M. J. GRADY.

HITCHING DEVICE.

APPLICATION FILED SEPT. 29, 1910.

1,012,840. Patented Dec. 26, 1911.

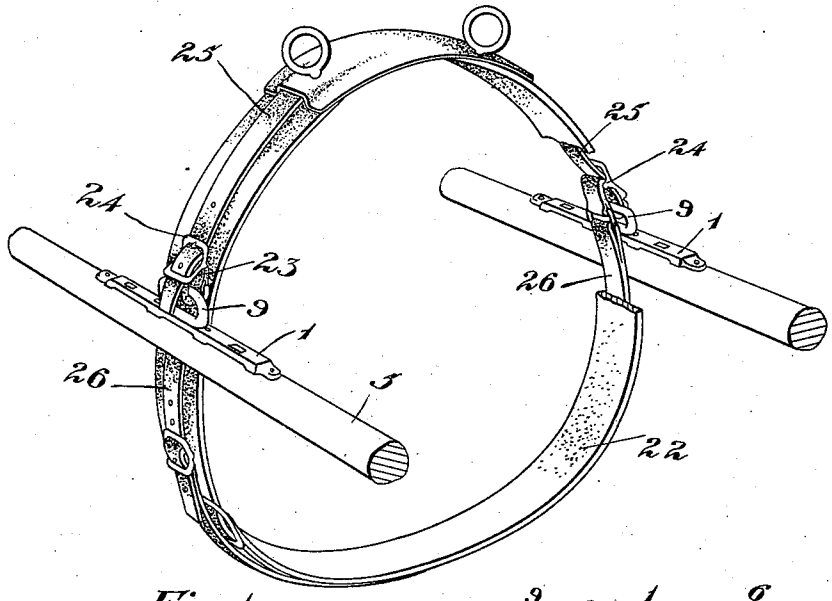

Fig. 1.

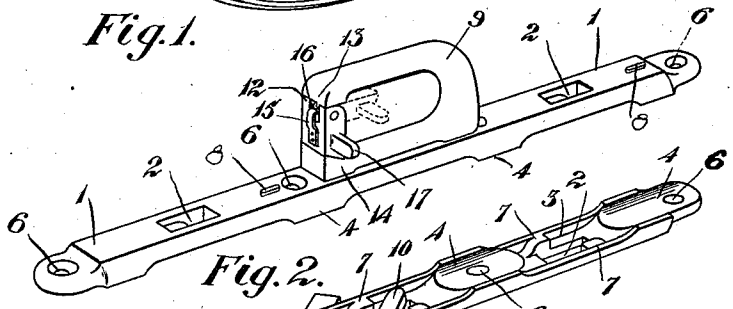

Fig. 2.

Fig. 3.

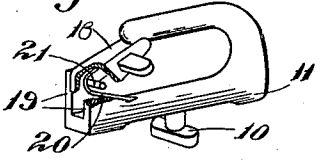

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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HITCHING DEVICE.

1,012,840. Specification of Letters Patent. Patented Dec. 26, 1911.

Application filed September 29, 1910. Serial No. 584,550.

To all whom it may concern:

Be it known that I, MICHAEL JAMES GRADY, a subject of the King of Great Britain, and resident of the village of St. Pauls, in the county of Perth, in the Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Hitching Devices; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to improvements in hitching devices, as described in the following specification and illustrated in the accompanying drawings that form part of the same.

The invention consists essentially in the novel construction and arrangement of parts, whereby the shafts are supported from loops suspended from the side of the belly-band by loop members adjustably secured to the said shafts.

The objects of the invention are, to facilitate the hitching and unhitching of horses, to save time and annoyance in adjusting the harness, and to provide a device for supporting the shafts which may be quickly adjusted to suit different horses.

In the drawings, Figure 1 is a perspective view of a portion of a pair of shafts showing my device attached thereto, part of the belly-band being broken away. Fig. 2 is an enlarged perspective view of the adjustable shaft loop and socket plate to which it is attached. Fig. 3 is an enlarged perspective view of the socket plate from the underside showing the shaft loop partly turned for removal. Fig. 4 is a perspective view of a slightly modified form of adjustable loop shown partly broken away.

Like numerals of reference indicate corresponding parts in each figure.

Referring to the drawings, 1 are metal plates formed with a plurality of rectangular shaped orifices 2 extending through the upper side thereof and the recesses 3 in the underside communicating with said orifices, the portions 4 of said plates between said recesses being formed to fit snugly to the curved surface of the shafts 5, said plates being securely held in place by suitable screws extending through the screw holes 6.

7 are stop lugs arranged on opposite sides of the orifices 2 within the recesses 3.

8 are teats projecting upwardly from the upper surface of the plates 1 arranged adjacent to one end of the orifices 2.

9 are the hitching loops formed of metal substantially hook shape and having the rigid T-shaped lugs 10 projecting downwardly from the center thereof, the head of said lugs being arranged crosswise from the said loop. The T-shaped lugs are adapted to be inserted into the rectangular orifices 2 and the loops turned parallel with the top of the plates 1 thus turning the T-shaped heads of the lugs 10 to engage the stop lugs 7. The loops 9 are thus held rigidly and can turn only in one direction.

11 are projections formed on the underside of the loops 9 at one side thereof and adapted to engage the teats 8 and to spring thereover and hold the loops 9 from turning accidentally away from the stop lugs 7.

The metal plates 1 have sufficient spring in them to allow the projections 11 to spring over the teats 8 in either direction when it is desired to shift the loops but they cannot become turned accidentally.

12 is a tongue pivotally connected to the downwardly extending lug 13 from the upper member of the loop 9, said tongue having its lower end beveled to fit snugly against the beveled portion 14 of the base of said loop.

15 is a latch spring rigidly secured to the tongue 12 and having a sharp projecting portion 16 adapted to engage the corresponding notch in the lug 13 and thereby holding the said tongue in its closed position.

17 is a lug extending laterally from the side of the tongue 12 to form a finger or thumb catch to facilitate the swinging of the tongue backward on its pivot.

In the form of adjustable loop member shown in Fig. 4, 18 is a tongue pivotally supported between the upright lugs 19 at the forward end of said member, said tongue being adapted to engage the underside of the upper portion of the loop and held in contact with said upper portion by the spring 20 extending around the pivot pin 21.

22 is the belly-band of the harness having the loops 23 secured to the buckles 24, said buckles being supported on the strap 25 and held from displacement by the strap 26 passing underneath the horse.

In the use of this device, the harness, including the band 22 and loops and straps 23, 25 and 26 is placed upon the horse. The shafts of the rig are then brought down over the horse's back and the loops 23 slipped over the upper portions of the metallic loop members 9, the latch tongues being swung back upon their pivots to allow the insertion of the leather loops. As soon as the leather loops are placed in position, the tongues are allowed to spring back to their normal position thereby locking the loops 23 and consequently the harness securely to the shafts. It is then merely necessary to connect up the traces and breeching and the horse is securely harnessed to the rig.

It will be readily understood that with the use of this device, the annoyance and difficulty incident to the backing of a horse into the shafts will be entirely avoided, as the shafts can be held in a raised position and the horse brought underneath and the shafts merely dropped into place and secured as hereinbefore described.

In the event of a different horse being placed in a rig and the supporting loops not being in just the right position they may be very quickly adjusted on the shafts by simply turning them on their pivots to free the T-shaped lugs when they may be shifted backwardly or forwardly and the T-heads inserted through different sets of orifices.

The device herein described is very simple to operate is cheap to manufacture and may be easily and quickly attached to the shafts of any vehicle. The construction or shape of the parts herein described may be varied considerably without departing from the spirit of the invention so long as the main feature of an adjustable loop member adapted to receive the suspended loops from the harness is retained.

A further advantage in the use of the device herein described is that the device fulfils the function of a hold back where the user prefers to dispense with the use of a breeching and in the case of the accidental breaking or unfastening of a tug the horse will be held securely in the shafts and an accident averted.

What I claim as my invention is:—

1. In a hitching device, the combination with the shafts of a vehicle, of a pair of plates each having a plurality of elongated orifices arranged longitudinally thereof and recesses in the underside communicating with said orifices and stop lugs oppositely arranged on each side of said orifices and extending downwardly into said recesses, metal loop members having downwardly extending T-shaped lugs adapted to be inserted through said elongated orifices and to abut said stop lugs when said loops are brought into alinement with said plates.

2. In a hitching device, the combination with the shafts of a vehicle, of a pair of plates each having a plurality of elongated orifices therein and upwardly projecting teats arranged adjacent to one end of said orifices, a pair of metallic loop members having T-shaped lugs adapted to be inserted into said elongated orifices, and stop lugs on the underside adapted to engage the said teats on the upper sides of said plates.

Signed at city of Stratford Ontario this 13th day of September A. D. 1910.

MICHAEL JAMES GRADY.

Witnesses:
W. H. Gregory,
S. D. Wardlaw.