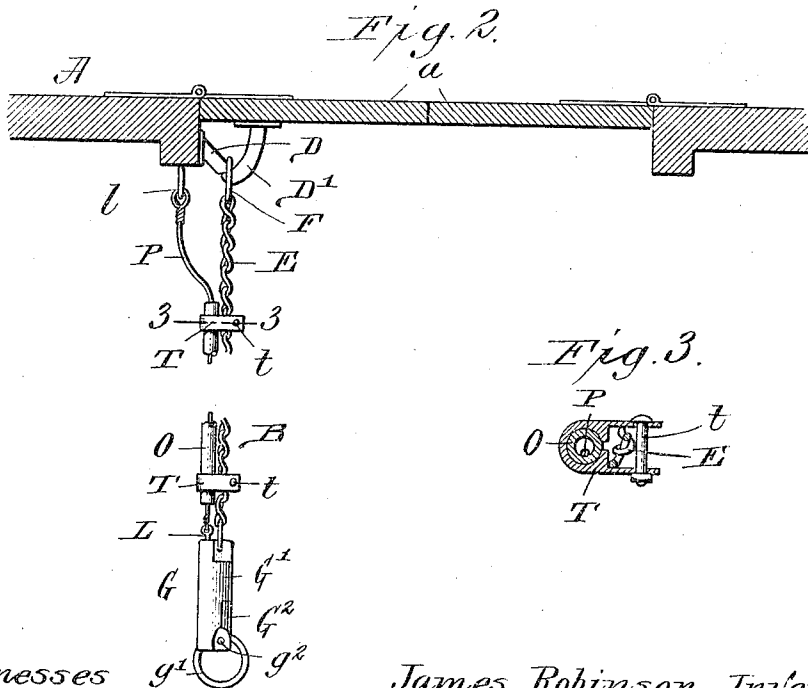
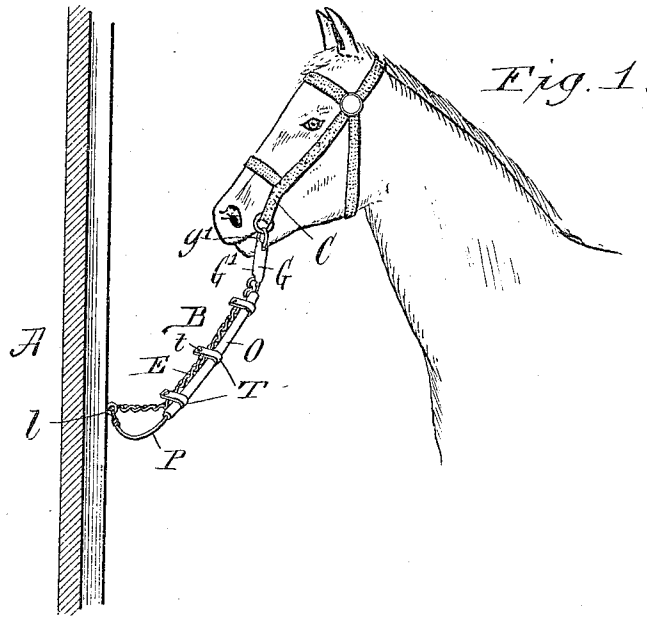


J. ROBINSON.
HITCHING AND RELEASING DEVICE.
APPLICATION FILED AUG. 16, 1909.

971,078.

Patented Sept. 27, 1910.

2 SHEETS—SHEET 1.



Witnesses
Christ Feinle, Jr.,
Eva C. Plueckhahn.

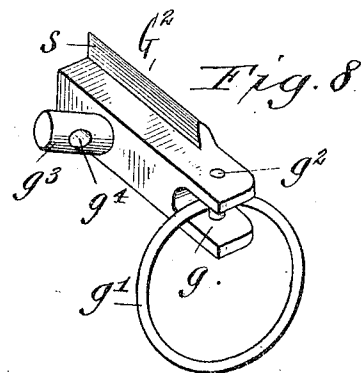
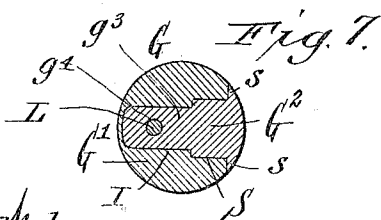
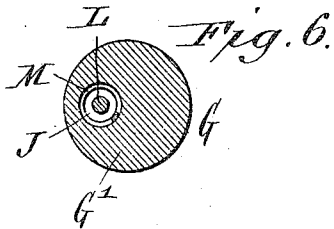
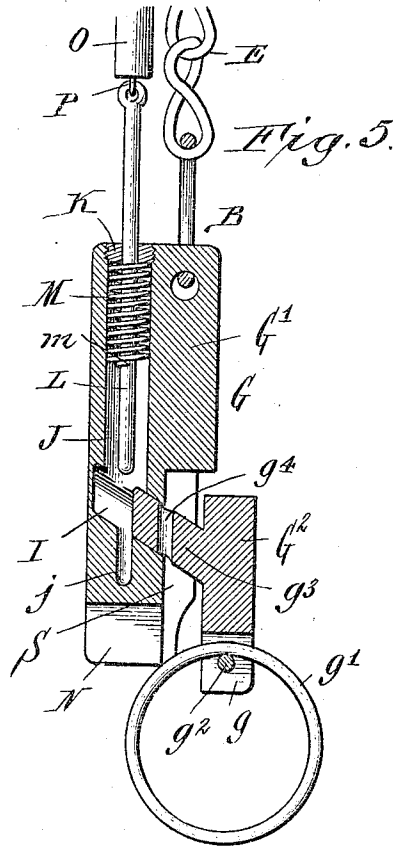
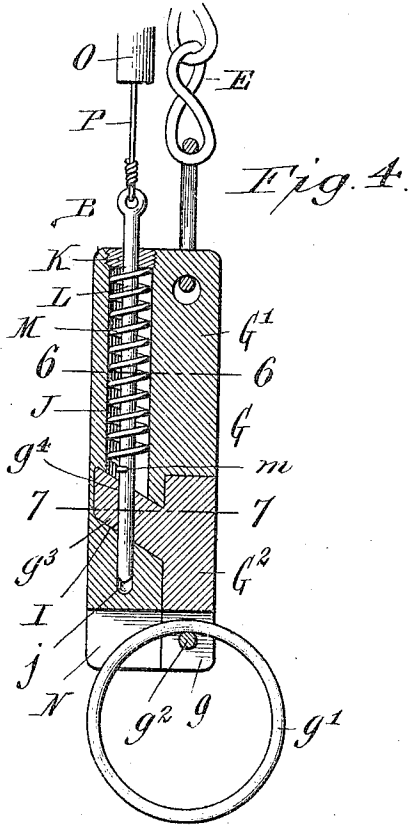
James Robinson Inventor.
By Emil Neuhart
Attorney.

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2 SHEETS—SHEET 2.



Witnesses:
Christ Feink, Jr.,
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James Robinson, Inventor.
By Emil Kuehrt
Attorney.

UNITED STATES PATENT OFFICE.

JAMES ROBINSON, OF BUFFALO, NEW YORK.

HITCHING AND RELEASING DEVICE.

971,078.

Specification of Letters Patent. Patented Sept. 27, 1910.

Application filed August 16, 1909. Serial No. 513,095.

To all whom it may concern:

Be it known that I, JAMES ROBINSON, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Hitching and Releasing Devices, of which the following is a specification.

My invention relates to hitching and releasing devices for horses, the same being especially designed for use in fire-departments, police departments, hospital service and other service where a quick release of horses is desirable upon receiving an alarm or call.

The primary object of my invention is the production of a device of the character named which is of light weight, neat in appearance, easily attached and positively secure, and which is so constructed that upon receiving an alarm of fire or a call for service, the horses will become detached from the stalls by their being permitted to move in a forward direction, owing to the opening of the doors forming part of the confining walls of the stalls by automatic means, or to the unlocking of the doors so that the horses can themselves open said doors.

Another object of my invention is to so construct the device that only a small portion of the same will remain attached to the halter of a horse when released.

With these and other objects in view, the invention consists in the construction, arrangement, and combination of parts to be hereinafter described and particularly pointed out in the subjoined claims.

In the drawings,—Figure 1 is a view showing the application of the device to a horse and the manner of attaching the same to the front wall of a stall. Fig. 2 is a broken plan of the device attached to the front wall of a stall. Fig. 3 is an enlarged cross-section, taken on line 3—3, Fig. 2. Fig. 4 is an enlarged longitudinal section through the release-head of the device showing the two members thereof connected. Fig. 5 is a similar view showing the two members disconnected. Fig. 6 is a cross-section taken on line 6—6, Fig. 4. Fig. 7 is a cross-section taken on line 7—7, Fig. 4. Fig. 8 is a detached perspective view of the halter-member of said release-head.

Referring now to the drawings in detail, like letters of reference refer to like parts in the several figures.

The reference numeral A designates the front wall of a stall which includes two oppositely-hinged outwardly-swinging doors *a* normally locked and in rear of which the horse is stationed awaiting a call for service. Through the door-opening closed by said doors, the horse passes upon receiving a call for service and these doors are either opened automatically, or unlocked to be opened by the horse as it moves forward to enter the room or space in front of the stall.

B designates my improved hitching and releasing device fastened at one end to the halter C of the horse and at its other end to the front wall of the stall in a manner to permit freedom of movement for the horse within certain limits without possibility of becoming released. For this purpose I secure a rearwardly and laterally inclined stud D to the stationary part of the wall A and to one of the doors *a* I affix a curved retainer arm D¹, adapted when the door is closed to bear against the end of said stud. The hitching and releasing-device comprises a chain E or other flexible element suitable for the purpose intended, and to one end of said chain a ring or loop F is affixed which is adapted to be passed over the stud D and be retained thereon by the arm D¹, until the doors *a* are opened and said arm moved away from said stud, at which time said ring or loop becomes released from said stud. To the opposite end of said chain a release-head G is secured which is adapted for attachment to the halter C of the horse. Said head comprises a securing-member G¹ and a halter-member G², the latter being detachable from said securing-member and having one end bifurcated, as at *g*, to receive a ring or loop *g*¹ held therein by a transverse pin *g*² and adapted for connection with the halter C. Said halter-member has an obliquely-disposed stud *g*³ provided with a bore *g*⁴ arranged parallel with the body of said member. The securing-member has an obliquely-disposed socket I into which is adapted to fit the stud *g*³ of the halter-member and said socket is intersected by a longitudinal bore J extending from one end of the securing-member to a point beyond the socket I, said bore being reduced in diameter beyond said socket, as at *j*, and having a bushing K threaded into its open end. Slidable in said bushing and the bore J is a lock-pin L adapted, when the halter-member is properly positioned on the

securing-member, to pass through the bore g^4 in the stud g^3 and enter the reduced end j of the bore J . For the purpose of retaining the two parts of the release-head in
 5 locked condition, a coil-spring M surrounds the lock-pin L , one end of said spring being secured to said pin, as at m , and its other end bearing against the inner face of the bushing K . The end of the securing-member
 10 is bifurcated, as at N , to correspond to the bifurcated end of said halter-member, and the ring or loop g^1 lies within the bifurcated parts of both members, thus relieving the
 15 bifurcated end of the halter-member of considerable of the strain which it would otherwise be subjected to.

Secured to the chain or flexible member E is a flexible tube O through which
 20 is passed a wire or cord P somewhat longer than said chain, one end of said wire or cord being secured to the projecting end of lock-pin L and its other end to a fixed point, preferably the front wall
 25 of the stall, as at l . Owing to this wire or cord being of greater length than the chain E it is not placed under strain until the chain E is released from the hook D , at which time the horse passes out through the
 30 door-opening and strains the wire or cord sufficiently to cause withdrawal of the lock-pin L from the stud g^3 of the halter-member and as the latter is connected with the halter remaining on the horse, the oblique
 35 disposition of the stud g^3 and its receiving-socket assures a ready withdrawal of said stud from the socket so that a quick and positive release is obtained. The horse in passing out of the stall carries the halter-member with him and the remaining portion of the device hangs suspended by the
 40 wire or cord P .

The release-head G is preferably made cylindrical and the securing member is grooved
 45 through a portion of its length, as at S , to receive the halter-member, which latter has over-hanging portions s and its outer surface made convex to conform to the curvature of the securing-member, thus providing
 50 a cylindrical contour for the release head from its bifurcation to its opposite end.

The flexible tube O may be secured to the chain E in any practicable manner, but I preferably provide clips T which embrace
 55 the tube and are clamped to said chain by means of screw-bolts t .

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

1. A hitching and releasing device for horses, comprising a release-head formed of
 60 a securing member and a halter-member having one end bifurcated, said securing-member having an obliquely-disposed socket and a longitudinal bore intersecting said socket
 65 and said halter-member having an obliquely-disposed stud adapted to enter said socket, said stud having a bore adapted to register with the longitudinal bore in said securing-member, a ring entered in the bifurcated
 70 end of said halter-member, a pin passing transversely through said bifurcated end and serving to retain said ring therein; a spring-retained lock-pin in said longitudinal bore adapted to extend through the bore in said
 75 stud, a flexible tie-member having one end secured to said securing-member and its other end releasably positioned, and a second tie-member somewhat longer than said first-mentioned tie-member and having one end
 80 connected to said lock-pin and its other end permanently fastened.

2. A hitching and releasing device comprising a release-head comprising a securing-member externally grooved through a
 85 portion of its length and provided with an obliquely-disposed socket and a longitudinal bore intersecting said socket and a halter-member fitting into said external groove and having an obliquely-disposed stud entering
 90 said socket and provided with a bore registering with that of said securing member, a lock-pin in said longitudinal bore passed through the bore in said stud, and two tie-members arranged and fastened so that one
 95 can be released to subject the other to strain, said last-mentioned tie-member being connected to said lock-pin to permit the disengagement of said halter-member from said
 100 securing-member.

3. A hitching and releasing-device comprising a release-head having two connected
 105 parts bifurcated at corresponding ends, a ring or loop secured to the bifurcated portion of one of said parts and extending into the bifurcated portion of the other part, means for retaining said parts in connected
 110 condition, a tie-member secured to said retaining-means and adapted to actuate the latter to permit disconnection of said parts, and a tie-member secured to the part of said release-head carrying said retaining-means.

In testimony whereof, I have affixed my signature in the presence of two witnesses.

JAMES ROBINSON.

Witnesses:

ELLA C. PLUECKHAHN,
 EMIL NEUHART.