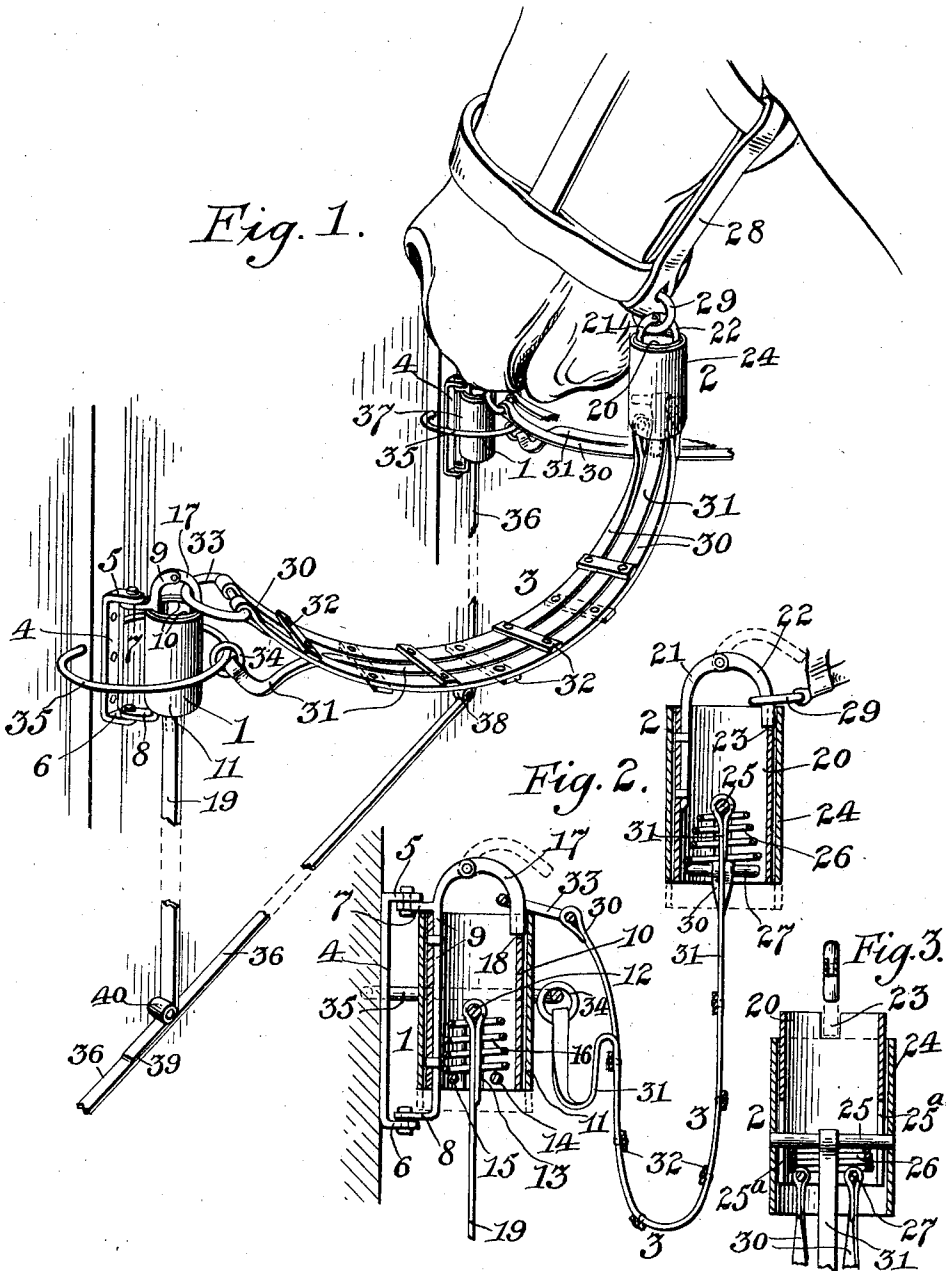


C. C. STARKEY.
DETACHABLE HITCHING DEVICE.
APPLICATION FILED MAY 16, 1910.

1,059,084.

Patented Apr. 15, 1913.



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DETACHABLE HITCHING DEVICE.

1,059,084.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed May 16, 1910. Serial No. 561,567.

To all whom it may concern:

Be it known that I, CHARLES C. STARKEY, a citizen of the United States, residing at Garden Grove, in the county of Orange and State of California, have invented certain new and useful Improvements in Detachable Hitching Devices, of which the following is a specification.

This invention relates to improvements in detachable hitching devices, and it has for its object the provision of such a device that can be easily and quickly operated for releasing or turning loose one or more horses or other animals, that may be ordinarily hitched or secured in a stable, building, stall or other place.

With this and other objects in view the invention consists in certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed.

In the accompanying drawing forming a part of this specification:—Figure 1, is a perspective view of the improved detachable hitching device, the same being shown as connected with a halter upon a horse. Fig. 2, is a central vertical sectional view through the parts of the hitching device, to show its internal construction. Fig. 3, is a vertical central sectional view through one of the releasing members of the hitching mechanism.

The device forming the subject matter of the present invention is designed to afford a simple and yet effective hitching means for animals, and particularly for horses, which shall be capable of operation for quickly releasing and turning loose the animals in case of an emergency, as for instance a fire or the like. The device is especially useful in fire engine stations, where the detaching or releasing of the horses must be expeditiously accomplished and where it is desirable that the flexible portion of the hitching mechanism, as for instance the strap, rope, chain or the like, which extends to the halter or bridle, shall be disconnected from said halter or bridle and thus leave no loose and dangling part to get in the way.

In the drawing herewith the preferred form of the mechanism is illustrated and the invention will now be described, reference being had thereto.

1, indicates the wall or post member of the hitching mechanism, 2 the halter or

bridle engaging member and 3 the flexible connection interposed between the two. The wall member 1, is pivotally mounted in a bracket 4, which is secured in any suitable manner to the wall, post, or portion of a stall in a stable, fire engine house or other place where animals may be hitched. The upper and lower ends 5 and 6, of the bracket 4, are turned outwardly and receive projections or out turned portions 7 and 8 of a bar 9. The bar 9 carries a hollow casing 10, which is usually made in cylindrical form for convenience. The casing 10 is riveted or otherwise permanently secured to the bar 9, so as to swing therewith upon the bracket 4. Closely fitting upon the casing 10, is an outer casing 11 which closely conforms to the outer surface of the said casing 10, but is movable thereon so that it can slide up and down with respect thereto. The outer casing 11 is provided with a transverse pin or bar 12 which extends through elongated slots or notches 13, formed in the opposite walls of the inner casing 10. When the outer casing is drawn downwardly, the movement of the rod or bar 12 therewith is accommodated by the said slots 13.

Near the lower end of the inner casing 10 are rigidly secured transversely extending rods or bars 14 and 15 and mounted thereon, within the inner casing 10 is a spring 16. The spring 16 is preferably a coiled spring as shown in Fig. 2, of the drawing and the said spring bears against the transverse bar 12 of the outer casing. The said spring 16 thus tends to force the rod 12 upwardly and normally maintains the outer casing 11 in its raised position, as shown in full lines in Fig. 2.

The upper end of the bar 9 extends above the upper edge of the casing 10 and is bent inwardly as shown in the drawing. Pivoted to the inwardly bent end of the said bar 9, is a keeper or curved bar 17, the free end of which is arranged to engage a notch or recess 18 in the upper edge of the inner casing 10. When the parts are in their normal positions, with the said keeper in the recess 18, the outer casing being at the same time in its upper position, so as to cover the recess 18, the keeper is locked against swinging outwardly and will retain the ring, end portion, or other part of a hitching strap that may be engaged by the said keeper. Upon pulling the outer casing

down, the keeper is released and the hitching strap is cast off. In order to pull down the casing 11, a strap, cord or the like is fastened to the bar 12, as shown in Fig. 2, so that by pulling upon the said strap as 19, the casing 11 may be depressed sufficiently to uncover the recess 18 and liberate the keeper therefrom.

The bridle or halter member 2 and the flexible connection 3, also form important parts of the invention as they facilitate the turning loose of the horse or other animal, without leaving a strap or rope dangling from the bridle or halter. This is especially desirable in fire engine houses, as such dangling strap or rope must necessarily be in the way, in the hurry of getting off to a fire. The member 2, is quite similar in structure, to the member 1 above described, and comprises an inner keeper carrying casing 20 having a keeper carrying projection or bar 21 extending upwardly therefrom, and a keeper or curved bar 22, pivoted to the outer end of said bar 21, as clearly shown in Fig. 2, of the drawing. The keeper 22 is arranged to engage the recess 23, in the upper edge of the inner casing 20, where it may be held by the outer casing 24 of this member in its normal position. The said outer casing 24 slides upon the outer surface of the inner casing 20, with a telescoping action like that of the casings 10 and 11 of the member 1. A transverse bar 25 is carried by the outer casing 24, and extends through slots or recesses 25^a let into the lower edge of the inner casing 20, so that the said bar 25 and the casing 24 may move up and down on the casing 20. A coil spring 26 is supported in the casing 20, by transverse bars 27, and bears against the under side of the said bar 25, for normally forcing the said bar and the casing 24 upwardly. The keeper 22 is designed to engage the bridle of the animal as 28, or a ring 29 or other attachment carried thereby for securing the said animal in hitched position. When the casing 24 is pulled down so as to free the end of the keeper 22, the ring 29 will be liberated and the animal turned loose without a dangling strap or rope.

The members 1 and 2, of the mechanism are connected by the flexible member 3, made up of the hitching strap 30, and the auxiliary releasing strap 31. In order to keep the straps 30 and 31 in compact form and yet not interfere with their independent sliding with respect to each other, the strap 30 is preferably made in two parallel parts arranged with a space between them to receive the strap 31, the two parts being connected at intervals by cross straps 32, as clearly illustrated in Fig. 1, of the drawing. The ends of the strap parts 30 are fastened at one end to a ring 33, which engages the keeper 17, and at the other end to the trans-

verse bars 27 of the bridle member 2. The auxiliary release strap 31, is secured at one end to the bar 25 of the bridle keeper member 2, and at the other end carries a ring 34, which is arranged to slide upon a curved bar 35, that extends around the wall keeper member 1. The said bar 35 is preferably fixed in position by having its ends attached to the wall or stall so as to be rigid thereon, and is made large enough in compass to permit the member 1 to swing around upon its pivotal mountings, without touching said bar. The strap 31 can thus always follow the movement of the hitching strap 30, as the ring 34 will slip loosely upon the bar 35, and the same pulling relation between the said straps 30 and 31 can be maintained, no matter where the member may be swung upon its pivots.

Of course it will be understood that the action of the straps would be exactly the same if the strap 31, was not held in any particular relation to the strap 30 by the cross straps 32.

In operating the mechanism for releasing the animal, the parts being assembled as shown in Figs. 1 and 2, it is only necessary to pull the strap 19 downwardly, sufficiently to depress the outer casing 11 below the recess 18. The animal pulling upon the strap 30 will cause the keeper 17 to swing outwardly and release the ring 33. The pull will then come upon the strap 31 and the bar 25 with the outer casing 24 of the member 2 will be pulled downwardly against the action of the spring 26. In this way the keeper 22 will be released and the halter or bridle of the animal will be entirely freed or detached from the hitching mechanism. In hitching the animal again the outer casing 24 is slipped downwardly upon the inner casing 20, until the keeper 22 can be restored to its normal position in the recess 23, the ring 29 of the halter having been first slipped upon the keeper 22. The ring 33 of the hitching strap 30 is also returned to its place upon the keeper 17 which is secured in the notch 18 by the casing 11 once more. It will be observed that it is impossible for the animal to free himself until the strap 19 is pulled upon.

As the device is capable of use singly or in numbers in series, it will be evident that a number of releasing devices may be operated simultaneously. Means for operating more than one of such devices at a time, has been illustrated in Fig. 1. Thus a strap 36 leading from a hitching mechanism 37, may be passed around a pulley 38 and extended to a point 39 where it is connected with the strap 19. The strap 19 is passed around a pulley 40 to facilitate its connection with the strap 36 in the manner shown, so that by pulling upon the said strap 36, both of the hitching devices shown may be operated for

releasing horses or other animals, as in a stable, series of stalls, or the like.

The mechanism above described is not only well adapted for use in fire stations, but is a desirable adjunct to all stables and places where animals are kept. This is so when it is needful to release all of the animals at once and quickly, as in case of a fire.

Having now described the invention what is claimed as new, and is desired to be secured by Letters Patent, is:—

1. A detachable hitching mechanism comprising a pivotally mounted wall casing, having a keeper adapted to open outwardly in the direction of the pull upon the hitching mechanism, a hitching strap extending from said keeper, a release strap cooperating with said hitching strap, a rigid wall member for holding and causing the operation of the release strap and a bridle engaging member connected with said hitching strap and release strap.

2. A detachable hitching mechanism comprising a wall member having an inner casing, a keeper carried by the inner casing and adapted to be held in locked position by the outer casing, a hitching strap adapted to extend from the keeper to the bridle of an animal, a release strap cooperating therewith, a ring member surrounding said wall member and engaging the release strap for accommodating the same to the position of the hitching strap and a bridle member for connecting said hitching and release straps with the bridle.

3. A detachable hitching mechanism, comprising a wall member having a pivoted connection with the wall, whereby said member may turn in the direction of the pull thereon, said member having inner and outer cylindrical casings, a hinge member connected with the inner casing for movably mounting the device on the wall, the upper end of said hinge member having a keeper pivoted thereto, a pull rod secured to the outer casing, a spring normally raising said pull rod and the outer casing, a hitching strap extending from the keeper to the bridle of an animal, a fixed member secured to the wall, a release strap extending from the fixed member to the bridle and a bridle member connecting said straps with the bridle, a pull upon the release strap operating to disconnect the bridle member and hitching strap from the bridle.

4. A detachable hitching mechanism comprising inner and outer telescoping casings, means for pivotally mounting the inner casing upon the wall, whereby the casing may turn in the direction of pulls thereon, a spring for normally lifting and holding said outer casing in telescoped position, a keeper supported upon the inner casing for holding a hitching strap, said keeper being adapted to open outwardly in the direction

of the strap, said keeper also being held in holding position when the outer casing is telescoped upon the inner, means for withdrawing the outer casing to release the keeper and a hitching strap extending to the bridle of an animal.

5. A detachable hitching mechanism comprising a hinged wall member adapted to swing upon a vertical axis to follow the lines of pull upon the mechanism, a fixed wall member adjacent thereto, a hitching strap extending from said hinged wall member to the bridle of an animal, means for holding the hitching strap on said hinged wall member, said means being capable of releasing said strap, a bridle engaging member connecting said hitching strap and bridle, and a release strap for disconnecting the hitching strap from the bridle, the said release strap being secured at one end to said fixed wall member.

6. A detachable hitching mechanism comprising a wall member having a strap engaging keeper adapted to open outwardly in the direction of the line of pull, a latch pulling member adjacent to the wall member, a bridle engaging member comprising telescoping casings, and a keeper pivoted thereto and adapted to open outwardly in the direction of pull of the bridle and a strap member interposed between the wall member and the bridle member and having a latch strap engaging said latch pulling member for releasing the bridle from the keeper of the bridle engaging member.

7. A detachable hitching mechanism comprising a pivotally mounted securing and releasing member, said member having inner and outer telescoping casings, a bar secured to the inner casing, a keeper pivotally secured to said bar and normally engaging a recess formed in the edge of the inner casing, said keeper being adapted to open outwardly in the line of pull thereon, a bar connected with the outer casing and extending through slots in the inner casing, a coil spring supported upon the inner casing, and normally forcing the said bar with the outer casing upwardly for holding the keeper in the recess of the inner casing, a strap secured to said bar of the outer casing for pulling it down and releasing the keeper and a hitching strap extending from the keeper to the animal to be hitched.

8. An animal hitching and releasing mechanism comprising a wall member made up of telescoping hitching strap holding casings and having projecting lugs extending toward a wall, a wall bracket engaging said lugs for pivotally supporting the said member so that it may turn to lines of pull thereon, a keeper carried by the member and a hitching strap mechanism extending from the said keeper to the halter of an animal.

9. A detachable hitching mechanism com-

prising a wall member made up of spring controlled telescoping casings, a spring controlling said casings, a keeper carried by said member and adapted to open outwardly
 5 in the line of pull upon the mechanism, means for separating the casings against the action of the spring of said member for releasing the keeper, a hitching strap extending from the said keeper toward the animal,
 10 a bridle member made up of telescoping casings and carrying a keeper for engaging the bridle, a spring in said casing for normally holding the parts in locked position, means connecting said hitching strap with the
 15 inner casing of the bridle member, an auxiliary strap secured to the outer casing of the bridle member for releasing the keeper of that member, and a curved bar extending around the wall member and rigidly supported on the wall for securing the other
 20 end of the auxiliary strap.

10. A detachable hitching mechanism comprising a pivotally mounted wall member and a bridle engaging member, each of
 25 said members being made up of telescoping casings having pivoted keepers carried by the inner casings and controlled by the outer casings, said keepers being capable of open-

ing outwardly in the direction of the line of pull, a hitching strap extending from the
 30 inner casing of the bridle member to the keeper of the wall member, and having two parallel strap sections and cross bracing straps connecting the two, an auxiliary release strap arranged to slide between said
 35 strap sections and held in place by the cross connecting straps and having one of its ends connected with the bridle member whereby a pull upon it will release the keeper of said
 40 member while the other end of said strap extends to a point near the wall member, a ring bar rigidly mounted upon the wall and extending around the wall member so as not to interfere with the pivotal swing of said
 45 wall member and loosely supporting the end of the said auxiliary strap, and a main release strap connected with the wall member so as to be capable of releasing the keeper of said member when pulled.

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

CHARLES C. STARKEY.

Witnesses:

EVELYN H. LEWIS,
 CASSELL SEVERANCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."