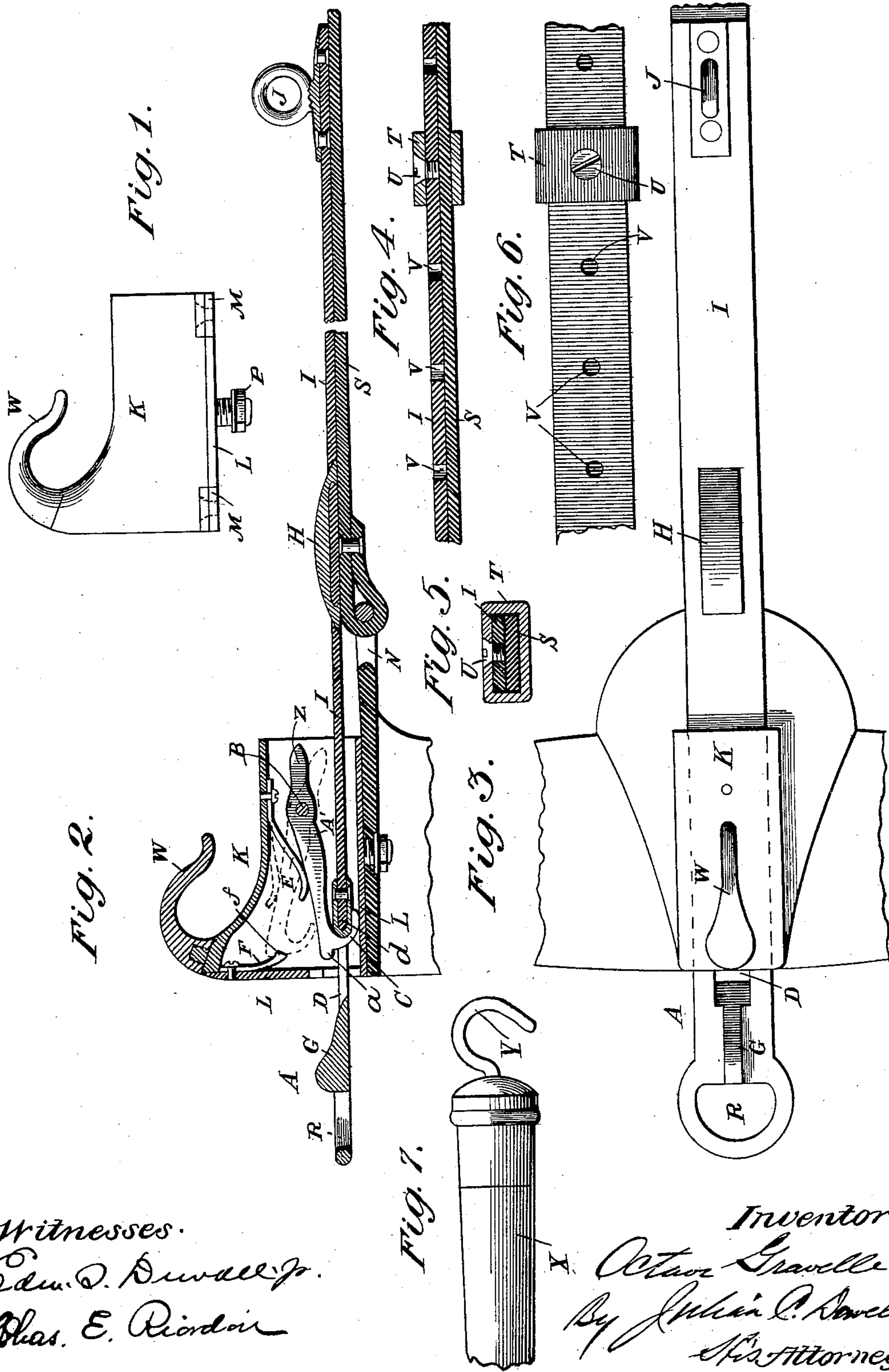


(No Model.)

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AUTOMATIC CHECKREIN HOLDER.

No. 599,898.

Patented Mar. 1, 1898.



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# UNITED STATES PATENT OFFICE.

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## AUTOMATIC CHECKREIN-HOLDER.

SPECIFICATION forming part of Letters Patent No. 599,898, dated March 1, 1898.

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*To all whom it may concern:*

Be it known that I, OCTAVE GRAVELLE, a citizen of the United States, residing at Spokane, Spokane county, State of Washington, have invented an Automatic Checkrein-Holder, of which the following is a specification.

This invention relates to harness and has in view to provide an attachment for facilitating checking and unchecking of a horse by a person seated in the vehicle to which the horse is harnessed, thus doing away with the annoyance of dismounting from the vehicle for the purpose of watering the horse.

In evolving the invention I have endeavored to produce an apparatus compact in form and simple and durable, avoiding a complicated construction difficult to operate and likely to get out of order.

With these objects in view the invention consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and particularly pointed out in the appended claims.

The drawings which accompany and form part of this specification illustrate an embodiment of the invention.

Of said drawings, Figure 1 shows a side elevation of the casing which is applied to the harness-saddle for the purpose of inclosing certain parts of the apparatus. Fig. 2 shows a longitudinal section of the complete apparatus. Fig. 3 shows a top plan view thereof. Figs. 4 and 5 show longitudinal and cross sections, respectively, of portions of the harness and the checking and unchecking attachment, illustrating the mode of connecting the same. Fig. 6 shows a plan view of the same. Fig. 7 illustrates a construction of whip adapted for use in connection with the form of checking and unchecking attachment shown in the preceding figures.

In furtherance of the objects of my invention I attach to the harness-saddle a casing composed of upper and lower sections K and L, the upper section comprising a top and sides and the lower section comprising a bottom and front piece and the two sections being secured together by suitable fastenings inserted through lugs or flanges M formed on the sections, as illustrated in Fig. 1. This casing is rigidly secured to the saddle in any

suitable manner—as, for example, by means of a screw and nut P.

The casing above described has openings in its front and rear, and a checkrein-holder, presently to be described in detail, slides longitudinally through the casing for purposes of checking and unchecking. This checkrein-holder, as here shown, comprises a plate A, formed with a loop R at its front end to receive the checkrein, and a substantially rectangular opening D near its opposite end, the rear side *d* of this opening constituting a locking-shoulder, as will hereinafter appear, and a projection or cam G, whose inclined face confronts the aforesaid shoulder *d*, forming a continuation of the front side of the opening D. The opening D in the plate A provides a loop, in which is fastened one end of a strap I, which strap extends rearwardly, lying over the back-strap S of the harness, the latter extending from the hames over the horse's back in the usual manner, and these two straps are connected, as illustrated in Figs. 4, 5, and 6, to prevent lateral displacement of the strap I and allow for its sliding back and forth over the strap S. These connections comprise a loop or keeper T, fastened to the strap I by means of a screw U, entered through the keeper and engaging one of a series of holes V in the strap I, the said keeper loosely embracing the strap S. At its rear end the strap I is equipped with a ring J, conveniently located for manipulation by one seated in the vehicle. To easily accomplish such manipulation, the whip may be provided with a hook at its rear end for engagement with the ring J, as illustrated in Fig. 7, where the letter X designates the whip and Y the hook fastened to the end of the same. At a point on the strap I between the ring J and the plate A, but nearer the latter, there is secured a rounded projection or cam H, the purpose of which will be explained hereinafter.

Within the casing K L there is arranged a latch A', which is pivoted intermediate of its ends by means of a suitable pin B, supported in the sides of the casing, and the arm of said latch on the front side of said pivot is formed at its extremity with a hook C, adapted to engage the shoulder *d* and to take under the same, as illustrated in Fig. 2. This arm of



the latch is pressed downwardly by a flat spring E, fastened to the top of the casing and thus exerting itself to produce an engagement between the latch and the plate A. At the upper end of the hook C on the end of the latch there is formed a slight projection *a*, and to the front side of the casing, at the upper part thereof, there is fastened a flat spring F, which stands out from the interior wall of the casing and is formed at its lower end with a double-inclined projection *f*, adapted to interlock with the projection *a* on the latch when the latter is moved upwardly to the broken-line position indicated in Fig. 2.

The rearwardly-extending arm of the latch, which is designated by the letter Z, is designed to coact with the cam H in a manner which will be explained in the following description of the operation of the apparatus.

When the horse is checked, the relation of parts is as illustrated in Fig. 2, the hook C of the sliding checkrein-holder and the rearwardly-extending arm Z of the latch being above the plane of the plate of the cam H. When it is desired to uncheck the horse, the hook on the end of the whip is engaged with the ring J and a pull is given, which causes the strap I and the plate A to be drawn rearwardly, and this effects a disengagement of the shoulder *d* from the hook C of the latch and also causes the cam G to act with its inclined face against the outer edge of said hook C, thereby elevating the latch to the dotted-line position indicated in Fig. 2. As the front end of the latch is thus elevated its small projection *a*, acting against the inclined lower side of the projection *f* on the spring F, displaces the latter sufficiently to allow said small projection *a* to pass the projection *f*, whereupon the latter springs below the projection *a* and retains the latch in its elevated position. The horse is now unchecked and can freely lower his head, drawing the plate A and the strap I forward through the casing on the saddle. When the front arm of the latch rises, of course the rear arm thereof is depressed, and this depression of the rear arm carries it into the plane of the cam H, so that when the strap I is drawn forward by the lowering of the horse's head this cam H, acting upon the rear arm Z of the latch, disengages the front end of the latch from the retaining-spring F, whereupon the spring E throws the front arm of the latch down against the strap I in readiness to again engage and interlock with the shoulder *d* when the said strap is drawn back. Hence when the horse is to be again checked the person seated in the vehicle has only to exert a pull upon the strap I, so as to bring the opening D in the plate A below the hook C of the latch, and the parts will be restored to the relation shown in Fig. 2 of the drawings.

The back-strap S of the harness may be conveniently fastened to a loop N formed on a rearward extension of the bottom of the section L of the casing.

It is evident that numerous modifications may be made in the construction here illustrated without departing from the spirit and scope of the invention, and hence I do not limit myself to such construction.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A checking and unchecking harness attachment comprising a checkrein-holder slidably engaged with the harness-saddle and having a locking-shoulder, an incline or cam opposite the same and an auxiliary cam behind said shoulder; a latch on the saddle for engagement with the locking-shoulder of said sliding checkrein-holder; and a yielding retainer to engage the latch when displaced by the first-named cam, said latch arranged to be disengaged from said retainer by the said auxiliary cam, and said sliding checkrein-holder having a rearward extension or rearward-extending connections facilitating its manipulation from the vehicle.

2. A checking and unchecking harness attachment comprising a checkrein-holder slidably engaged with the harness-saddle and having a locking-shoulder, an incline or cam opposite the same and an auxiliary cam behind said shoulder; a latch on the saddle pivoted intermediate of its ends and spring-pressed on one side of its pivot into engagement with the said shoulder on the checkrein-slide; and a yielding retainer to engage the latch when displaced by the first-named cam, said latch arranged to be disengaged from said retainer by the said auxiliary cam acting against the arm of the latch which extends on the opposite side of its pivot to the shoulder-engaging arm.

3. A checking and unchecking harness attachment comprising a checkrein-holder slidably engaged with the harness-saddle and having an opening through it, one end of which opening constitutes a locking-shoulder, an incline or cam at the opposite end of the said opening, and an auxiliary cam some distance back of the opening; a latch having a hooked end to engage and take under the said locking-shoulder, and a yielding retainer for engagement with said latch when the latter is displaced by the first-named cam, the latch and retainer having suitable complementary formations for this purpose, and said latch arranged to be disengaged from said retainer by the said auxiliary cam, substantially as described.

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Witnesses:

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