided with a ball seated in the lower socket, the lower socket being wider than its ball, to permit lateral movement of its ball in all directions, substantially as described.

3. The combination, in a cattle-stanchion, of upper and lower supports and stationary pickets secured between said supports, of a panel pivoted in said supports between the stationary pickets, said pivoted panel comprising a lower and an upper cross-bar, a stationary picket secured in said cross-bars, and a picket pivoted in the lower cross-bar, and a latch-bar slidably mounted upon the upper cross-bar and engaging the upper end of the pivoted picket, said latch-bar being provided with an end slot or notch adapted to straddle a stationary picket of the stanchion when the pivoted panel-picket is in its open position, and thereby prevent movement of the central panel on its pivot, substantially as described.

4. The combination in a cattle-stanchion, of upper and lower supports, a central panel pivotally mounted between said supports, and comprising upper and lower cross-bars, the upper cross-bar being provided with a longitudinal slot, a stationary picket secured in said cross-bars, and a picket pivoted in the lower cross-bar, said picket being slidably mounted at its upper end in the longitudinal slot in the upper cross-bar, a longitudinally-slotted latch-bar slidably mounted upon the upper cross-bar and engaging the pivoted picket, a triangular tooth projecting above the upper cross-bar to engage in the longitudinal slot in the latch-bar, a horizontal cross-pin in the latch-bar adapted to ride over said tooth, and means for moving the latch-bar vertically and longitudinally, substantially as described.

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

SAMUEL ALLEN CURTIS.

Witnesses:

L. C. THOMPSON,
C. W. RICH.