No. 650,159. Patented May 22, 1900.

# J. K. WILDER.

## STANCHION.

(No Model.) (Application filed July 31, 1899.)

Fig. 2.

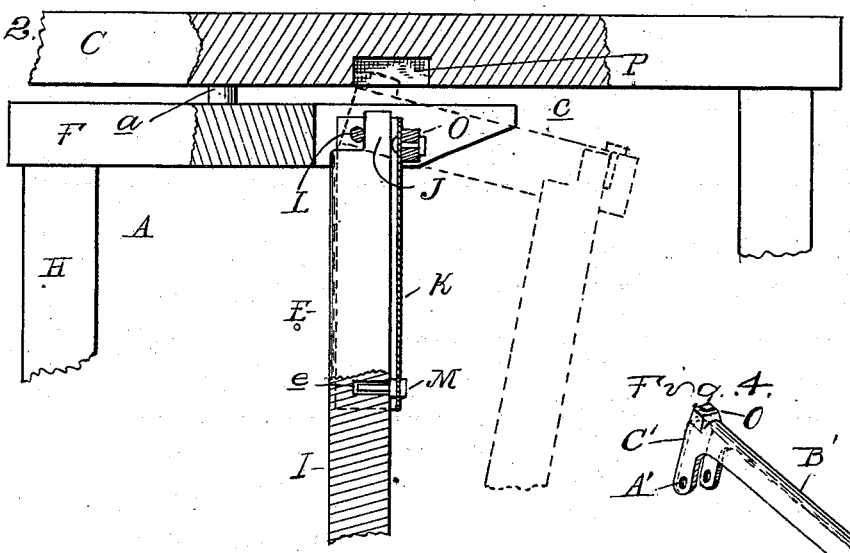



Fig. 4.

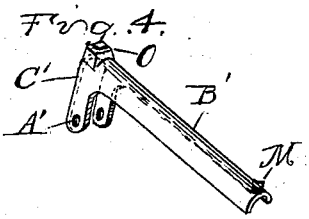



Fig. 3.

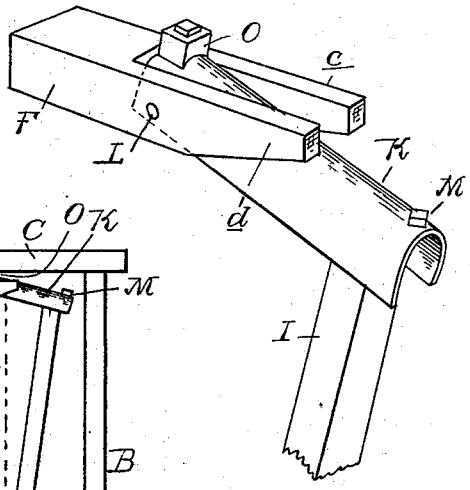
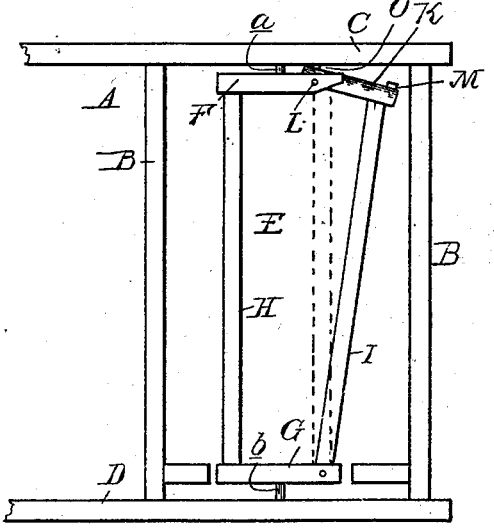



Fig. 1.

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# UNITED STATES PATENT OFFICE.

JOHN K. WILDER, OF MONROE, MICHIGAN.

## STANCHION.

SPECIFICATION forming part of Letters Patent No. 650,159, dated May 22, 1900.

Application filed July 31, 1899. Serial No. 725,655. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN K. WILDER, a citizen of the United States, residing at Monroe, in the county of Monroe and State of Michigan, have invented certain new and useful Improvements in Cattle-Stanchions, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention has reference to cattle-stanchions, and relates particularly to the swinging type of stanchion; and the invention consists in a novel construction of a lock and guide for the movable or swinging side member.

The invention further consists in the construction, arrangement, and combination of the various parts, as more fully hereinafter described and claimed.

In the drawings, Figure 1 is a front elevation of my improved cattle-stanchion. Fig. 2 is a sectional elevation thereof, illustrating the manner in which it is locked against rotary movement. Fig. 3 is a perspective view of a portion of a stanchion, showing the construction and location of the lock and guide arms. Fig. 4 is a modified type of guide and lock arms.

In the drawings thus briefly referred to the reference-letter A designates a framework comprising post members B and an upper cross-piece or stringer C.

D designates the flooring upon which the framework is supported, and E represents my improved stanchion, which is mounted for rotary movement intermediate the stringer and flooring, the connecting mechanism comprising pivot-pins *a* and *b*.

In construction the stanchion consists of a rectangular frame comprising an upper cross-bar F, a similar lower bar G, a rigid side bar H, and a hinged side bar I. The latter bar is pivoted at its lower end to the cross-bar G and is provided at its upper end with an extension J, which is adapted when the stanchion is closed to pass between the furcations *c* and *d*, formed upon one end of the upper cross-bar F. The mechanism for locking the hinged side bar is essentially of the construction as shown in Fig. 4, wherein it is shown to consist of a member comprising a loop C′ and a gravity and guide arm B′ projecting therefrom. The loop and arm may, as shown, be formed in one piece. It is evident that the invention comprehends the loop and arm being constructed in separate pieces and secured together. The member is adapted to be pivoted at its ends A′ to the upper cross-bar of the stanchion at or slightly below the top of the swinging side bar when the latter is in its vertical or closed position and is of a size to permit of its straddling the top of said bar only when the latter is in a substantially-vertical position to lock the bar from outward movement. The guide-arm, which is at right angles to the loop and depends therefrom when the side bar is vertical, is provided with a suitable stop M for arresting the further outward movement of the bar after the stanchion has been opened.

In practice the locking mechanism is preferably formed of sheet metal and, as a matter of convenience in manufacturing, is in the form of an inverted-**U**-shaped bar K, as plainly shown in Fig. 3. This construction is precisely the same as that shown in the perspective view with the exception that in the preferred form the side portions of the loop, Fig. 4, are prolonged or continued throughout the length of the arm, forming the trough or **U**-shaped bar described. This latter type of locking-bar is pivoted, as shown, between the furcations *c* and *d* by a pin or bolt L, the latter being substantially at or below the top of the swinging or hinged side bar, as shown. The free end of the side bar is adapted to travel within the trough-shaped bar K, or what will hereinafter be termed the "latch-bar," and is limited in its outward movement by the stop M in the form of an inwardly-projecting bolt extending within the latch-bar at its free end. Movement of the side bar in the opposite direction is limited by the pin L. When the stanchion is closed, the latch-bar is in parallelism with the hinged side bar, and the upper portion of said trough-shaped bar, which constitutes the loop portion of the latch, as before stated, straddles the top of the side bar, as shown in full lines in Fig. 2. The recess *e* is formed within the hinged side bar to receive the stop M upon the latch, permitting the latch-bar to be brought into desired parallel relation with the side bar. It will thus be observed from the construction of the locking mechanism that the side bar or movable member of

the stanchion when in the locked position is arranged between the pivot L and the bearing-point upon the upper end or loop portion of the latch-bar immediately opposite the pivot, securely locking the parts in position; also, by providing the locking mechanism with a gravity-arm the hinged member of the stanchion is locked automatically and may be unlocked in a ready and effective manner by simply raising said arm upon its fixed pivot.

The means employed for preventing rotation of the stanchion proper when its movable side member is unlocked comprises, essentially, a head O, formed upon the bar K, which when the latter is moved upwardly is adapted to extend within a recess P within the stringer, as shown in Fig. 2. Thus when the stanchion is closing the downward movement of the arm K automatically unlocks the stanchion, and the latter is free to rotate.

What I claim as my invention is—

1. In a stanchion, the combination with a hinged side bar, of a guiding and locking member for the side bar comprising a gravity guiding-arm, and a loop at the upper end thereof having a fixed pivotal connection with the stanchion-top at or slightly below the top of the side bar when the latter is in its vertical position and adapted to straddle the side bar at its top when the stanchion is closed, and a stop for limiting the outward movement of the side bar, substantially as described.

2. In a stanchion the combination with a hinged side bar, of a guiding and locking member for the side bar, comprising a gravity guiding-arm, a stop at the lower end thereof, and a loop at the upper end thereof, having a fixed pivotal connection with the stanchion-top at or slightly below the top of the side bar when the latter is in its vertical position and adapted to straddle the side bar at its top when the stanchion is closed, substantially as described.

3. In a stanchion, the combination with a hinged side bar, of a guiding and locking member for the side bar, comprising an inverted-trough-shaped gravity guiding-arm, a stop within said trough-shaped arm for arresting the outward movement of the side bar, and a loop having a fixed pivotal connection with the stanchion-top at or slightly below the top of the side bar when the latter is in its vertical position and adapted to straddle said side bar at its top when the stanchion is closed, substantially as described.

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

JOHN K. WILDER.

Witnesses:
A. L. DEUEL,
A. B. BACKUS.