E. EKLUND.

WHIFFLETREE DETACHING DEVICE FOR VEHICLE THILLS.

APPLICATION FILED JULY 25, 1911.

1,014,584. Patented Jan. 9, 1912.

FIG. 1

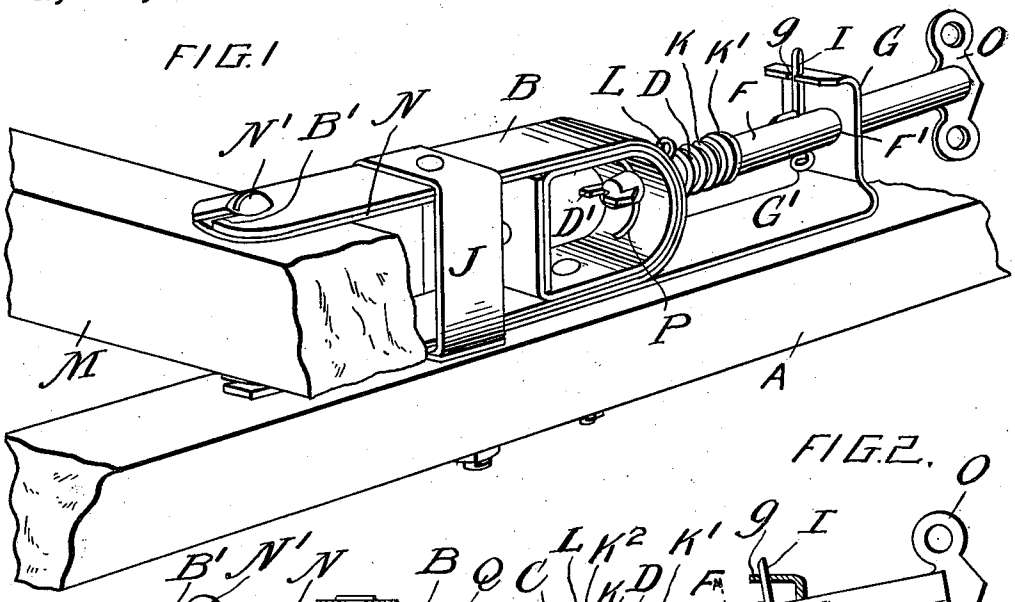

FIG. 2.

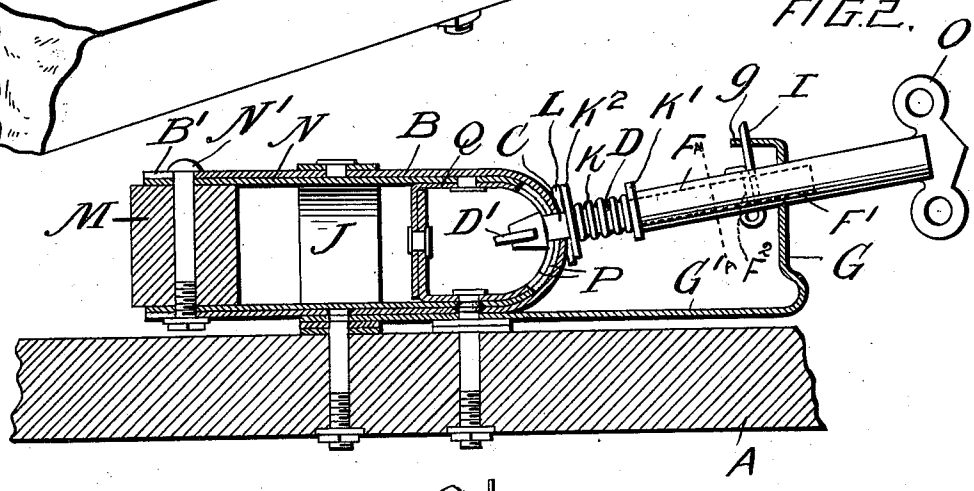

FIG. 3.

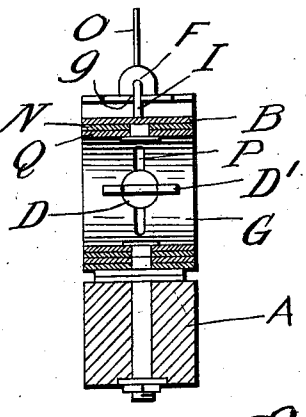

FIG. 4.

WITNESSES:

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WHIFFLETREE-DETACHING DEVICE FOR VEHICLE-THILLS.

1,014,584. Specification of Letters Patent. Patented Jan. 9, 1912.

Application filed July 25, 1911. Serial No. 640,414.

To all whom it may concern:

Be it known that I, EMIL EKLUND, a citizen of the United States, residing at Pennock, in the county of Kandiyohi and State of Minnesota, have invented certain new and useful Improvements in Whiffletree-Detaching Devices for Vehicle-Thills; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in devices for quickly detaching whiffle trees from thills in the event of a team running away.

The invention consists in the provision of a simple and efficient device of this nature having various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a perspective view showing the application of the invention to the shaft or thill of a vehicle. Fig. 2 is a longitudinal sectional view, Fig. 3 is a cross sectional view, and Fig. 4 is a cross sectional view through the shell and rod which telescopes therein and taken on line *a*—*a* of Fig. 2.

Reference now being had to the details of the drawings by letter, A designates the shaft or thill of a vehicle upon which the device is mounted. Fixed to said shaft is a clevis-shaped member B which has slotted ends B′ and an aperture C. A rod D passes through said aperture and has wings D′ upon its inner end. A shell F is mounted in an aperture F′ in the upwardly turned end G of the plate G′ and said rod telescopes within the shell. The inner end of the rod which telescopes within the shell F is slotted as at F^2 to receive the key I, thereby causing the rod and shell to rotate together. A spring K is mounted upon said rod and interposed between a washer K′ against which the inner end of the shell abuts and a washer K^2 also upon the rod and which is held from movement in one direction by means of a key L passing through an aperture in the rod. The outer throw of the shell is limited by means of a key I which is passed through said shell and adapted to strike against the upturned portion G of said plate. Wings O are fixed to the outer end of said shell and afford means for imparting a partial rotary movement to the shell for a purpose which will hereinafter appear.

A brace J is fastened to the shaft and passes about the arms of the member B as shown and serves to securely hold the member B in place. Telescoping within the clevis-shaped member B is a similarly shaped member N having apertures in its ends to receive a pivotal screw N′ which passes through a whiffle tree M. The inner bent portion of the member N is reinforced by means of the shell Q and the latter and the bent portion of said part N is provided with an elongated slot P with an enlarged central portion and adapted to receive the end of said rod and the wings thereon, which, by giving the rod a half rotary movement, will cause said wings to be positioned transversely of the slot and serve to hold the member N within the member B. When the member N is positioned within the member B, the slots B′ will receive the pivotal screw and which latter, together with the brace J, will coöperate to prevent a lateral movement being imparted to the member N.

It will be noted in the drawings that the upwardly projecting portion G of the plate G′ is bent at right angles and is provided with a notch *g* which is adapted to receive the key which passes through apertures in the shell within which said rod telescopes. Said coiled spring is adapted to normally hold the key upon the shell in said notch *g* and which will prevent a rocking movement being imparted to the rod which might tend to release the mechanism.

The operation of my apparatus will be readily understood and is as follows:—The wings at the outer end of the shell are preferably positioned within convenient reach of an operator as he might sit in a vehicle to which the device is attached. When the wings at the inner end of the rod are transversely positioned relative to the slot in the inner end of the member N, the whiffle tree and clevis-shaped member to which it is pivoted will be securely locked to the shaft of the vehicle. In the event of it being desired to release the whiffle tree, the operator by pushing upon the shell may release the key from the notch *g*, after which the shell

is given a partial rotary movement to bring the wings and the inner end of the rod in registration with the elongated slot in the member N which will allow the latter to be detached from said wings and be withdrawn from the member B. When it is desired to connect up the parts, a reverse movement is imparted to the members and the rod after the wings have passed through the slot in the inner end of the member N is given a half rotary movement to bring the wings crosswise of the slot and the key will automatically engage the notch and be held therein by the coiled spring.

What I claim to be new is:—

1. An apparatus for detaching whiffle trees from vehicle shafts consisting of two clevis-shaped members, one adapted to telescope within the other, one member fastened to the shaft, said member which is fastened to the shaft having an aperture, a rod passing through said aperture and provided with wings in its end, a whiffle tree pivoted to the other member, the latter having a slot in its inner end adapted to receive the wings of said rod, and means for holding said wings transversely of said slot.

2. An apparatus for detaching whiffle trees from vehicle shafts consisting of two clevis-shaped members, one adapted to telescope within the other, one member fastened to the shaft, said member which is fastened to the shaft having an aperture, a rod passing through said aperture and provided with wings in its end, a whiffle tree pivoted to the other member, the latter having a slot in its inner end adapted to receive the wings of said rod, a plate fastened to the shaft, a shell movable in an aperture in an upright portion thereof and in which said rod telescopes, and means carried by said shell and adapted to engage a notch in the plate to hold the rod from rotation.

3. An apparatus for detaching whiffle trees from vehicle shafts consisting of two clevis-shaped members, one adapted to telescope within the other, one member fastened to the shaft, said member which is fastened to the shaft having an aperture, a rod passing through said aperture and provided with wings in its end, a whiffle tree pivoted to the other member, the latter having a slot in its inner end adapted to receive the wings of said rod, a plate fastened to the shaft, a shell movable in an aperture in an upright portion thereof and in which said rod telescopes, a spring mounted upon the rod, a key passing through the latter, said spring bearing between the shell and key, and means carried by the shell and adapted to engage a notch in said plate to hold the rod from rotation.

4. An apparatus for detaching whiffle trees from vehicle shafts consisting of a plate adapted to be fastened to the shaft of a vehicle and having an upturned portion which is apertured and a bent end which is notched, a clevis-shaped member fastened to said plate and provided with slotted ends, an aperture in its bent portion, a brace about said member, a second clevis-shaped member, a whiffle tree, a pivotal screw passing through the same and adapted to engage said slots, a shell mounted in the aperture in said plate, a rod telescoping within said shell, wings at one end of said rod adapted to pass through said slot, a key fixed to the rod, a spring interposed between the shell and key, and a projection upon the shell adapted to be held by said spring in the notch in said plate.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

EMIL EKLUND.

Witnesses:
WERNER I. BERGLUND,
H. G. FLOREN.