(No Model.)

W. SMITH.

DEVICE FOR LIBERATING ANIMALS.

No. 418,537. Patented Dec. 31, 1889.

Fig. 1.

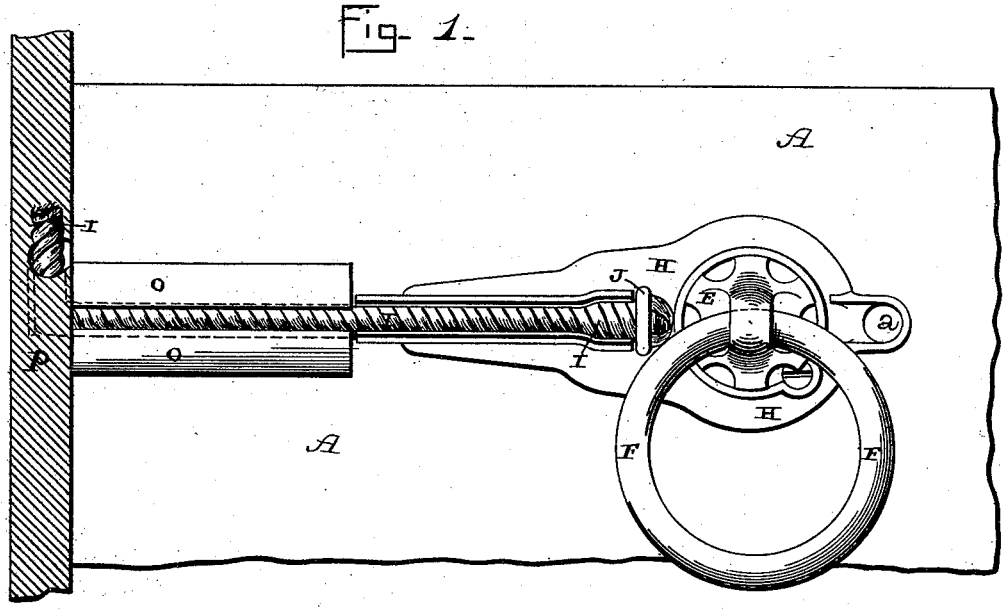


Fig. 2.

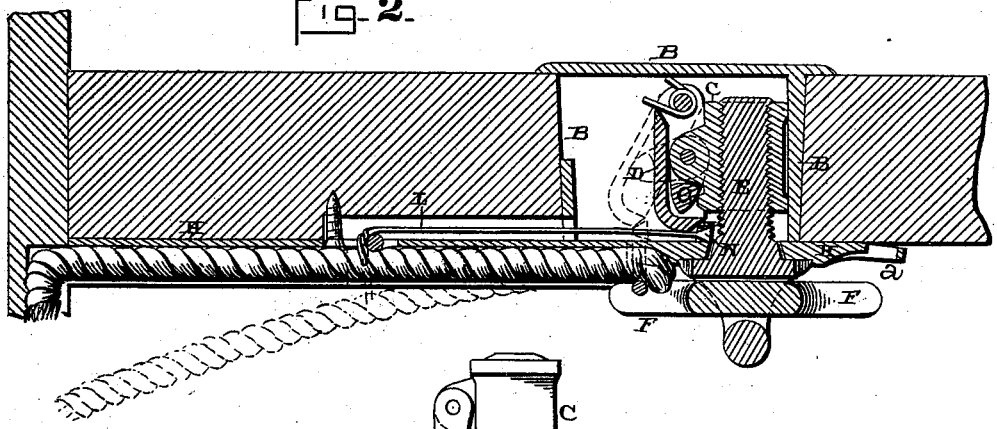
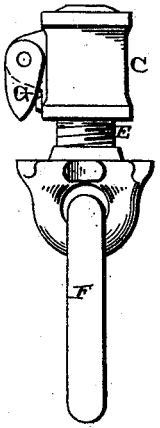


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM SMITH, OF CALOMA, IOWA.

DEVICE FOR LIBERATING ANIMALS.

SPECIFICATION forming part of Letters Patent No. 418,537, dated December 31, 1889.

Application filed August 20, 1889. Serial No. 321,419. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SMITH, of Caloma, in the county of Marion and State of Iowa, have invented certain new and useful Improvements in Devices for Liberating Animals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in devices for liberating animals at a distance from their stalls; and it consists in the combination of a rope, wire, or chain, which extends from the door or entrance of the stable to each stall, trip-wires connected to the rope or wire, movable thimbles to which the fastening-rings are attached, and which are provided with pivoted dogs, spring-latches to engage with the dogs, and the plates which are attached to the front board of the manger, and to which the operating cord or wire is fastened, as will be more fully described hereinafter.

The object of my invention is to provide a mechanism by means of which animals in a burning stable can be liberated at a distance from their mangers and led to the door without a person having to venture inside of the burning stable.

Figure 1 is a front elevation of a device which embodies my invention. Fig. 2 is a horizontal section of the same. Fig. 3 is a detached view.

A represents the front board of the manger, through which there is made a suitable opening to receive the casting B. This casting forms a chamber or receptacle in which the thimble C and the spring-latch D are placed, and may be made of any suitable construction. The thimble C consists of an internally-threaded short piece of pipe, into which the screw E, to which the fastening-ring F is secured, is screwed, and which thimble C is provided with a pivoted dog G upon one side, for the purpose of engaging with the spring-actuated latch D, and thus preventing the thimble from being withdrawn from the casting B. The spring-latch is pivoted inside of the casting B, and is held in position by means of a suitable spring which is applied to it for that purpose. In order to insert the thimble, the latch D must be forced back sufficiently far to allow the dog G to pass beyond its outer end, and then the catch springs back into position, so as to catch against the front end of the dog. The spring-catch is hollowed out on its side next to the thimble, so as to form a recess in which the dog will automatically catch as soon as the thimble is forced into position. Before the thimble can be removed the spring-latch D must be forced backward at its outer end. The screw E passes through the plate H, which bears against the front board A of the manger, into the thimble, and the front plate H is thus held by the screw and thimble. The pressure of the screw also serves to hold the casting B and front plate H securely in position without any other fastening devices. The plate H, applied to the outer side of the front board of the manger, is supported in a horizontal position by spurs on the under side thereof. The flat-headed screw fits into notches in the edge of the screw-bolt E when set, so as to prevent the bolt unscrewing by the movement of the animal. The round-headed screw is to cause the thimble C to pull out of the casting B without wedging or cramping. The plate is necessarily made detachable from the front board A, so that when the animal is detached the plate H, the fastening-ring F, the screw or bolt E, and the thimble and its dog will remain attached to the halter or rope upon the animal, for the purpose of leading the animal to the door. On the outer side of this plate H is formed a suitable groove, in which the end of the fastening rope or wire I is placed, and then the end of the rope or wire is fastened to the plate H by means of a staple J or other suitable fastening device. Also attached to the rope or wire I at the end of the plate H is a detaching-wire L, which has a button or knob N secured to its inner end, and which button or knob passes through a suitable guide formed on the under side of the plate H, so as to be held in position to operate the spring-latch D. When the rope is pulled upon from the stable-door, it is pulled out of the groove in which it is placed, and the operating-wire L is drawn backward at the same time that a pull is exerted by the

rope upon the plate H. As the operating-wire L is drawn outward the knob or button N upon its end draws back the spring-latch D, and then the sleeve C is pulled out of the casting B, in which it is placed, together with the plate H,

The rope I is supported in position by means of strips O, secured to the front board A of the manger. and between which the rope is made to catch until the rope reaches the side of the stall, when it is passed into a grooved board or guide P, which is fastened thereto. If the guide P is made of iron, it may be screwed into the front board A, or it may be attached thereto in any other way that may be preferred. The rope then extends up overhead to the ceiling, where it is supported in place by any sort of device which will allow it to readily slip off or out of when the rope is pulled.

In case the stable should catch on fire and it be dangerous for a person to enter for the purpose of leading out the animals, it is only necessary to exert a pull upon the rope or wire I, which extends from the stable-door along over the stalls in which the horses are fastened, and the rope will first pull out of or off of the supports placed overhead, and then one rope after the other will pull out of the grooved guides P and from between the strips O, and then as the rope begins to pull out of the groove upon the plate H it operates the wire L, so that the latch D is drawn backward, thus releasing the thimble from the casting B, when the plate H, the screw, and the ring F, to which the animal is tied, will be drawn toward the stable-door. As the animal remains tied to the ring F, as the plate H is drawn toward the stable-door the animal is led directly out of the stall toward the door.

Of course to the main operating-rope there will be fastened any number of other ropes, according to the number of stalls in the stable, or each stall or liberator may have a separate rope or wire extending to the door, as may be found desirable. If the stalls are upon both sides of the stable, the liberator should be placed in the manger, so that the small end of the plate H will point toward the door end of the stable. The eye *a* at the large end of the plate H is to tie the trip-rope or wire of a second liberator in the same stall to, thereby making one rope sufficient for each stall.

When this liberating device is used for cattle tied in stalls, a wire will preferably be used instead of a rope, and this wire will have buttons fastened upon it to correspond to each liberating device. The wires are to pass the full length of the stalls through a groove in front of the manger, one end to reach outside of the building, where it can be operated in case of fire for the purpose of liberating all of the stock tied in that row almost instantly. The buttons upon the wire must be placed farther apart than the liberators are distant from each other, in order that they will not all be liberated at the same time.

Having thus described my invention, I claim—

In a device for liberating animals from a distance, the combination of the spring-latch, the screw-threaded thimble provided with a dog, the hitching-ring, the plate applied to the front board of the manger, the operating-rope having attached to it a wire provided with a button for operating the latch, and the grooved guides or ways in which the operating-rope is placed, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM SMITH.

Witnesses:
ALLEN HAMRICK,
PAUL SAXTON.