

M. JOHNSTON.
SAFETY LINE HITCH FOR WAGONS.
APPLICATION FILED APR. 8, 1908.

956,581.

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Fig 1

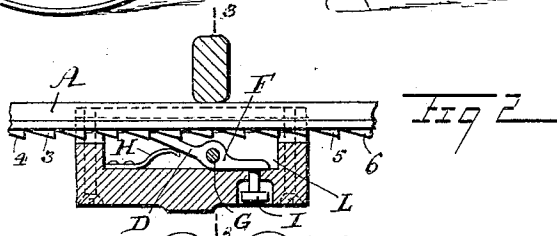
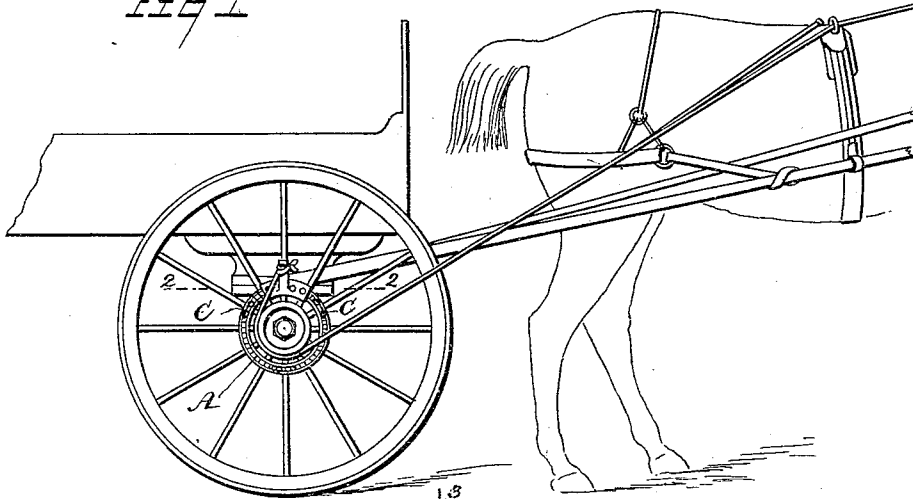


Fig 2

Fig 4

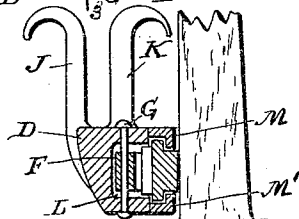
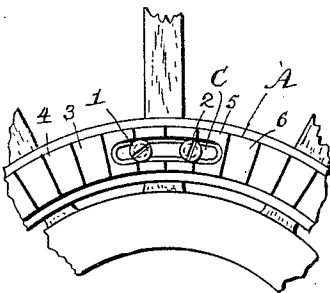
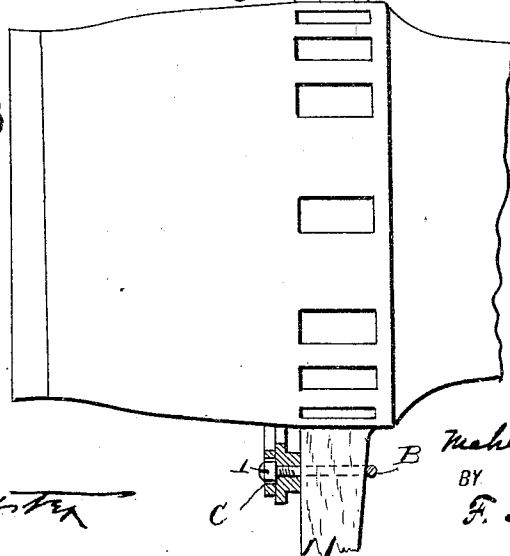


Fig 3



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MAHLON JOHNSTON, OF BINGHAMTON, NEW YORK.

SAFETY LINE-HITCH FOR WAGONS.

956,581.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MAHLON JOHNSTON, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Safety Line-Hitches for Wagons, of which the following is a specification.

My invention relates to improvements in safety line hitches for wagons and carriages, and the principal object of my invention is the provision of a device of this character in which a slotted and notched circular band surrounding the hub of a forward wheel is supported by adjustable bands about the spokes of the wheel; on this band is mounted a movable support, which in turn mounts means for holding the lines; the movable support by means of a pawl and ratchet connection with the band, turns with the wheel in the forward movement of the wheel, and thus tightens the lines up on the bits; while when the wheel turns backward, the lines hang loose and cannot be wound around the hub.

The objects of my improvement are to provide a safety line hitch for wagons and carriages, which, when the team or horse starts forward will draw up the lines tightly, holding the horse in check, but when the team or horse backs, the lines will remain loose. I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is a fragmentary side view of a wagon showing the application of my invention. Fig. 2 is a sectional plan taken on line 2, 2 of Fig. 1. Fig. 3 is a transverse section taken on line 3, 3 of Fig. 2. Fig. 4 is a fragmentary front elevation of a part of my invention.

Similar characters refer to similar parts throughout the several views.

In my device I have mounted on the outer side of the wheel spokes, the slotted circular T rail band A, its surface being surmounted by a series of projecting notches 3, 4 and 5, 6 etc. as shown in Figs. 2 and 4; the band A is held in place by the clevis B which passes around the spoke, its two ends being threaded, and passing through the slots in the band and being there surmounted by the screw nuts 1 and 2 as shown in Fig. 4; these being tightened enables the T rail circular band to be held firmly in place.

Mounted on the band A is the movable

support D; this support D has let into its inner side the space L; on each of the two inner surfaces of D are mounted the angular plates M and M'; these grasp the shoulders of the circular T rail band A and thus the support D is held in movable contact with the band A. Within the interior space L in this movable support D is mounted the pawl F turning on the pivot G; this pawl F is held in connection with the notches 3, 4, 5, 6 etc. by the spring H; the pawl has projecting from it the button I, and by pressing upon which the pawl may be released from the notch on A at any given point; and thus the movable support D can be released from the notches 3, 4, 5 6 etc. and turned around to any given point along the band A, but upon the button being released the pawl takes its position in the notch as before.

Mounted on the movable support D is the line hitch composed of the hooks J and K.

The angular plates are so mounted on D and are in connection with A as to form a groove in which the T rail band A runs, and in this manner the support D is locked to the T rail band A and glides back and forth on the rail band.

In operation the lines are inserted between the hooks J and K, and then wound around the hooks once, and are thereby held firmly in place; if the horse or team move forward the spring pawl F catching the notch on the band A, holds the support D firmly against the band and turns around with the wheel, in its forward turning, and thus winds the lines around the hub as shown in Fig. 1; if the team or horse backs then the pawl is released from the notch and it releases the support D so that it is free to move along the band A or the band A to move through the groove in the support D, and the tension on the lines is relieved no matter how far the wheel turns in moving backward, and the lines are kept loose and free during the backward movement.

Having thus described my invention what I claim as new and for which I desire Letters Patent, is as follows:

In a device of the character described, the combination with the wheel of a band having slots formed therein, means engaging the spokes and passing through said slots for adjustably securing the band in position upon the wheel, said band having ratchet teeth formed on its face opposite the spokes, an inwardly and an outwardly projecting

flange formed on the band, a movable support in which said flanges are engaged mounted on the band, a spring pressed pawl normally held in engagement with the
5 ratchet teeth pivotally secured to the inner side of the movable support, means inserted in the movable support and engaging the pawl for releasing the same; and a double

hook rein holding device secured on the outer side of the movable support.

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

MAHLON JOHNSTON.

Witnesses:

W. S. GILMORE,

F. M. FOX.