A. F. A. TIDYMAN.

STANCHION.

APPLICATION FILED JUNE 8, 1910.

987,269. Patented Mar. 21, 1911.

Fig. 1.

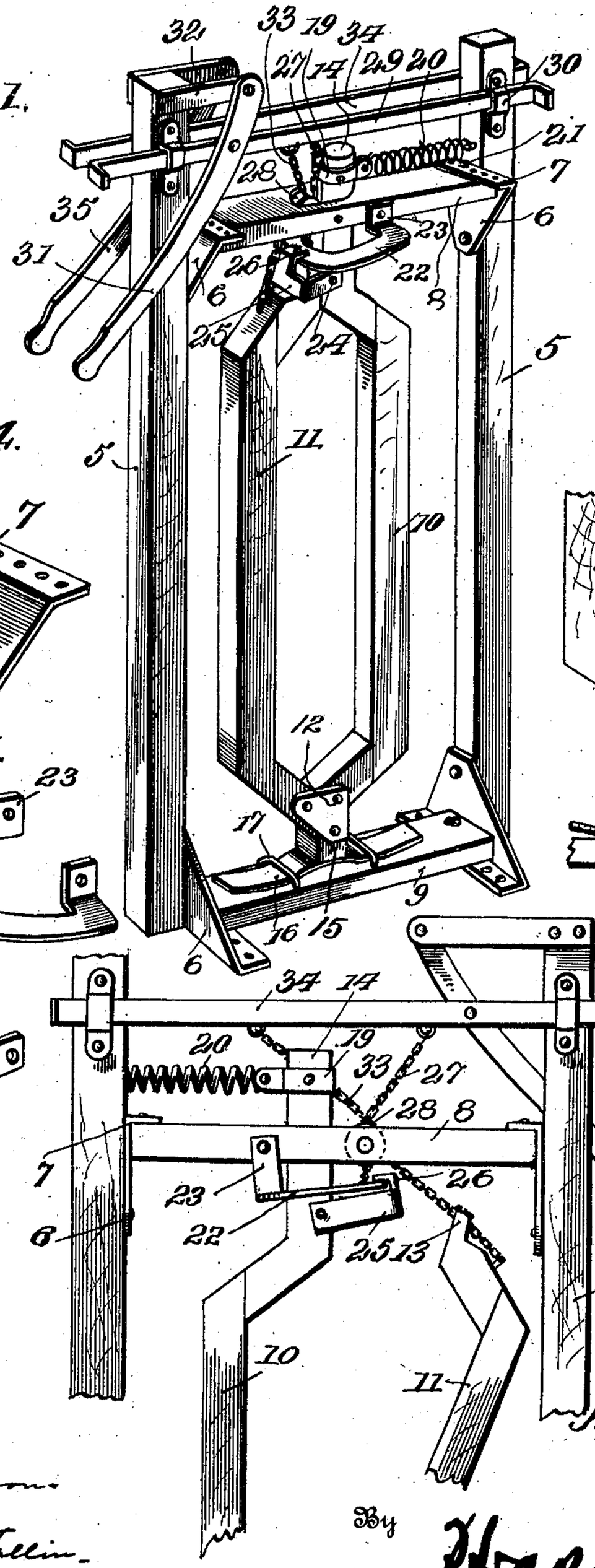

Fig. 4.

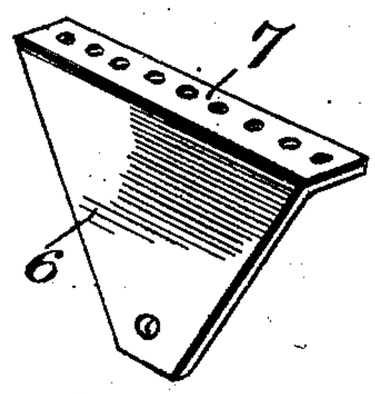

Fig. 5.

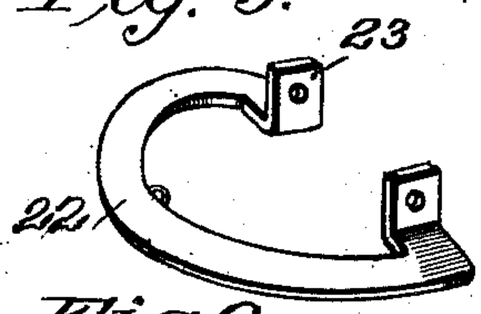

Fig. 6.

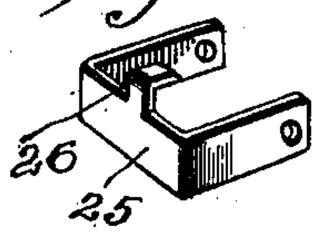

Fig. 3.

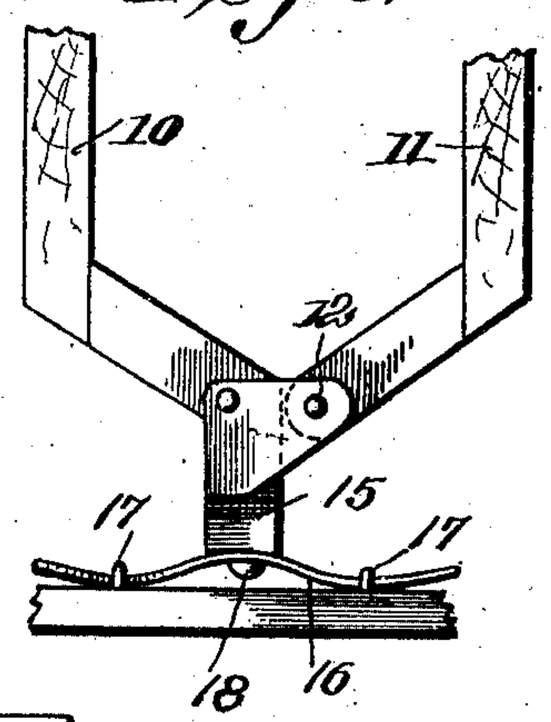

Fig. 2.

Witnesses

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STANCHION.

987,269. Specification of Letters Patent. **Patented Mar. 21, 1911.**

Application filed June 8, 1910. Serial No. 565,756.

To all whom it may concern:

Be it known that I, ARTHUR F. A. TIDYMAN, citizen of the United States, residing at Mayville, in the county of Dodge and State of Wisconsin, have invented certain new and useful Improvements in Stanchions, of which the following is a specification.

This invention relates to stanchions and has for its object the provisions of a comparatively simple and thoroughly efficient device of this character, the construction of which is such as effectually to prevent a cow from leaving its stall, while at the same time permitting the animal to turn its head in any direction.

A further object is to provide a stanchion including a supporting frame having a yoke pivotally mounted therein and provided with a movable section, the lower end of said yoke being free to move laterally with respect to the supporting frame.

A further object is to provide improved means for locking the movable section of the yoke in closed position, and means for releasing the locking means.

A still further object of the invention is generally to improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

For a full understanding of the invention and the merits thereof, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a stanchion constructed in accordance with my invention; Fig. 2 is a rear elevation of the upper portion of the stanchion, showing the movable section thereof in open position; Fig. 3 is a rear elevation of the lower portion of the stanchion; Fig. 4 is a detail perspective view of one of the supporting brackets detached; Fig. 5 is a similar view of the segmental plate or bar detached; Fig. 6 is a perspective view of the U-shaped locking member detached.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The improved stanchion forming the subject matter of the present invention comprises a supporting frame including spaced uprights 5 having brackets 6 secured to the inner faces thereof and provided with laterally extending flanges 7 for attachment to transverse connecting bars 8 and 9. The flanges of the lower set of brackets are preferably disposed in alinement with the lower ends of the adjacent standards 5 so as to form a smooth bearing surface for the supporting frame, while the upper set of brackets are preferably spaced from the upper ends of the standards 5.

Pivotally mounted within the supporting frame is a yoke 10 having a movable section 11, the lower end of which is pivoted to the body of the yoke, as indicated at 12, while the upper end thereof is reduced to form a terminal lip 13. One end of the yoke 10 is provided with a vertically disposed pin 14 which extends through a correspondingly shaped opening in the upper connecting bar 8, while the lower end thereof is provided with a foot piece 15, the bottom of which is pivotally connected with a sliding plate 16. The plate 16 is slidably mounted in suitable guides or keepers 17 secured to the bottom of the connecting bar 9, the intermediate portion of the plate being bowed upwardly so as to prevent the pivot pin 18 from coming in contact with said connecting bar. Thus it will be seen that the lower end of the yoke is pivotally connected with the plate 16, while the latter is free to slide within the keepers 17 so as to permit the lower end of the yoke to be adjusted laterally with respect to the supporting frame and thus prevent said yoke from cutting or otherwise lacerating the neck of the cow when the animal lies down in its stall.

Secured to the upper end of the pin 14 is a collar 19 to which is secured one end of a coil spring 20, the opposite end of said spring being fastened in any suitable manner to one of the bars of the supporting frame 5. The tension of the spring 20 is such as to return the yoke to normal position when the latter is tilted on its pivotal axis, as by reason of the cow turning its head.

The flanges 7 of the brackets are provided with a plurality of spaced openings for the reception of pins or bolts 21, such a construction permitting the connecting bars 8 and 9 to be adjusted in a horizontal plane to accommodate cows of different sizes.

Depending from the upper connecting bar 8 is a segmental guide plate 22 having its intermediate portion extended beneath the bar 8 and its opposite ends bent upwardly to form attaching lugs 23 for engagement with the adjacent vertical edges of the bar 8.

Pivotally mounted at 24 on the upper end of the yoke 10 is a substantially U-shaped locking member 25 adapted to engage the terminal lip 13 of the movable section 11 and thus hold said movable section in closed position. The U-shaped locking member 25 is provided with an upwardly and inwardly extending lug 26 which rides over the segmental rack 22 and forms in effect a guide for the yoke when the latter is swung in either direction on its pivotal axis.

Secured to the intermediate portion of the segmental rack 22, is one end of a chain or other flexible element 27, the opposite end of which passes over a guide pulley or roller 28 for attachment to a transverse rod 29 slidably mounted in suitable keepers 30 secured to the standards on one side of the supporting frame. One end of an operating lever 31 is pivotally mounted on a support 32, while the intermediate portion thereof is pivotally connected with the rod 29, so that by tilting the lever the rod 29 will be moved longitudinally and through the medium of the chain 27 elevate the plate and release the locking member 25 from engagement with the terminal lip 13 of the movable section 11 of the yoke, when it is desired to position said yoke on the neck of a cow. In order to close the movable section of the yoke, there is provided a chain 33, one end of which is secured to the free end of the movable section 11, the opposite end of said chain being extended over a guide roller or pulley to a second sliding rod 34 to which is connected a lever 35 similar in construction to the lever 31. Thus it will be seen that by tilting the lever 31, the locking member 25 will be elevated to disengage the movable yoke section 11 so as to allow the yoke to embrace the neck of an animal and by tilting the lever 35, the section 11 may be moved to closed position, the locking member 25 dropping by gravity into engagement with the terminal lip 13 and preventing tilting movement of said movable section.

The stanchions may be made in different sizes and shapes and any number of such stanchions connected in any suitable manner, without departing from the spirit of the invention.

While I have shown the stanchion formed of wood, it will, of course, be understood that the same may be constructed of piping, tubular metal, angle iron or the like.

Having thus described the invention, what is claimed as new is:

1. A stanchion including a supporting frame, a yoke pivotally mounted in the frame and provided with a movable section, a bar, a locking member adapted to engage the movable yoke section for holding the latter in closed position and provided with a guide lip bearing against the bar, and means operatively connected with the locking member for releasing the latter.

2. A stanchion comprising a supporting frame including spaced uprights connected by transverse bars, one of which is provided with an opening, a plate slidably mounted on the lower connecting bar, a yoke having a vertical pin journaled in the opening of the upper bar and having its lower end pivotally connected with the plate, said yoke being provided with a movable section, means for locking the movable section in closed position, and means for releasing the locking means.

3. A stanchion comprising a supporting frame including spaced uprights having brackets secured thereto and provided with laterally extending perforated flanges, upper and lower connecting bars secured to said flanges, one of said connecting bars being provided with an opening, keepers secured to the lower connecting bar, a plate slidably mounted in said keepers, a yoke having its upper end provided with a pin seated in the opening of the upper connecting bar and having its lower end pivotally connected with the plate, said yoke being provided with a movable section, a locking member mounted on the yoke and adapted to engage the adjacent end of the movable section for locking the latter in closed position, and a spring forming a connection between the vertical pin of the yoke and one of the uprights of the supporting frame.

4. A stanchion including a supporting frame comprising spaced uprights connected by upper and lower transverse bars, a yoke having a vertical pin journaled in the upper transverse bar, a plate slidably mounted on the lower transverse bar and pivotally connected with the lower end of the yoke, said yoke being provided with a movable section having its free end formed with a terminal lip, a bar depending from the upper connecting bar, a substantially U-shaped locking member pivotally mounted on the yoke and adapted to engage the terminal lip of the movable section, said locking member being provided with an overhanging lug bearing against the depending bar, keepers secured to the opposite sides of the uprights, rods slidably mounted in said keepers, a cable having one end thereof secured to the depending bar for elevating the latter to disengage the locking member from the movable yoke section, and its other end secured to one of the sliding rods, a second cable secured to the mating rod and movable yoke section for moving the latter to closed posi-

tion, and operating levers pivotally mounted on the supporting frame and pivotally connected with the adjacent sliding rods.

5. A stanchion including a supporting frame comprising spaced uprights connected by laterally adjustable transverse bars, one of which is provided with an opening, keepers secured to the other connecting bar, a plate slidably mounted in the keepers and having its intermediate portion bowed upwardly, a yoke having one end thereof provided with a pin journaled in said opening and its lower end formed with a depending foot pivotally connected with the bowed portion of the sliding plate, said yoke being provided with a pivoted section, the free end of which is reduced to form a lip, a segmental bar depending from the upper transverse bar of the frame, a U-shaped locking member pivotally mounted on the yoke and adapted to engage the lip of the movable yoke section, said locking member being provided with an overhanging lug for contact with the segmental bar, a spring forming a connection between the pin and supporting frame, transverse rods slidably mounted on opposite sides of the frame, operating levers pivotally mounted on the supporting frame and pivotally connected with the rods, and cables connected with the yoke and segmental bar, respectively, and extending through the opening in the upper transverse connecting bar for attachment to the adjacent rods.

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

ARTHUR F. A. TIDYMAN. [L. S.]

Witnesses:
GEO. C. WHEELER,
GILBERT ZURIG.