

C. C. PARTRIDGE.
DEVICE FOR LIBERATING ANIMALS.

No. 519,201.

Patented May 1, 1894.

Fig. 1.

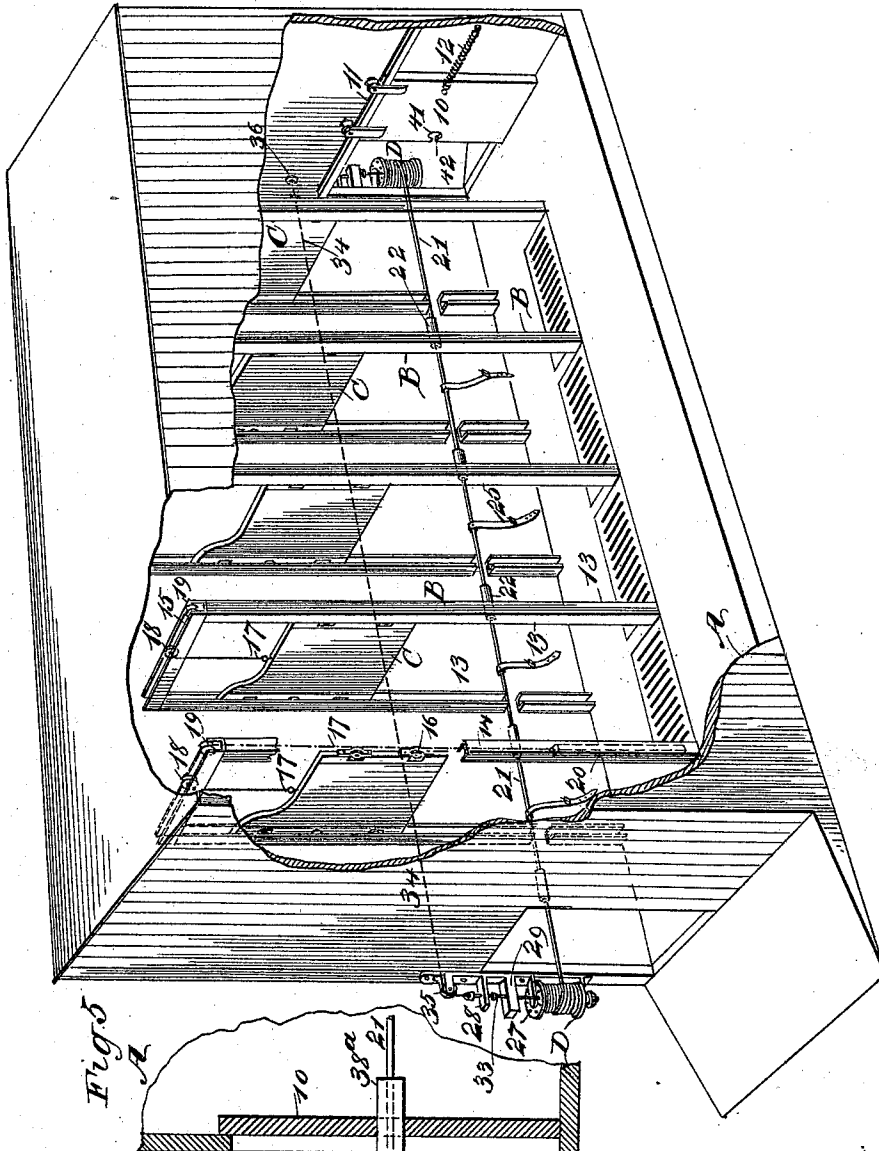
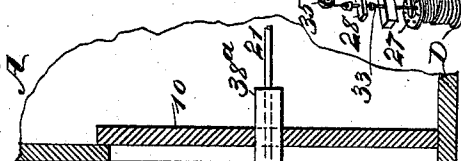


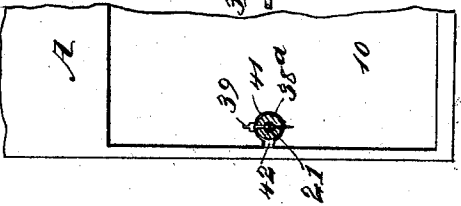
Fig. 5.



WITNESSES:

Paul J. Hark
C. Sedgwick

Fig. 6.



INVENTOR

C. C. Partridge
BY *Munn & Co.*

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

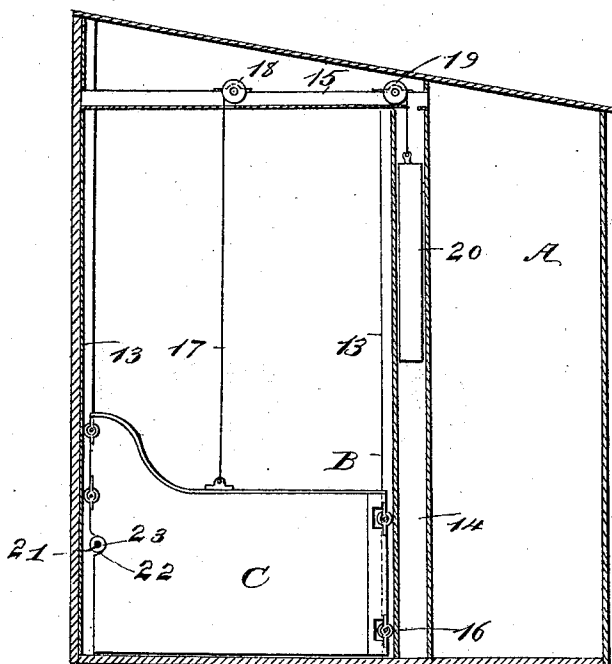
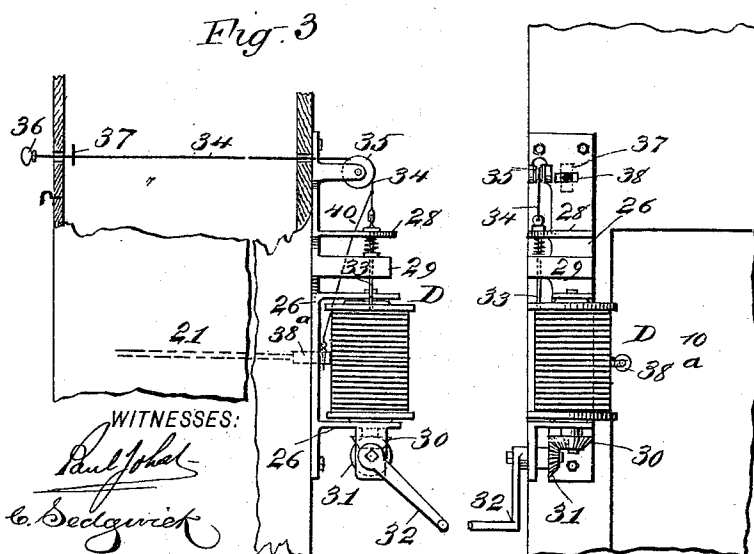


Fig. 4.



WITNESSES:

Paul Johel-
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INVENTOR

C. C. Partridge
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES C. PARTRIDGE, OF HYDE PARK, MASSACHUSETTS.

DEVICE FOR LIBERATING ANIMALS.

SPECIFICATION forming part of Letters Patent No. 519,201, dated May 1, 1894.

Application filed November 23, 1893. Serial No. 491,740. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. PARTRIDGE, of Hyde Park, in the county of Norfolk and State of Massachusetts, have invented a new and Improved Device for Liberating Animals, of which the following is a full, clear, and exact description.

My invention is an improvement in the class of devices for releasing animals, especially horses, from the fastenings in stalls and conducting or leading them out of the stable in case of danger from fire.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of a building, broken away to disclose the interior, and illustrating the application of the device thereto, the partitions of the stalls being illustrated in their elevated position. Fig. 2 is a transverse vertical section through the building, illustrating a partition of a stall locked in its lower position. Fig. 3 is a broken side elevation of the building, illustrating in enlarged view the drum section of the releasing device, and the manner in which it may be released from an opposite side of a building. Fig. 4 is a front elevation of the drum device. Fig. 5 is a section through the door of the building, illustrating the manner in which it is held closed; and Fig. 6 is a section taken practically on the line 6—6 of Fig. 5.

In carrying out the invention the building A to be fitted up with the improvement may be of any desired character, and is provided at its ends with doors 10, which doors are preferably hung to slide on tracks 11, and are controlled by a spring 12, of any approved character, the spring acting to open the door when said door is unlatched.

The frames B for the stall partitions C, are constructed preferably of a non-combustible material, such as iron, and as shown in Figs. 1 and 2, the vertical members 13 of the stall frames are of box construction, being made of U-iron, or its equivalent; but one of the

standards or members, preferably the inner one as shown in Fig. 2, is provided with an additional box structure 14, extending from the top to the bottom thereof, and in making the U-standards the U-iron or grooved faces of the standards are made to face one another, and an upper cross bar 15, serving to connect the standards is likewise made of U-iron, and the grooved surface is made to face the roof of the building.

The stall partitions C, are preferably made of sheet iron, or sheet metal of any description, or of any fire-proof material. The partitions are adapted to slide in the grooves or channels of the standards 13, the ends of the partitions being usually provided with friction rollers 16, as shown in Fig. 2, the friction rollers having bearing against a wall of the grooves in the standards. Each partition has attached to it, preferably at its upper edge, the lower end of a cable 17, of wire or other fire-proof material. These cables are made to extend upward over pulleys 18, located at about the central portion of the cross bars of the stall frames, the cross bars being provided with suitable openings for the passage of the cables. The cables are carried from the pulleys 18 over pulleys 19, located where the upper cross bars of the stall frames extend over the boxings 14 of said frames, and the cables are made to extend downward into the said boxings, and are attached to weights 20, sliding in the boxings, and said weights are of sufficient power to raise the partitions C upward when the partitions are unlatched, the partitions rising to such a height, as shown in Fig. 1, that an unobstructed passage-way will be provided from one door to the other, as these doors are located at the ends of the line of stalls.

The latch mechanism consists of a cable 21 and sleeves or collars 22 fixedly located at intervals upon said cable. The collars or sleeves 22, are so placed upon the cable that one of them may be passed through each stall partition, and all of the collars or sleeves will be in locking engagement with the stall partitions at the same time. The cable 21 is the releasing cable, and the locking connection between the stall partitions and the cable is effected by producing in what may be termed the outer end of each stall partition

C a recess 23, as shown in Fig. 2, and when the releasing cable is manipulated to lock the stall partitions in their lower positions the sleeves or collars 22, are made to pass into the partition recesses 23, and the partitions will then be held permanently in their lower position, forming a series of stalls.

Between the various sleeves or collars on the releasing cable, are straps 25, or any equivalent of a strap, capable of being attached to the halter of a horse, or a ring, or equivalent device secured to the animal's neck. The ends of the releasing cable are passed out through the end openings in the building covered by the doors 10; and the said releasing cable is attached at each of its ends to a drum D, shown in enlarged view in Figs. 3 and 4. The drums D are held to revolve in brackets 26, said brackets being adapted for attachment exteriorly to the walls of the building adjacent to the end openings. Each drum is provided in its upper head with a series of apertures 27, the said apertures being circularly arranged and located between the center and periphery of the head. The vertical member of the bracket 26, is made to extend upward beyond the drum, and the upper portion of said member in each bracket is provided with two spaced, horizontal and parallel arms 28 and 29, which are located over the arm of the bracket journaling the upper trunnion of the drum. The lower trunnion of each drum is ordinarily provided with a beveled gear 30, which is made to mesh with a similar gear 31, located upon a shaft journaled in a lower arm of the bracket 26, said shaft being adapted to receive a crank arm 32, or its equivalent, by means of which it is rotated. By operating one crank arm 32, both drums being free to turn, the releasing cable may be made to travel in direction of the end of the building at which the drum being manipulated is placed. The drums are locked and prevented from turning, after the releasing cable has been made taut, through the medium of a pin 33, preferably spring-controlled, which pin has guided and limited movement in the arms 28 and 29 of the brackets 26, the lower ends of the pins being adapted to enter any one of the drum apertures 27, which may be in its path. The pins 33, are provided with suitable collars, as shown in Fig. 3, which permit them to be raised and lowered, but not to leave their guides or supports 28 and 29. Each pin 33, has connected with its upper end one extremity of a trip cable 34, and these trip cables are made to pass over pulleys 35, and are carried through apertures in the walls of the building back of the stalls to the opposite side or end of the building, where they are provided with a knob 36, as shown in Figs. 1 and 3, and a button 37 which is to be located normally within the building, but may be passed through a slot 38 formed in the vertical member of the bracket at that end of the building, and by turning the button at

right angles, or across the slot 38, the cable will be prevented from being moved in a manner to raise the pin 33 with which it is connected when on the inside of the building, and to prevent the pin from dropping when the button is located at the outside of the building.

It will be understood that the outer standards of the stall frames are recessed to permit the passage of the releasing cable and its sleeves or collars, as shown in Fig. 1. The doors 10 are locked by sleeves or collars 38^a, which are loosely mounted upon the cable 21; and the sliding sleeves or collars 38^a may be held fixedly upon the cable by passing a pin 39 through each of said sleeves and through the cable, the pins 39, being connected with the trip cables 34 through the medium of a branch cable 40, as shown in Fig. 3. Each door 10 is provided in its edge facing the cable with a circular opening 41, removed a slight distance from its edge, and a horizontal slot 42, produced in the edge and leading to said opening. The slot 42, is larger than the releasing cable 21 it is adapted to receive, while the opening 41 is made of sufficient size to loosely receive one of the sliding sleeves or collars 38^a.

In operation, when the device is not required for use, the stall partitions are placed in their lower or proper position, and the drums are rotated in a manner to bring the fixed collars or sleeves 22 in the recesses 23 of the partitions. The animals may now be hitched to the straps 25 in any approved manner, and released singly when required. Either door 10 may be opened by simply removing the pin 39 and sliding the sleeve 38^a, locking that door, from engagement with the door; and when the door is closed the sleeve is slid in locking position with it and is locked in that position by the pin 39. In the event of a fire, one of the trip cables 34, is drawn upon, whereupon the locking pin 33 at the opposite end of the building will be withdrawn from the drum at that end, and the drum will be free to turn. The trip cable is then locked, to prevent the return of the pin to an engagement with the drum, which may be done by causing the button 37 when drawn through the opening 38 to engage with the outer face of the building across the opening; or the button 37 may be omitted, and the cable may be attached to a hook adjacent to the opening through which it passes. The opposite locking pin having been disengaged from its drum, the locking pin of the drum adjacent to the operator is removed from locking engagement with the drum; and as the trip cables 34 are operated to produce the above result the branch trip cables 40, will draw the pins 39 from the sliding sleeves 38^a. By rotating one of the drums, the releasing cable will be coiled around the drum manipulated, and the fixed sleeves or collars 22 will be instantly drawn out of engagement with the stall partitions and said partitions will be elevated

by the action of their weights 20, and the sleeves 38* will be carried out of locking engagement with the doors 10, and the springs 12 will immediately open said doors. By continuing to coil the cable around the drum manipulated, the animals in the stalls, and all of which were attached to the releasing cable in the stalls, will be forced to move with the cable, and as soon as the animals reach the opening at the end of the building they are unhitched from the cable. Thus no matter how alarmed an animal may be by the presence of fire, it will be compelled to follow the cable, and will be rescued if the building is at all approachable. The drums may be electrically operated, or operated by any desired motive power.

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

1. The combination with a series of stalls, each having vertical guides, and a series of partitions adapted to slide in the latter, weights connected with said partitions for raising them and holding them normally elevated, a cable having devices adapted for engagement with and disengagement from the partitions, drums on which the cable is wound at each end of the series of stalls, and devices for temporarily locking the drums, as shown and described.

2. In a device of the character described, the combination, with a building having openings therein normally closed by spring-controlled doors, and stalls located in said building, said stalls comprising frames having slide-ways therein, partitions having sliding movement in said frames, and weights connected with the said partitions, whereby they

are elevated, of a releasing cable extending through the building and through the openings thereof, shifting and locking devices substantially as shown and described, connected with the cable at the exterior of the building, the said cable being adapted for attachment to the head-stall of an animal, sleeves or collars fixedly located upon the releasing cable and adapted to enter recesses in the stall partitions when the latter are in their lower position, and sleeves or collars likewise carried by the cable and adapted for locking engagement with the doors of the building, substantially as shown and described.

3. In a device of the character described, the combination, with a building, and stalls located in the building, said stalls consisting of a frame and counter-balanced partitions sliding in the several frames, of a shifting cable passing through the stalls and adapted to have animals attached thereto, locking collars fixedly formed upon the cable and adapted for shifting locking engagement with the stall partitions when in their lower position, drums located exteriorly of the building, to which the ends of the releasing cable are attached, and locking devices connected with the drums, trip devices capable of operation from opposite sides or ends of the building and connected with the locking devices, and means, substantially as shown and described, for revolving the drums, as specified.

CHARLES C. PARTRIDGE.

Witnesses:

ANDREW T. FROST,
JOHN McMERWIN.