(No Model.) 3 Sheets—Sheet 1.

W. JONES.

APPARATUS FOR REMOVING LIVE STOCK FROM BARNS.

No. 456,037. Patented July 14, 1891.

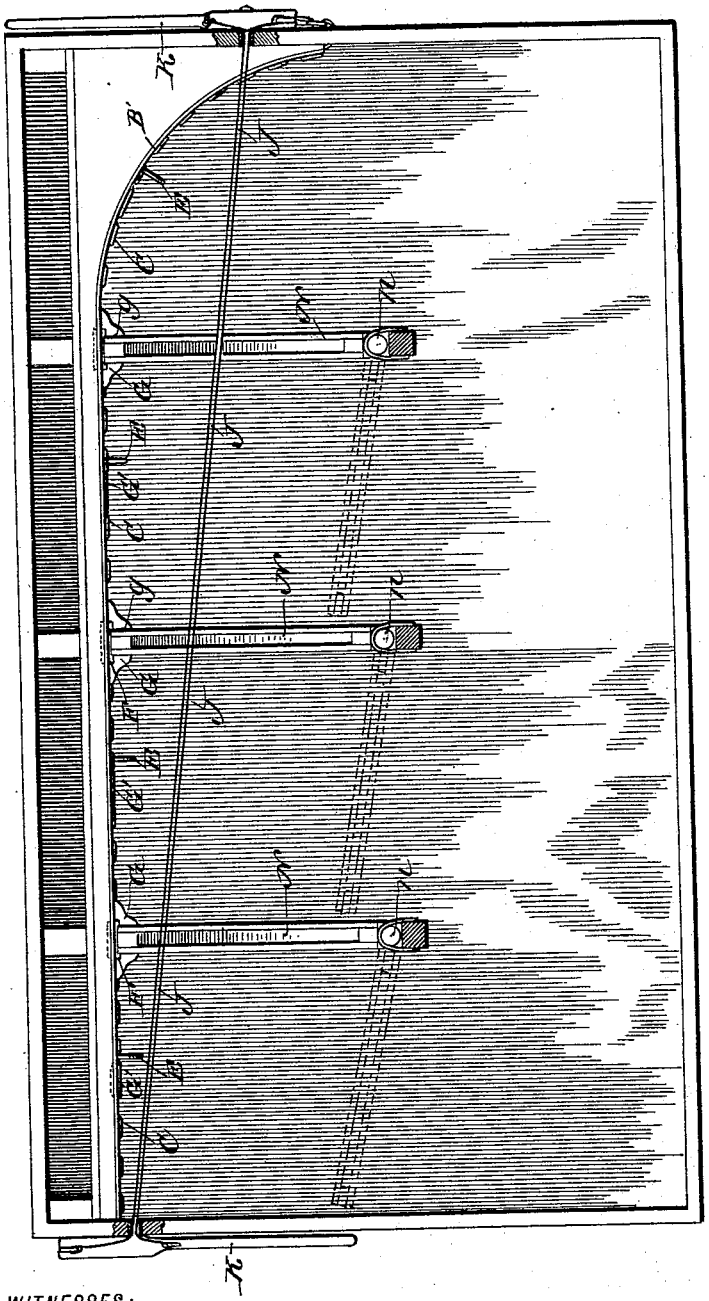

Fig. 1.

Fig. 6.

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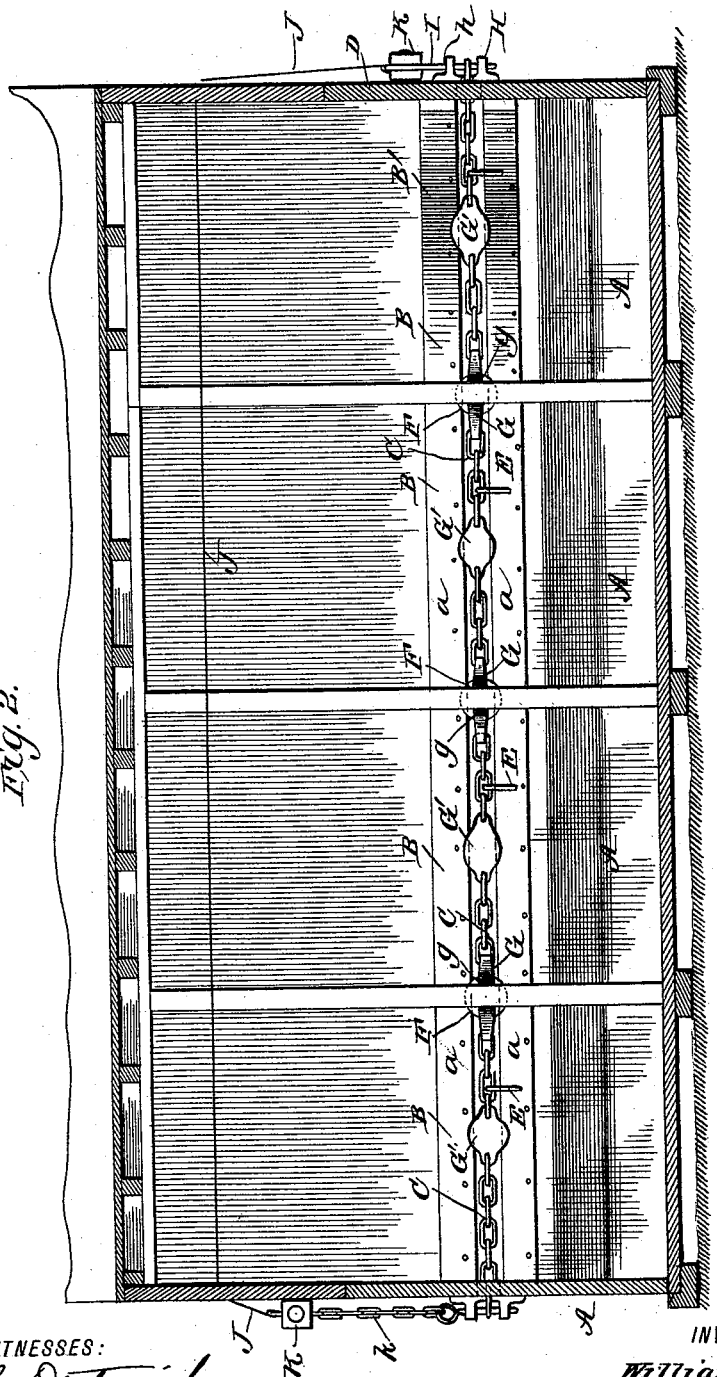

Fig. 2.

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(No Model.) 3 Sheets—Sheet 3.

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Fig. 3.

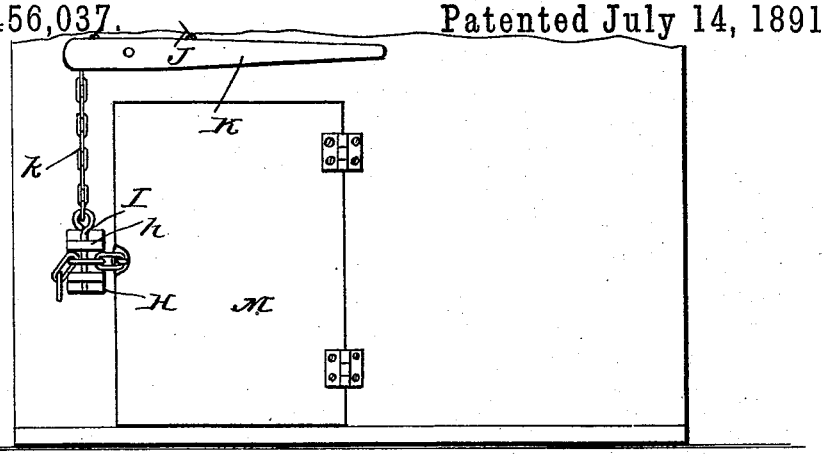


Fig. 4.

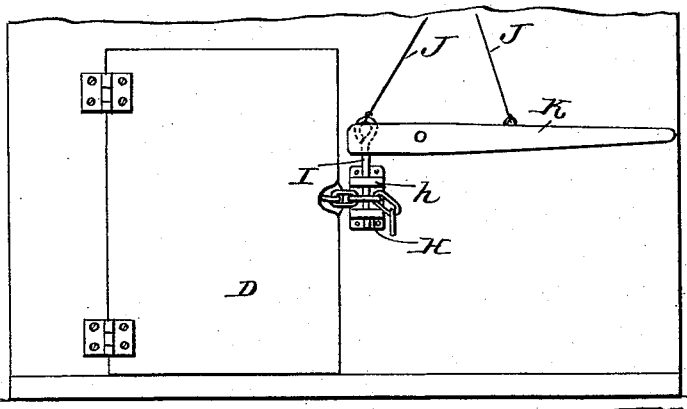
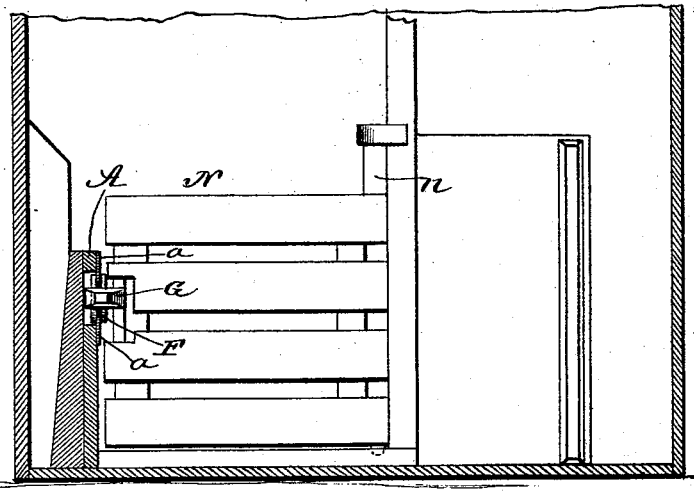


Fig. 5



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UNITED STATES PATENT OFFICE.

WILLIAM JONES, OF OSCEOLA, NEBRASKA.

APPARATUS FOR REMOVING LIVE STOCK FROM BARNS.

SPECIFICATION forming part of Letters Patent No. 456,037, dated July 14, 1891.

Application filed October 13, 1890. Serial No. 368,024. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JONES, of Osceola, in the county of Polk and State of Nebraska, have invented a new and useful Improvement in Apparatus for Removing Live Stock from Barns, of which the following is a specification.

My invention is an improvement in apparatus designed to enable the quick and convenient removal of live stock, especially horses, from barns in case of fire or other emergency when the rapid removal of the stock is regarded as necessary; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a horizontal and Fig. 2 a vertical section of a barn or stable provided with my improvement. Figs. 3 and 4 are partial end views thereof. Fig. 5 is a partial cross-section, and Fig. 6 is a detail view, all of which will be described.

The improved apparatus includes a chain or connection supported to move longitudinally, locking devices by which such chain or connection may be secured from such longitudinal movement, guides in which the chain is movably supported, stall-partitions hinged at their rear ends, so that their front ends can move laterally, latch devices by which to secure the stall-partitions, and other mechanism, as will be described.

Above or in other convenient relation to the mangers A, and in front of the stalls, I provide the guideway B for the chain or connection C, which is held to move longitudinally in the guideway. This guideway is preferably formed of upper and lower rails *a a*, adapted to overlap the upper and lower edges of the chain or connection, so that the latter will be held to the guide and yet may move freely longitudinally, as will be understood from the drawings. At one end the guideway is curved at B′ and leads to the door D, so that the movement of the chain in the direction of the said door will tend to lead the horses or other stock out of the said door. At suitable points the chain has rings or loops at E, to which the horses may be secured, such rings E being properly arranged for the hitching of the horses in the stalls in the normal arrangement of all the parts. By preference I provide the chain with anti-friction rollers F, running in the guides, and in the construction shown the said rollers are supported in blocks G, which blocks are secured to or form a part of the chain and are adapted by notching them at *g* to serve as latch devices by which to secure the stall-partitions in normal position. The chain is also provided between the blocks G with guide-blocks G′, arranged at their upper and lower ends to engage and run along the rails *a* of guideway A.

At the ends of the barn are provided locks for preventing the endwise movement of the chain, the chain being passed through a box or staple H, having an opening *h*, in which a bolt I plays. This bolt I enters a link or ring of the chain and prevents the movement of the chain, one bolt I holding the chain from movement in one direction and the other bolt holding it from movement in the opposite direction, as will be readily understood. These bolts I are connected by intermediate wires or cords J and operating-levers K, connected by chains *k* with the bolts, so that the movement of one lever to release its bolt I will operate to release the other bolt I, thus enabling the operator to quickly release the chain at both its ends from either end of such chain, when by opening the adjacent door M the chain may be readily drawn upon to lead the string of horses out of the barn or stable.

The stall-partitions N are hinged at their rear ends at *n*, so that their forward ends may swing laterally to permit the horses to move out, as will be readily understood from the drawings. At their swinging ends the stall-partitions are provided with bearings adapted for engagement by the latch devices G, preferably by fitting in the notches *g*, such construction serving to hold the partitions firmly in place and at the same time operating to start the partitions to one side as the chain is moved.

It will be understood that in referring to the connection as a chain I do not desire to be limited to a link chain, as a rope, wire, cable, or other suitable construction might be employed without departing from the broad principles of my invention. It will also be understood that I do not desire to be limited to the use of a single connection running entirely through the barn, as where desired the

connection may be in sections secured at one end midway and at the other end at the side or end of the barn and arranged to be released at both ends from without the barn.

The construction, as shown, is simple, inexpensive, and will be found to operate smoothly and easily for the purpose described.

It will be seen that in my improved apparatus it is not necessary to back the horses out of their stalls; but the partitions of said stalls move laterally at their front ends and permit the horses to walk directly from their stalls out of the stable. This results from the hinging of the stall-partitions at their rear ends together, with the arrangement of the chain or connection at the front end of the stalls, as shown.

Having thus described my invention, what I claim as new is—

1. In an apparatus substantially as described, the combination of the stalls having their partitions supported to move laterally at their front ends, the guideway extended in front thereof and adapted to receive and hold the chain or connection, and the chain or connection held in said guideway and movable longitudinally and provided with latch devices for securing the front ends of the stall-partitions, substantially as set forth.

2. The combination, in an apparatus substantially as described, of the chain or connection to which the stock may be hitched, the bolts I I, adapted to secure the said chain or connection from movements, the levers K, the connection *k* between said levers and their respective bolts, and the connections J between the said levers, all substantially as and for the purposes set forth.

3. In an apparatus substantially as described, the combination of the stall-partitions hinged at their rear ends and movable laterally at their front ends and the longitudinally-movable chain or connection provided with notched blocks or portions engaging the front ends of the stall-partitions, whereby the movement of the chain or connection in either direction will tend also to move the stall-partitions, and means whereby the chain or connection may be held from endwise movement, all substantially as and for the purposes set forth.

4. In an apparatus substantially as described, the combination of the stall-partitions movable at their front ends, the chain or connection movable longitudinally and in the direction of movement of the front ends of the stalls and provided with latch devices by which to secure the stall-partitions in normal position and to move the said partitions to one side as the chain or connection is moved longitudinally, and means whereby the chain or connection may be held from endwise movement, all substantially as and for the purposes set forth.

5. In an apparatus for removing stock from barns, the combination of the longitudinally-movable chain or connection to which the stock are hitched, a guideway for such chain or connection, and means for holding the chain to the guideway throughout the length of the latter, whereby the animals or any one of them cannot forcibly draw the chain or connection out of its desired alignment, substantially as set forth.

6. In an apparatus substantially as described, a guide and latch device, substantially as shown, consisting of the block G, having a notch to receive the end of the stall-partition and a roller to run on the rails of the guideway, all substantially as and for the purposes set forth.

7. The improved apparatus herein described, consisting of the stall-partitions movable at their front ends, the guideway, the chain or connection movable longitudinally in said guideway and having latch devices by which to secure the stall-partitions, the bolts I for locking the chain or connection from endwise movement, the levers K, the connections *k* between the levers and bolts I, and the connections between the said levers, all substantially as set forth.

8. In an apparatus substantially as described, the combination of the stall-partitions movable laterally at their front ends, the guideway extended in front of said partitions and having upper and lower rails, and the chain or connection held to and movable longitudinally in the said guideway and provided with rollers to run on the said rails and with latches by which to secure the stall-partitions closed or to move the same to one side as the chain or connection is moved longitudinally, all substantially as set forth.

WILLIAM JONES.

Witnesses:
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CHAS. A. MYERS.