F. A. BRUNDAGE.

COW STANCHION.

APPLICATION FILED MAR. 24, 1911.

1,011,024.

Patented Dec. 5, 1911.

2 SHEETS—SHEET 1.

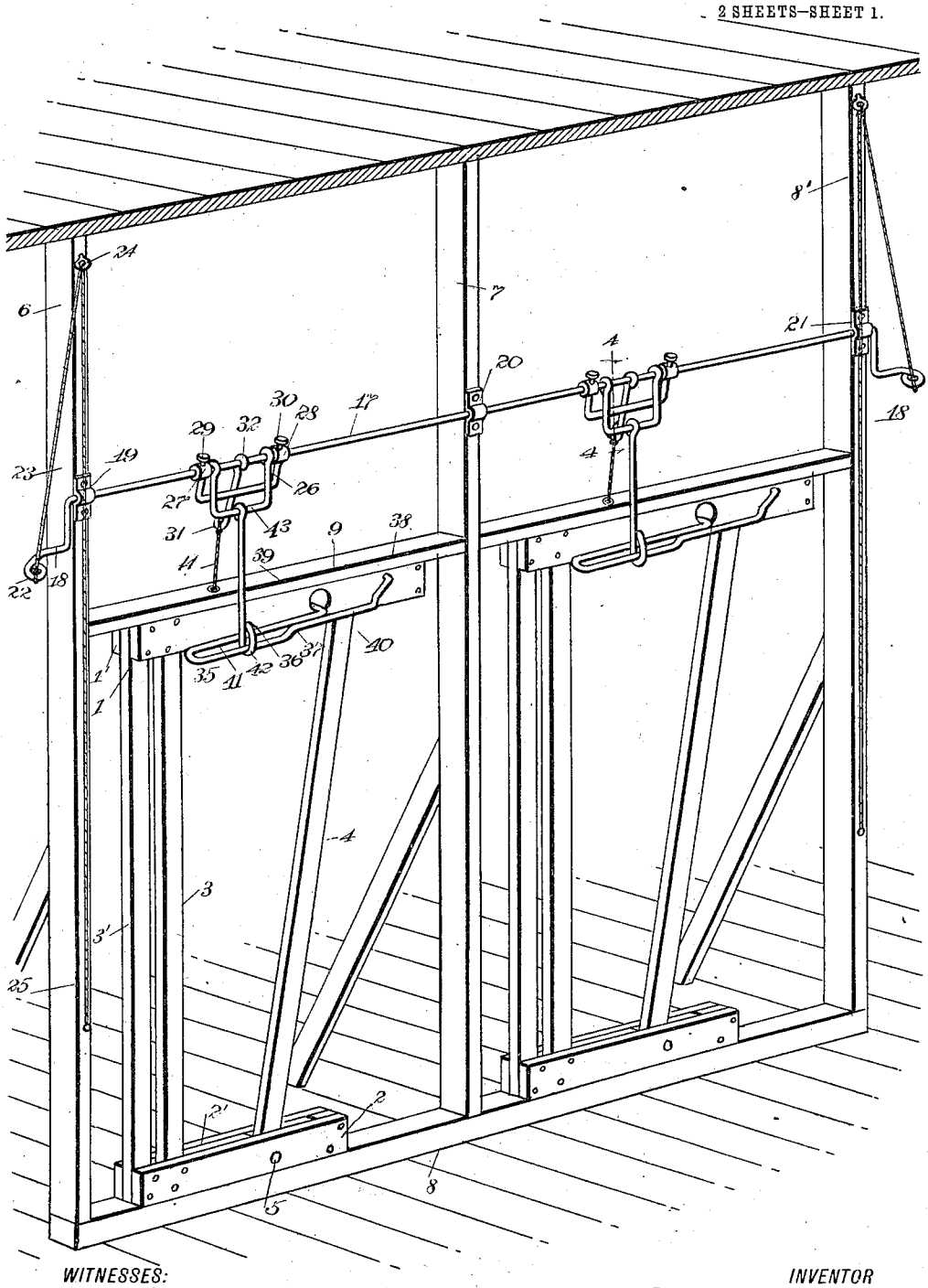

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FIG. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

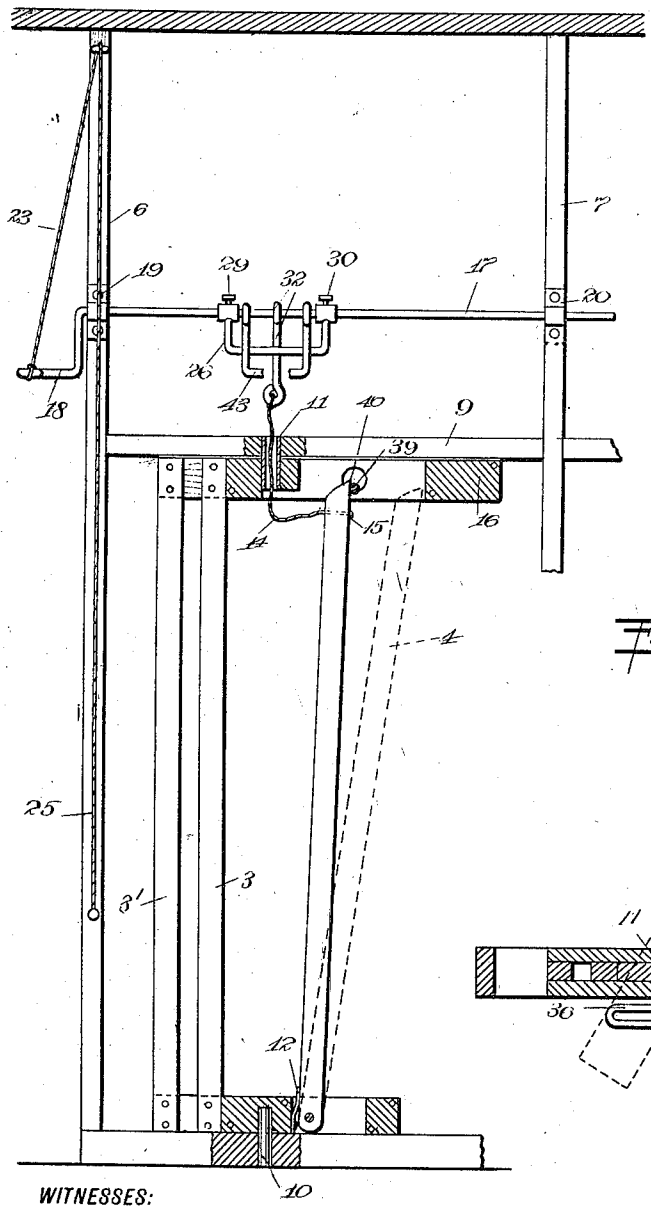


Fig. 4.

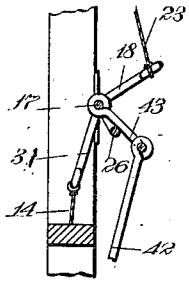
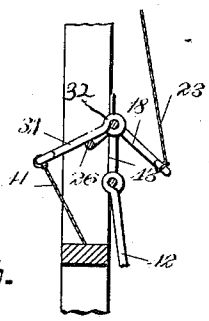


Fig. 5.



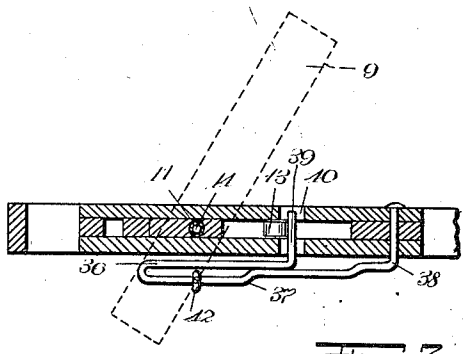


Fig. 3.

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UNITED STATES PATENT OFFICE.

FRED A. BRUNDAGE, OF BELMONT, NEW YORK.

COW-STANCHION.

1,011,024. Specification of Letters Patent. Patented Dec. 5, 1911.

Application filed March 24, 1911. Serial No. 616,574.

To all whom it may concern:

Be it known that I, FRED A. BRUNDAGE, a citizen of the United States, and a resident of Belmont, in the county of Allegany and State of New York, have invented a new and Improved Cow-Stanchion, of which the following is a full, clear, and exact description.

My invention relates generally to cow stanchions, and more particularly it involves an improved form of stanchion having means whereby the movable bar in the stanchion may be locked and unlocked.

The object of my invention is to provide a cow stanchion having an improved locking means whereby the movable bar may be easily and quickly brought to either operative or inoperative position.

A further object of the invention is to provide an improved means whereby the movable bars on a plurality of stanchions may be simultaneously operated, thereby locking or unlocking the said movable bars.

A further object of the invention is to provide a cow stanchion of simple construction with an improved operating means for locking or unlocking the movable bar of the stanchion, the construction of the parts being such that any number of stanchions may be conveniently operated at the same time.

Reference is to be had to the accompanying drawings forming a part of this specification, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view showing a plurality of stanchions with the locking bars thereon in inoperative position; Fig. 2 is a front view of one of the stanchions with the supporting frame therefor, partly in section; Fig. 3 is a horizontal sectional view through the upper stanchion member of figure; Fig. 4 is a vertical sectional view through the horizontally extending operating rod of the clevises carried thereby, on the line 4—4 of Fig. 1; Fig. 5 is a similar sectional view showing the operating bar in a different position.

The stanchion is made up of the upper horizontally extending members 1, 1′, the lower horizontally extending members 2, 2′, with the vertically extending members 3, 3′, and also provided with the vertically extending pivoted bar 4 movable at its upper end between the horizontally extending members 1, 1′, and pivoted at its lower end at 5 between the lower horizontally extending members 2, 2′.

The supporting frame for the stanchion comprises the uprights 6, 7, with the floor member 8, and the cross member 9, the stanchion being pivoted between the members 8 and 9 by means of pins 10, 11.

The leaf spring 12 is suitably supported within the lower stanchion member 2, 2′, the free end of this spring being in engagement with the side portion and movable stanchion bar 4, the tendency of this spring being to force the bar 4 into the position shown in dotted lines in Fig. 2.

The upper end of the bar 4 is tapered, as at 13, and a cord or wire 14 is suitably attached at 15 adjacent the upper end of this bar, this cord or wire extending out through the hollow pivot member 11. It is to be noted that the movable bar 4 (Fig. 2) is movable from the position shown in dotted lines to that shown in full lines, and vice versa, means being provided to sustain this bar in either position; the bar in its inoperative position, shown in dotted lines, is held in place by abutting against the spacer block 16 contained between the upper stanchion members 1 and 1′.

Extending horizontally of the uprights 6 and 7, and if more than one stanchion is used, between the uprights 6, 7 and 8′, is the locking rod 17 having a crank end 18, the bar being suitably supported in bearings 19, 20, 21, carried by each of the uprights. The crank end 18 of the locking rod is provided with an eye 22 in engagement with a suitable wire 23 extending through a pulley or eye-hole 24 and having a suitable portion extending to the outside of the barn or other structure whereby the locking rod may be operated from the outside of the barn in case of fire, thereby releasing the animals.

The clevis 26 having at each end thereof a suitable bearing portion 27, 28, through which the locking rod 17 is extended, is held firmly in position on this rod by means of the locking screws 29, 30. Freely suspended on the rod 17 is a short arm 31 having an eye portion 32 in engagement with the rod, the opposite end of the arm being connected to a piece of cord or wire 14 whereby turning the crank 18 in a clockwise direction will bring the clevis 26 into engagement with the arm 31 whereby the cord 14, and with it the movable stanchion bar 4, will

be carried from the dotted line position to the full line position, as set forth in Fig. 2.

It will be obvious that any desirable number of stanchions may be placed in successive arrangement and that turning of the crank 18 will operate all of the movable stanchion bars simultaneously.

In order to securely hold the movable stanchion bar in normal position, with the neck portion of the animal, and at the same time permit the stanchion to be freely turned about the pivots 10 and 11, I make use of the locking hook 35 preferably made from a single piece of wire having coextensive portions 36, 37, the end of the portion 37 being pivotally engaged at 38 with the horizontal stanchion member 1, the end 39 of the other portion 36 being offset and extending into the opening 40 provided in the stanchion members 1, 1'. The portions 36 and 37 of the hook member 35 adjacent one end thereof are separated from each other as at 41 and the hook end of an arm 42 is engaged with the portion 37, the other end of this arm being suitably supported on a clevis 43 freely carried on the locking rod 17. It will be noted from Fig. 2 that the inturned end 39 of the movable hook member lies in the path of the tapered end 13 of the movable stanchion bar 4 so that as this bar is moved from the dotted line position to the full line position, the tapered end thereof will engage the end of the hook, forcing the hook upwardly until the bar is passed into the full line position of Fig. 2, when the hook will fall into engagement with the rear side of the upper portion of the movable stanchion bar thereby holding it firmly in the full line position. When it is desired to bring the movable stanchion bars into inoperative position, as when it is desired to release the cattle, the crank 18 is turned counter-clockwise whereby the clevis 26, carried by the rod 17, will come into engagement with the clevis 43 also carried by this rod, thereby lifting the inturned end 39 of the movable hook member 35 by means of the arm 42, the leaf spring 12 forcing the stanchion bar 4 to inoperative position when this inturned end 39 has been moved up and out of contact with the rear side of the upper portion thereof.

It is apparent that any number of stanchions may be simultaneously brought to inoperative position by a single turn of the crank 18 and, due to the peculiar formation of the movable hook member 35, the stanchion may turn about the pivots 10 and 11 with no danger of the movable stanchion bar 4 being released.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent:

1. In combination with a cow stanchion, a hook carried thereby, a movable rod having a plurality of parts depending therefrom, one of the said parts being movable with the said rod and the remaining said parts being freely movable on the said rod, one of the last-named parts being in engagement with the movable stanchion member, the other of the said parts being in engagement with the hook member carried by the stanchion, whereby as the rod is moved in either direction the member movable therewith will engage either of the movable members thereon, whereby the movable stanchion bar may be brought to operative position or may be released from the said operative position.

2. In combination with a cow stanchion, a spring carried thereby and in engagement with the movable stanchion bar, means whereby the said bar may be brought to operative position against the pressure of the said spring, and means comprising a movable rod having a part extending therefrom and movable therewith, another part extending therefrom and freely movable thereon, the said last-named part being in engagement with the movable hook carried by the said stanchion and in engagement with the movable stanchion member for holding it in operative position, movement of the said rod bringing the member movable therewith into engagement with the member movable thereon, whereby the said hook member will be moved and the said spring will bring the movable stanchion bar to inoperative position.

3. In combination with a cow stanchion, a hook carried thereby, a spring also carried thereby and in engagement with the movable stanchion bar, a movable rod carried thereby and having a plurality of parts depending therefrom, one of the said parts being movable with the bar and adapted to engage either of the other said parts as the rod is turned in either direction, one of the other said parts having an arm movable therewith and in engagement with the aforesaid hook, the other of the said parts having a flexible connection with the free end of the movable stanchion bar, whereby when the rod is turned in one direction the stanchion bar will be moved into engagement with the said hook, and when turned in the opposite direction the said hook will be freed from engagement with the said bar.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRED A. BRUNDAGE.

Witnesses:
G. W. PAUL,
H. R. SARTORE.