(No Model.)

C. K. J. RABEN.

STOCK SECURING AND RELEASING DEVICE.

No. 510,365. Patented Dec. 5, 1893.

Fig. 1.

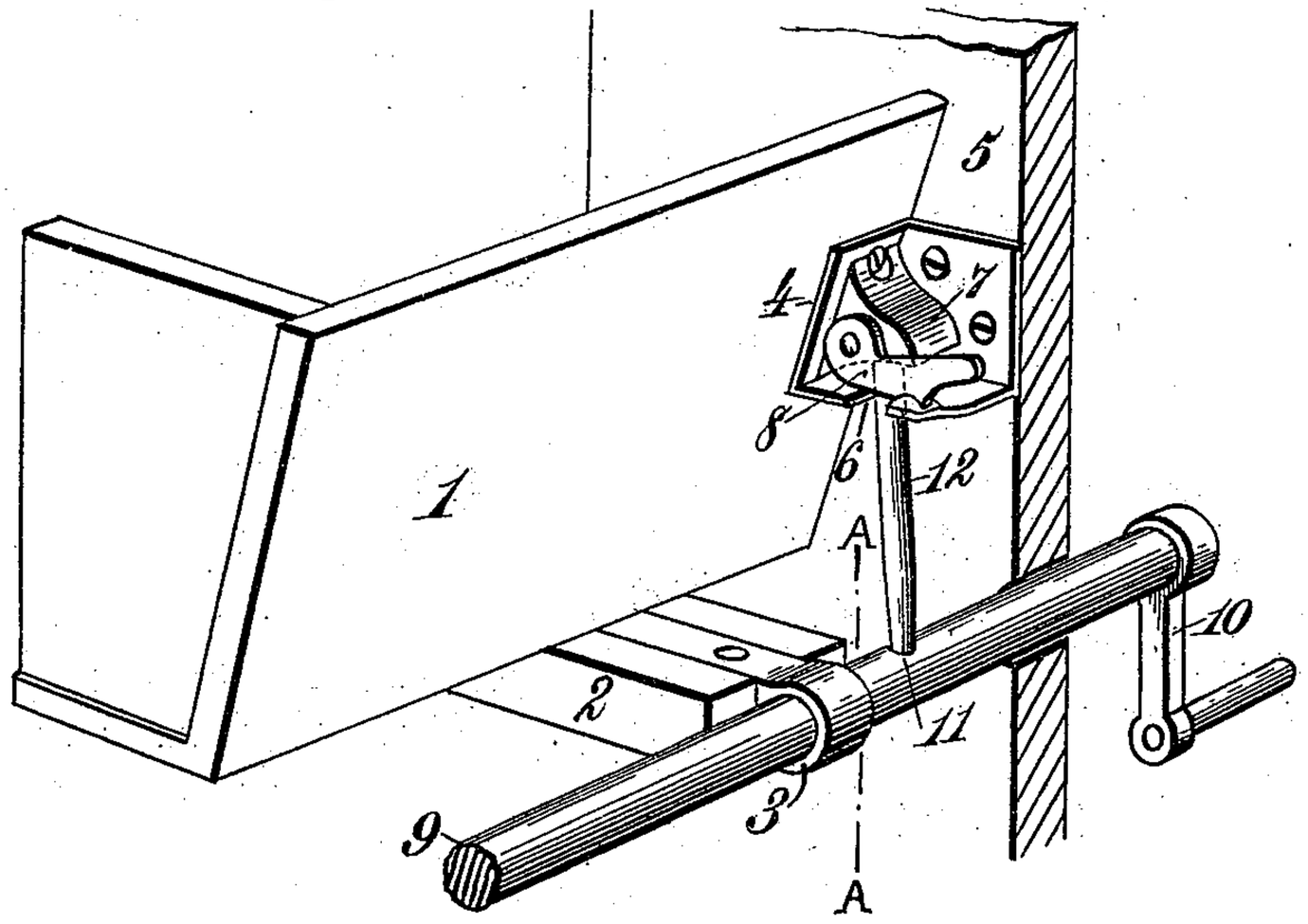


Fig. 2.

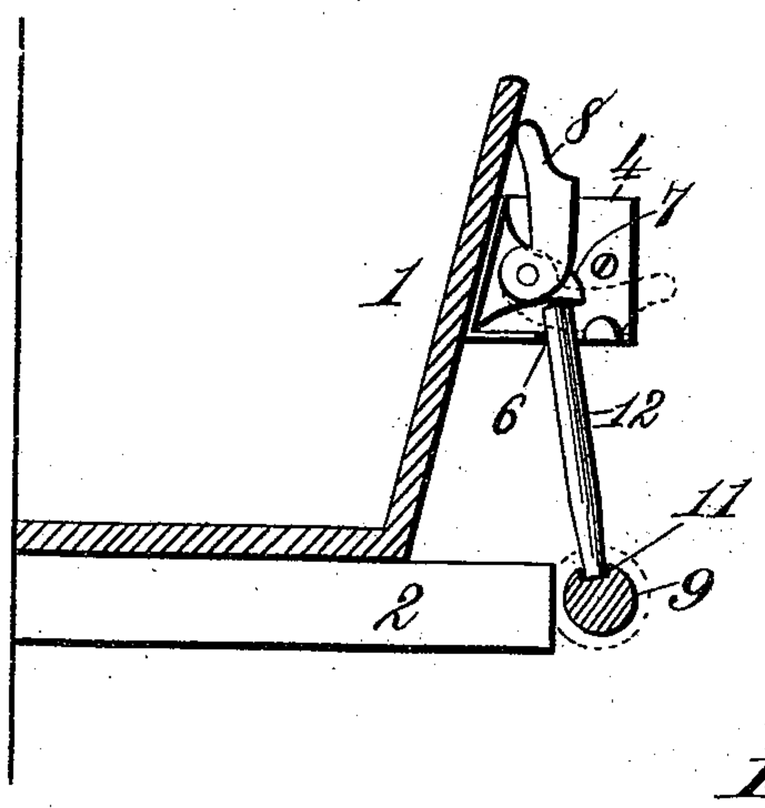


Fig. 3.

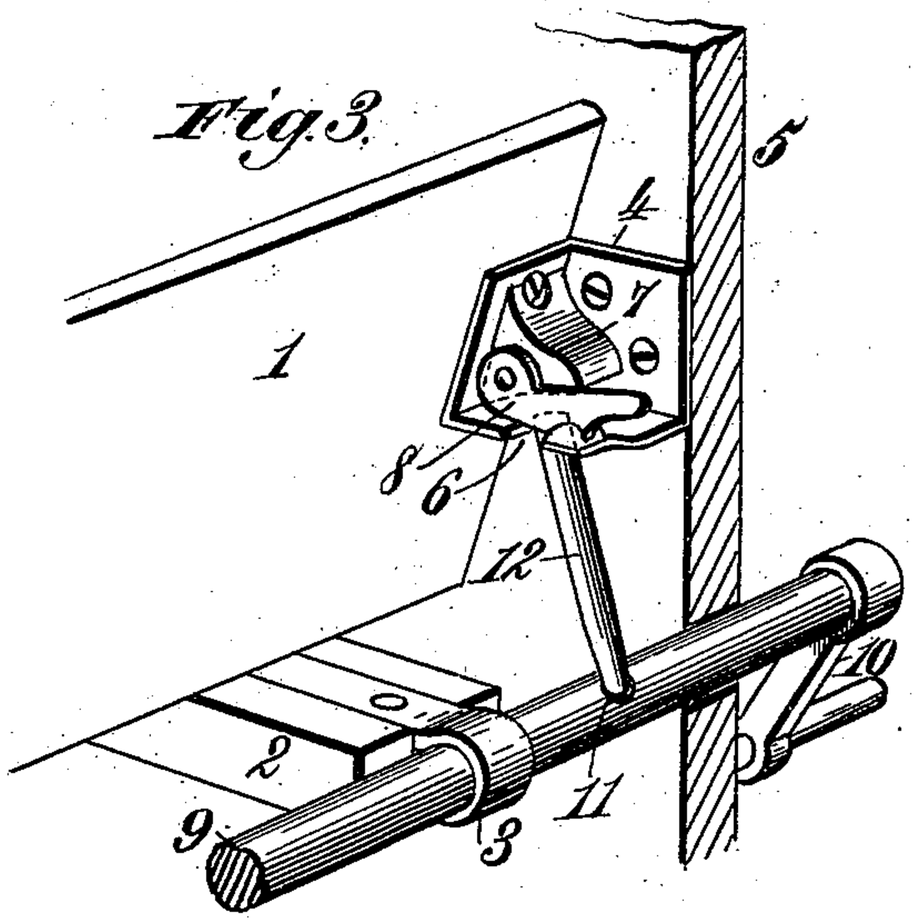
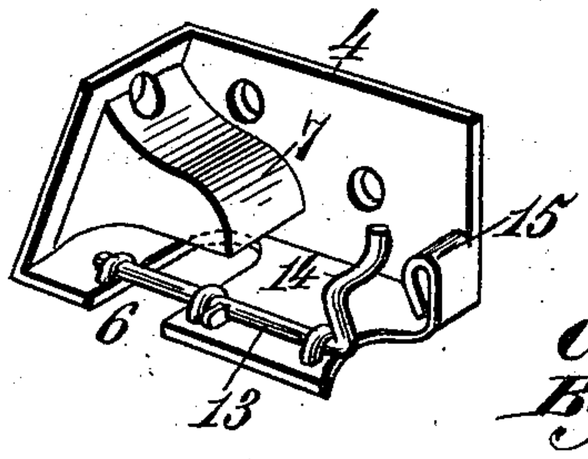


Fig. 4.



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CHARLES K. J. RABEN, OF GRAND RAPIDS, MICHIGAN.

STOCK SECURING AND RELEASING DEVICE.

SPECIFICATION forming part of Letters Patent No. 510,365, dated December 5, 1893.

Application filed August 24, 1893. Serial No. 483,949. (No model.)

To all whom it may concern:

Be it known that I, CHARLES K. J. RABEN, a subject of the German Emperor, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Stock Securing and Releasing Devices, of which the following is a specification.

My invention relates to devices for securing and releasing stock or cattle from their stalls, and has for its object to provide a novel, simple and useful device adapted to be operated from the outside of the stable or shed to simultaneously release all the stock or cattle secured thereto, and also to be operated from within the stable to release the stock or cattle severally.

To this end said invention consists in the novel construction and combination of parts hereinafter described and claimed, reference being made to the accompanying drawings making part of the specification, wherein—

Figure 1, is a perspective view illustrating my invention applied to a single stall or manger. Fig. 2, is a vertical section taken on the line A—A, Fig. 1. Fig. 3, is a perspective view illustrating the operation of my invention. Fig. 4, is a detail view of a modified form of pin-catch or retaining device.

In the said drawings the reference numeral 1 designates a manger situated as usual at the head of a stall, and which, otherwise than as herein described, may be of ordinary construction. Immediately beneath the manger is arranged a bar or beam 2, which may project from the wall of the stable or shed and abut the floor of the manger so as to support said manger. An eye or journal 3, is secured to said bar or beam 2, in any suitable manner, as by screws or nails as shown. A bracket 4 is secured to the front wall of the manger 1, above and preferably at one side of the eye or journal 3, one member thereof being attached to the manger wall and the other member to the stall-dividing partition 5. The base of said bracket is provided with an open-ended recess 6, to receive the pin hereinafter referred to.

The numeral 7 indicates a lug or lip formed integral with or secured to the bracket, the lower edge of which is slightly above and projects over the recess 6, and pivoted to this lug or lip 7, is a latch or catch 8, capable of being swung on its pivot to open and close the end of the recess 6, in order that the hereinafter described pin may be inserted and retained in, and withdrawn from, said recess.

Journaled in the eye or journal 3, is a shaft 9, one end of which extends outside the stable or shed, and is provided with a suitable handle 10, by which said shaft is rotated in its bearing, and said shaft is provided in its periphery with a seat or recess 11, located in the same, or substantially the same, vertical line with the recess 6.

The numeral 12, designates a pin, one end of which loosely or detachably rests in the seat 11, and the other end of which is received in the recess 6, being confined therein when the latch or catch 8, is in position to close the end of the recess, and removable therefrom when said latch or catch is raised. The upper end of the pin bears against the lug or lip 7, and thus prevents the rotation of the shaft and the consequent dropping out of the pin, except when said shaft is rotated by manipulation of the handle 10.

In Fig. 4 of the drawings, I have shown a modified form of pin-retaining device which may be found desirable, and which is in all substantial respects the same as that already described, except that instead of the pivoted latch or catch 8, I employ a longitudinally movable, rotatable rod 13 to open and close the end of the recess 6, said rod being provided with a handle 14, which is turned in behind a stop 15, on the bracket to close the recess 6, and is turned out therefrom to permit the rod to be moved longitudinally to open the recess.

It will be understood that, although I have shown my invention applied to but a single stall and manger, it is also to be arranged in connection with a series of mangers, each of which is provided with a journal for the rotatable shaft and a pin retaining device, the rotatable shaft extending in front of the entire series of mangers and provided with the requisite number of pin seats or recesses.

In operation the shaft 9 is turned so that the pin seats therein are uppermost, and the pins (with the tethers to which the animals

are secured passed therearound) set in position, their lower ends resting loosely in the said seats and their upper ends confined in the recesses 6, by closing the latch 8 or its equivalent. The stock or cattle being now secured safely in their places in the stalls, when it is desired to release any single animal the attendant raises the latch, or moves the rod 13 out of the way of the recess 6, and the pin may be removed and the tether taken therefrom.

In the case of fire, or whenever desirable, the stock may all be simultaneously released, by turning the handle 10 to rotate the shaft 9, when the pins will gradually ride out of the seats in said shaft until they are free thereof, when their upper ends will drop out of the recesses 6, and the animals are released. This is specially an advantage, because the release of the stock is effected from the outside of the shed or stable, and the operation is clearly illustrated in Fig. 3 of the drawings.

Having thus described my invention, what I claim is—

1. In a stock securing and releasing device, the combination of a rotatable shaft having a pin-seat, a pin-retaining device located above the shaft, and a pin the upper end of which is detachably engaged with the pin-retaining device and the lower end of which is detachably engaged with the pin-seat of the shaft, whereby upon rotation of the shaft the pin rides or falls out of the pin-seat and is disengaged from the pin-retaining device, substantially as described.

2. In a stock-securing and releasing device, the combination with a rotatable shaft having a pin seat, of a pin-retaining device provided with a recess and a lug projecting over said recess, a pin, one end of which loosely engages said pin seat, and the other end of which engages the recess in the pin-retaining device, and a latch for confining the end of said pin in said recess, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES K. J. RABEN.

Witnesses:
GEORGE W. THOMPSON,
FRED C. TEMPLE.