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CATTLE STANCHION.

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1,043,390. Patented Nov. 5, 1912.

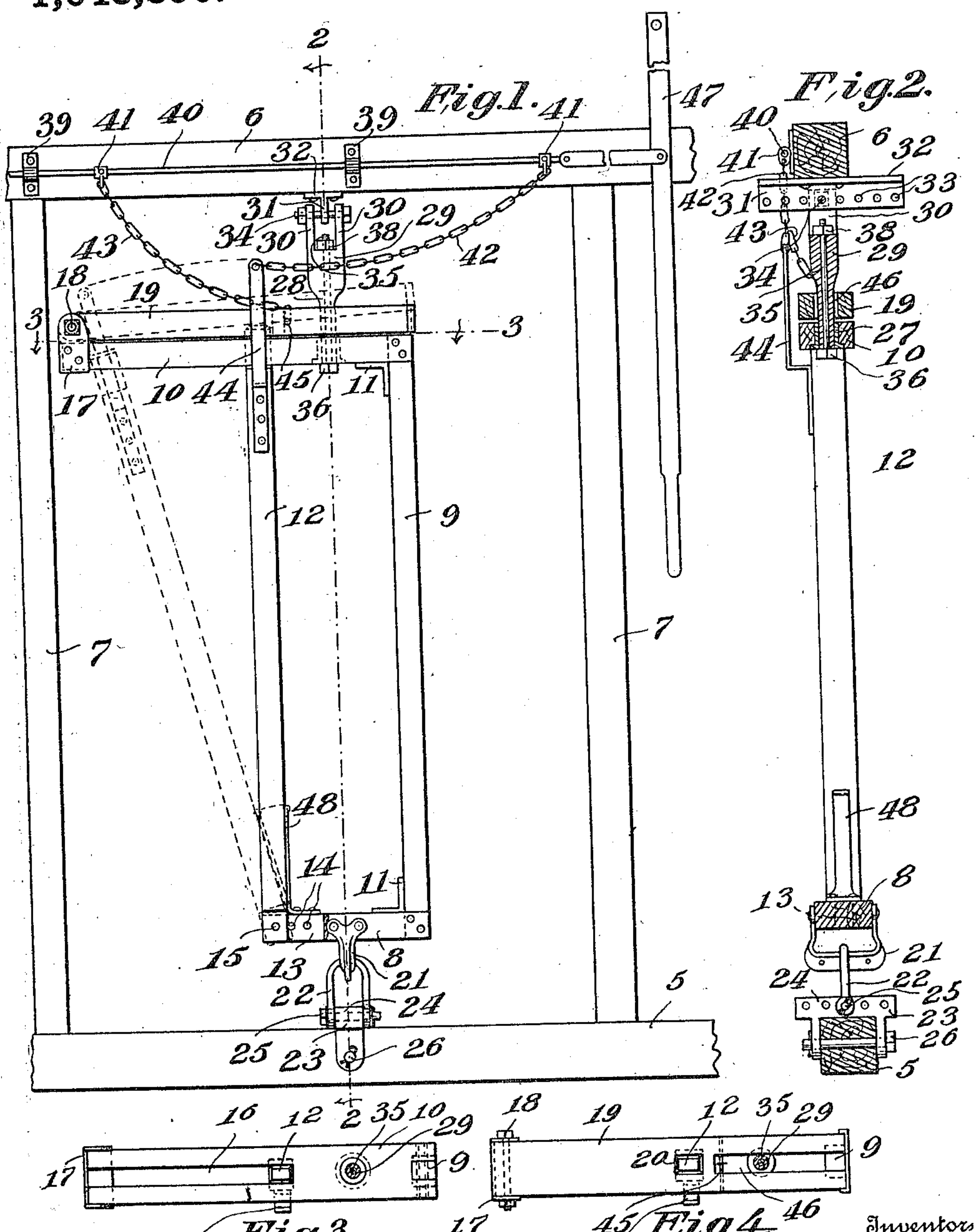

Fig.1. Fig.2. Fig.3. Fig.4.

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CATTLE-STANCHION.

1,043,390. Specification of Letters Patent. Patented Nov. 5, 1912.

Application filed February 8, 1911. Serial No. 607,319.

To all whom it may concern:

Be it known that we, GUSTAV W. BARTZ and HERMAN T. ABITZ, citizens of the United States, residing at Reedsville, in the county of Manitowoc and State of Wisconsin, have invented new and useful Improvements in Cattle-Stanchions, of which the following is a specification.

The invention relates to stanchions, and more particularly to the class of cattle stanchions.

The primary object of the invention is the provision of a device of this character in which one or more animals may be held, and when there are more than one animal fastened therein, the same may be simultaneously released in a single operation, or a single animal released and the remaining number of the herd held, or vice versa.

Another object of the invention is the provision of a device of this character in which cattle when held within the stanchions may freely move, as the stanchion is mounted for limited lateral and rotary movement, and is also capable of being locked and unlocked for holding or releasing the cattle.

Further objects of the invention are generally, the simplicity of construction, increased efficiency, capable of forward, backward, sidewise, lateral and rotary adjustment when locked and occupied, and also that will permit any number of stanchion yokes to be locked or unlocked simultaneously in a single operation for retaining or releasing cattle.

A still further object of the invention is the provision of a device of this character which is strong, durable and inexpensive in manufacture, and also one that will retain the stanchion yokes in their correct position when unoccupied, whereby the cattle may be readily and easily secured in the yokes.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claim hereunto appended.

In the drawings: Figure 1 is a fragmentary front elevation of a device constructed in accordance with the invention, the stanchion yoke being shown in full lines in locked position, while in dotted lines the same is shown in unlocked position. Fig. 2 is a sectional view on the line 2—2 of Fig. 1. Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 1, looking in the direction of the arrow. Fig. 4 is a top plan view of the stanchion yoke when in locked position.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, 5 designates the lower sill, 6 the upper sill, and 7 the uprights forming a continuous supporting frame for any number of stanchion yokes that may be required in a cattle barn, the stanchion yokes being hereinafter more fully described.

The stanchion yoke comprises a short horizontal foot bar 8, to one end of which is securely connected a stationary vertical bar 9, to which is connected at its upper end a head bar 10, the latter being parallel with the foot bar 8 but of greater length than the same, the foot and head bars 8 and 10, respectively, being braced by angle irons 11 which are suitably connected thereto. Connected to the opposite end of the foot bar 8 is a vertically disposed swinging bar 12, the same, at its lower end, being slidably fitted in a bifurcation 13 formed in the foot bar 8 and opening through one end thereof, the said foot bar 8 being provided with a plurality of openings 14, any one of which is adapted to register with a suitable opening formed in the swinging bar 12 for receiving a pivot bolt or pin 15, and in this manner the said swinging bar 12 may be adjusted toward or away from the stationary bar 9, as the occasion may require. The upper end of the swinging bar 12 projects into and slides within a guide slot 16 formed in the head bar 10, the outer end of the slot 16 being closed by a casting 17 fixed to the said head bar, so as to limit the outward swinging movement of the bar 12 when the stanchion yoke is being opened.

Arranged above the head bar 10 of the stanchion yoke and connected to the casting 17 by means of a pivot 18 is a locking bar 19, the latter being provided with a socket 20 adapted to receive the upper and free end of the swinging bar 12 when the latter is in closed position, or in parallel relation to the stationary bar 9 of the yoke, thereby locking the said swinging bar against movement.

Connected centrally to the foot bar 8 of the stanchion yoke is a U-shaped clevis 21, the latter being loosely coupled with an inverted U-shaped clevis 22, the ends of which are adjustably connected and pivoted to the cross web 23 of a U-shaped casting 24, by means of a pin 25, the casting 24 being detachably connected to the lower sill 5 by means of a removable pin 26 which is passed through the sill and the said casting, the pins 25 and 26 being fastened in any suitable manner to prevent displacement thereof.

In alinement with the clevis 21 and suitably mounted in the head bar 10 is a sleeve 27, through which is passed the stem 28 of a hanger 29, the same being provided with a suitable bifurcation forming spaced parallel ears 30, the bifurcation in the said hanger receiving the central flange 31 of a T-shaped beam or bar 32, the latter being suitably fixed to the upper sill 6 of the frame, the said central flange 31 being provided with a series of openings 33, any one of which is adapted to receive a pin 34, the latter being engaged with the ears 30 of the hanger 29, whereby the latter may be adjusted on the T-shaped bar 32, as the occasion may require.

The stem 28 of the hanger 29 is provided with a suitable central bore, through which is passed a headed pin 35, the head 36 of which engages the outturned annular bearing flange 37 of the sleeve 27, while the opposite end of the pin has engaged therewith a nut 38 confined within the bifurcation in the upper end of the hanger 29. Thus, it will be seen that the hanger is connected with the head bar 10 of the stanchion yoke.

Fixed upon the upper sill 6 is a plurality of guide eyes 39, in which is slidably mounted a releasing rod 40, the same being of the required length, whereby a plurality of stanchion yokes may be simultaneously locked and unlocked on actuating the said rod 40. However, in the drawings, there is shown but a single stanchion yoke, but it will be obvious that any number of yokes may be mounted between the uprights 7 of the frame for supporting said stanchion yoke. The releasing rod 40 is provided with spaced perforated lugs 41, to which are connected pull chains 42 and 43. The pull chain 42 is connected with the free end of an arm 44 fixed to the swinging bar 12, the free end of the arm 44 being outbent to lie outside of the head bar 10 of the stanchion yoke, while the chain 43 is suitably connected with the locking bar 19, the said chain 43 being connected to a pin 45 mounted in the locking bar 19, which pin 45 intersects a slot 46 formed in the locking bar 19, the said slot being adapted to receive the stem 28 of the hanger 29, and is of a length to permit the said locking bar 19 to be raised and lowered away from and toward the head bar 10 of the stanchion yoke on the unlocking and locking of the movable bar thereof.

At a suitable point above the upper sill 6 of the frame is pivotally connected one end of a throw lever 47, the same being also pivotally connected to the releasing rod, whereby on the swinging of the throw lever 47 in one direction, the locking bar 19 will be elevated, thus freeing the swinging bar 12 of the stanchion yoke, so that the said swinging bar 12 may move to open position for the release of an animal from the yoke.

Connected to the foot bar 8 of the stanchion yoke is one end of a spring member 48, the opposite end of which has its bearing against the swinging bar 12 and serves to act thereupon, whereby the said bar 12 will be automatically thrown to open position or away from its normal vertical position with relation to the stationary bar 9 of the yoke. Now, when the yoke is unlocked and the swinging bar 12 has moved to position for opening the yoke, and it is desired to close the same, an operator merely moves the throw lever 47 in opposite direction, thereby pulling upon the chain 42 which causes the swinging bar 12 to be moved to vertical parallel relation to the stationary bar 9 of the yoke, and as the releasing lever 47 is pulled upon, it causes the slackening of the chain 43, so that by the weight of the locking bar 19, the same will drop into locking position for engagement with the upper end of the swinging bar 12, thereby locking the same in its closed or parallel position with relation to the stationary bar 9 of the stanchion yoke for the securing of an animal in the yoke. It is evident that the said stanchion yoke is free to move in a limited degree either laterally or forwardly. Also the said yoke is capable of limited rotary movement. Furthermore, when the pins 25 and 34 have been adjusted in the webbing 23 and flange 39 of the casting and T-shaped beam 24 and 32, respectively, the said yoke may be thrown either forwardly or rearwardly with respect to the supporting frame therefor. It is also to be understood that where a plurality of stanchion yokes are employed, the chains 42 and 43 may be detached from one or more of the stanchion yokes, thereby permitting certain of the cattle to remain secured in the yokes, while others are released therefrom. It is evident that when the chains 42 and 43 are connected up with the stanchion yokes, all of the same may be simultaneously released for the freeing of the cattle therefrom.

What is claimed is:

The combination with a stationarily mounted, vertical frame of bars fixed transversely to the top and bottom of said frame centrally thereof, a yoke adjustably con-

nected to said bars and having stationary and swinging side rails, a locking bar hinged to the top of the yoke and engageable with the swinging rail for locking it when parallel with the stationary rail, an arm fixed to the swinging rail, a slidable releasing rod mounted on the frame at the top thereof, and chains, one fixed to the rod and the arm and the other fixed to the rod and locking bar and connected to the rod at opposite sides thereof and adapted alternately to pull upon said locking bar and swinging rail on movements of the rod in reverse directions.

In testimony whereof we affix our signatures in presence of two witnesses.

GUSTAV W. BARTZ.
HERMAN T. ABITZ.

Witnesses:
EMIL D. SCHNEIDER,
GEORGE RUETHER.