(Model.)

C. E. DYER & W. PARSONS.

Hitching Device.

No. 227,100. **Patented May 4, 1880.**

Fig. 1.

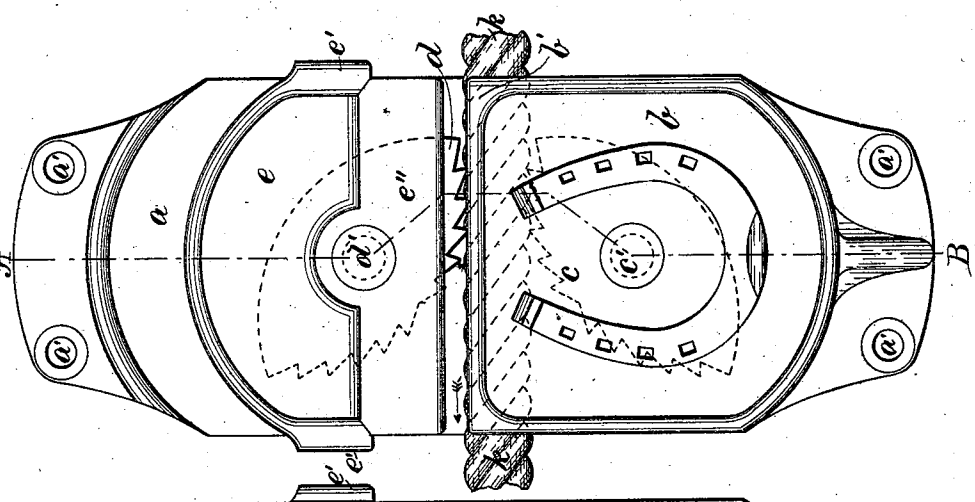


Fig. 2.

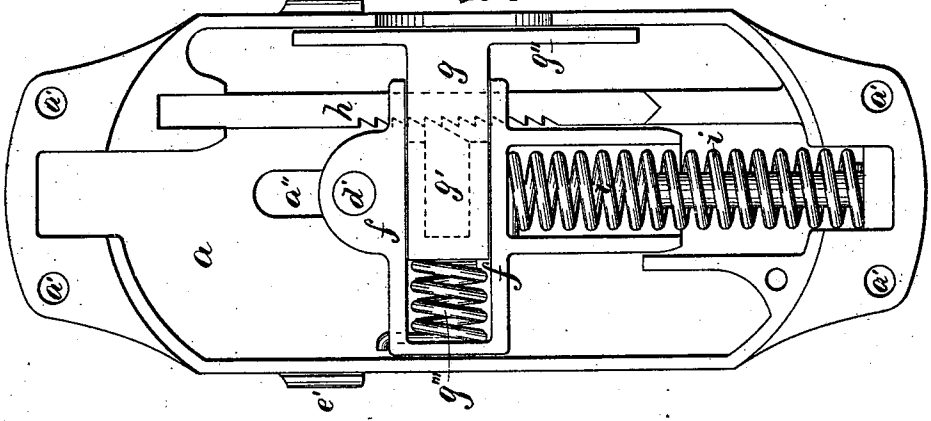
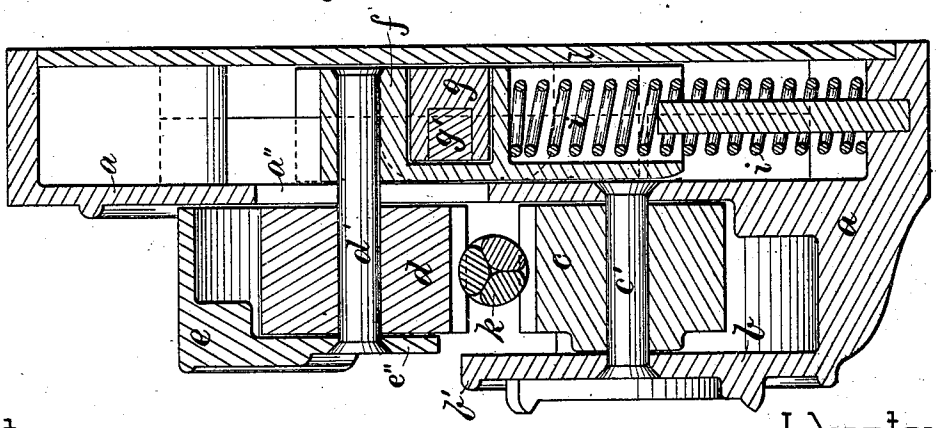


Fig. 3.



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by Munn & Andrew. their atts.

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UNITED STATES PATENT OFFICE.

CHARLES E. DYER, OF MALDEN, AND WALTER PARSONS, OF MEDFORD, MASSACHUSETTS.

HITCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 227,100, dated May 4, 1880.

Application filed March 6, 1880. (Model.)

To all whom it may concern:

Be it known that we, CHARLES E. DYER, residing at Malden, in the county of Middlesex and State of Massachusetts, and WALTER PARSONS, residing at Medford, in the county of Middlesex and State of Massachusetts, both citizens of the United States, have jointly invented certain new and useful Improvements in Hitching Devices; and we 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in hitching devices, for the purpose of hitching animals quickly and securely, and to be able to unhitch them with great dispatch when so required; and it consists of a metallic case intended to be secured by means of suitable screws or bolts to the place in the barn, stable, shed, or other place where the animal is to be hitched. To the front of this case is pivoted on a stationary pin or bolt a serrated cam that is free to rock on its supporting-bolt or pivot-pin.

In addition to the aforesaid serrated cam is used a second one of similar construction, also pivoted on a pin or bolt, on which it is free to turn a part of a revolution; but the fulcrum pin or pivot of the latter cam is not made stationary, but is adjustable to and from the first-above named cam, so that the hitching rope or strap may be clamped and secured firmly between the said two cams when moved toward each other and confined in such a position. The pivot-pin of the adjustable cam projects through a slotted perforation in the frame, and within the latter is secured to it a pawl-carrying block that serves as a receptacle for a laterally-adjustable pawl, which is actuated by the influence of a coiled spring to force the pawl into the toothed recesses of a stationary ratchet-bar contained within the frame. By this arrangement the adjustable serrated cam is retained in its proper position relative to the stationary cam when the hitching rope or strap is confined between them.

To unhitch the rope or strap it is only necessary to disengage the pawl from the ratchet-bar, which is done by exerting a slight pressure by the thumb upon a plate attached to the pawl-piece, when the adjustable cam is instantly made to recede from the hitching-rope and the stationary cam by the influence of a coiled releasing-spring acting upon the pawl-carrying block, as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, in which—

Figure 1 represents a front elevation of the hitching device, showing a rope secured between the serrated jaws thereon. Fig. 2 represents a rear view of the invention with the plate or cover removed; and Fig. 3 represents a central longitudinal section on the line A B, shown in Fig. 1.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

a is the metallic frame, having screw-holes *a' a' a' a'* for securing it in place by means of screws or bolts, as described. *b* is a hollow front extension of the frame *a*, having a lip or flange, *b'*, as shown.

c' is the stationary fulcrum-pin or pivot for the radially-movable serrated cam *c*, as described. It will be seen that the said cam *c* is not adjustable in a vertical direction, but is free to turn a partial revolution around its axis, the sides of the extension *b* serving as stops to prevent its turning a complete revolution.

d represents the vertically-adjustable serrated jaw that is pivoted to the vertically-adjustable fulcrum pin or pivot *d'*, the latter being secured to the vertically-adjustable hollow case *e*, provided with guide-pieces *e' e'* on either side of the stationary frame *a*, so as to guide it properly during its vertical motion. The adjustable pivot *d'* passes through the slotted perforation *a''* in the frame *a*, and to it, within the said frame, is secured the pawl-carrying block *f*, as shown, in which the pawl-piece *g* is laterally adjustable.

g' is the pawl secured to the pawl-piece *g*, and *g''* is a plate or vertical extension on the pawl-piece *g*, upon which pressure is made to bear by the thumb of the operator when it is required to release the pawl *g* from the sta-

tionary and serrated ratchet-bar *h*, and thus to allow the adjustable serrated cam *d* to move away from the stationary cam *c*, which is automatically accomplished by means of the coiled spring *i*, arranged within the case or frame *a*, as shown in Fig. 2. *g'''* is a coiled spring located within the block *f*, for the purpose of locking the pawl *g'* to the ratchet-bar *h* when the device is in use.

k represents the usual hitching-rope, which is firmly secured and confined between the serrated cams or jaws *c* and *d* simply by grasping with one hand the stationary hollow front extension, *b'*, and movable case *e*, and by such means moving the latter toward the former until the serrated jaws or cams *c d* compress the hitching-rope *k*, previously laid between them. If now the animal pulls on the rope in the direction indicated by the arrow in Fig. 1, it will be more and more firmly secured between the said oscillating jaws on account of their eccentric shape, as shown. As the said jaws *c d* are equally serrated to the right and left, as shown in Fig. 1, it follows, of course, that it makes no difference in which direction the animal pulls on the rope.

e'' is a lip on the front of the vertically-adjustable case *e*, and it serves, as well as the lip or flange *b'* on the stationary case *b*, to prevent the rope *k* from being pulled forward and out from the serrated jaws *c d*. *l* is a plate or cover on the rear of the frame *a*, to which it is secured by one or more screws in the usual way.

By means of this invention animals may be hitched instantly without the need of tying knots in the hitching-rope, and the unhitching can be done as quickly in the manner above described, and it is therefore very useful and valuable in case of fire or to quickly release the animal if accidentally cast in its stall, as well as for general hitching purposes.

What we wish to secure by Letters Patent, and claim, is—

1. The herein-described hitching device, consisting of oscillating serrated cam *c* and vertically-adjustable oscillating serrated cam *d*, as and for the purpose set forth.

2. The frame *a*, with its extension *b' b'* and serrated cam *c*, the adjustable case *e e' e' e''*, with its vertically-adjustable cam *d*, pawl-carrying block *f*, with its pawl-piece *g*, pawl *g'*, and plate *g''*, coiled springs *g''' i*, and the ratchet-bar *h*, all arranged and constructed substantially as set forth and described.

In testimony whereof we have affixed our signatures in presence of two witnesses.

CHARLES E. DYER.
WALTER PARSONS.

Witnesses:
CHARLES E. PARSONS,
ALBAN ANDRÉN.