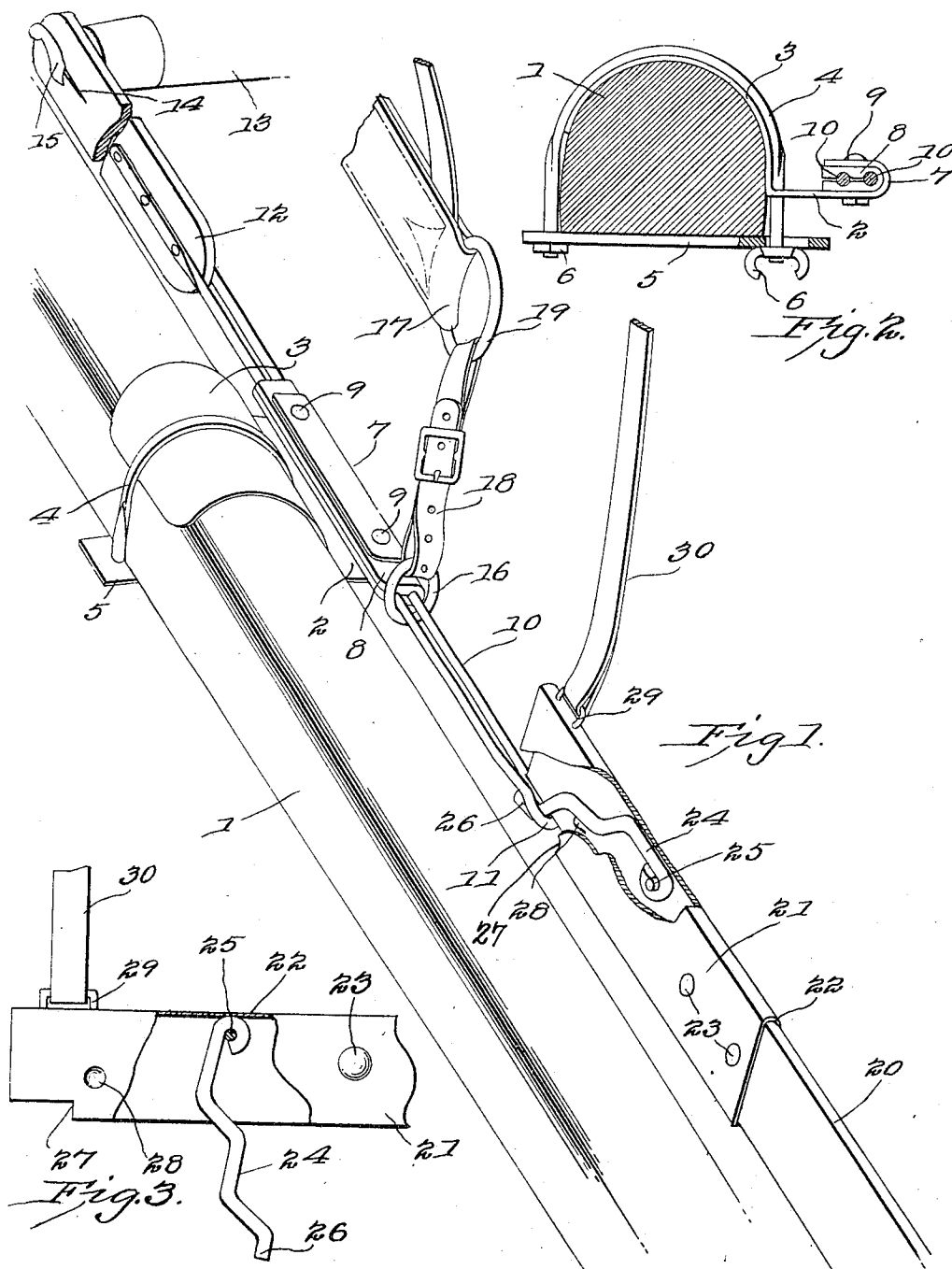


No. 819,936.

PATENTED MAY 8, 1906.

V. O. SEARER.
DRAFT CONNECTOR FOR VEHICLES.
APPLICATION FILED AUG. 23, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

VERNON OSCAR SEARER, OF WAKARUSA, INDIANA.

DRAFT-CONNECTOR FOR VEHICLES.

No. 819,936.

Specification of Letters Patent.

Patented May 8, 1906.

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To all whom it may concern:

Be it known that I, VERNON OSCAR SEARER, a citizen of the United States, residing at Wakarusa, in the county of Elkhart and State of Indiana, have invented a new and useful Draft-Connector for Vehicles, of which the following is a specification.

My invention relates to draft-connectors for vehicles, and has for its object to provide a device of the class embodying new and improved features of convenience and reliability.

A further object of my invention is to provide means whereby a draft-animal may be disconnected from the vehicle without the necessity of manipulating draft connections upon both sides of the animal.

A further object of my invention is to provide means whereby a draft-animal may be disconnected from a vehicle while the operator is in the vehicle.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view of my improved draft-connector for vehicles. Fig. 2 is a transverse sectional view of a buggy-thill and of the bracket portion of my improved connector mounted thereon. Fig. 3 is a view in side elevation of the trace end forming a portion of my draft-connector and shown with one of the sides broken away and the hooked member unlatched.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

My improved draft-connector is adapted for use in connection with vehicles provided with thills, as 1, and upon which it is mounted. The draft-connector comprises in its preferred form a bracket member 2, carried by a shield 3, rigidly secured to the thill in any approved manner, as by the encircling clip 4, secured by the plate 5, through which the clip member passes, and the nuts 6 upon the ends of the clip members and abutting the plate 5. The edge of the bracket 2, ex-

tending inwardly from the thill, is folded upon itself, as at 7, embracing within the fold an elastic wear member 8, preferably of leather and secured by bolts or rivets 9, passing through the fold of the bracket and through the wear member. Slidably mounted between the folds of the wear member 8 is disposed a rod 10, folded at one end to form a loop 11 and secured at its opposite end to a trace 12, connected to a whiffletree 13 in any approved manner, as by the slot 14 upon the whiffletree-hook 15. A holdback-ring 16 is mounted upon the rod 10, which it loosely embraces, and is connected to a holdback 17 through the medium of the usual strap 18 and ring 19. The holdback-ring 16 is proportioned to pass freely over the loop 11 of the rod 10 and embrace the rod and to abut and bear against the bracket 2.

For use in conjunction with the members, as before described, a trace 20, connected, as usual, to a harness, is provided with a trace end 21, preferably formed of sheet metal folded, as at 22, to form a channel member and secured to the trace in any approved manner, as by the rivets 23. Within the channel member is mounted a curved hooked member 24, pivoted to the channel member, as by the pivot 25, and with its hooked extremity 26 arranged to engage the loop 11 and hold said loop within the notch 27, formed in the end of the channel member. The channel member is provided with means for holding the hooked member normally closed, as the spring depression 28, engaging behind the hooked member and preventing the opening thereof unintentionally. Adjacent the rear end of the trace end a loop 29 is formed, within which is engaged a band or strap 30, passing over the back of the draft-animal and engaging a similar loop upon the opposite side.

With the parts assembled as shown in Fig. 1 the draft is connected to the vehicle through the medium of traces 12 and 20, connected to the whiffletree 13. To disconnect the draft, the strap 30 is raised upwardly by being grasped by the operator located upon either side of or in the rear of the animal and the trace end 22 lifted upwardly. It will be noted that the rod 10 is capable of a movement longitudinally of the thill 1, but is retained against a transverse movement. The lifting of the trace end will therefore disengage the hooked member 24 from the spring-fastening 28 and open the hook to the posi-

tion shown in Fig. 3, releasing and disengaging the loop 11. When the hook has been disengaged from the loop 11, the forward movement of the draft-animal will cause the holdback-ring 16 to slip freely from the rod 10, thus entirely disengaging the animal from the vehicle. It is obvious that the connecting of the animal to the vehicle will be accomplished in the reverse order—to wit, by first slipping the holdback-ring 16 over the rod 10, then inserting the end 26 of the hooked member of the trace in the loop 11, and closing the hooked member within the channel member, again assuming the position shown in Fig. 1.

Having thus described the invention, what is claimed is—

1. In a draft-connector for vehicles, a thill and whiffletree, a rod slidably mounted on the thill and connected with the whiffletree, means for attaching the draft to the rod, and a holdback-ring loosely embracing the rod.

2. In a draft-connector for vehicles, a thill, a rod slidably mounted on the thill and connected with the vehicle, a trace, means connecting the trace and the rod, a holdback-ring loosely embracing the rod, and means whereby when the trace is disconnected the ring slips freely from the rod.

3. In a draft-connector for vehicles, a thill and whiffletree, a rod slidably mounted upon the thill and connected with the whiffletree, a trace, means connecting the trace and the rod, a holdback-ring loosely embracing the rod, and means whereby when the trace is disconnected the ring slips freely from the rod.

4. In a draft-connector for vehicles, a thill and whiffletree, a bracket rigidly secured to the thill, a rod mounted on said bracket and slidably movable longitudinally of the thill, means connecting the rod and the whiffletree, a trace, means connecting the trace and the rod, a holdback-ring loosely embracing the rod and normally abutting the bracket, and means whereby when the trace is disconnected the ring slips freely from the rod.

5. In a draft-connector for vehicles, a loop slidably connected with the vehicle, a trace, a trace end provided with a pivoted hook for engagement with the loop, and means whereby raising the trace end moves the hook angularly upon the pivot and disconnects it from the loop.

6. In a draft-connector for vehicles, a thill, a loop mounted upon and having a limited movement longitudinally of the thill, a trace, a trace end provided with a pivoted hook for engagement with the loop, and means where-

by raising the trace end moves the hook angularly upon the pivot and disconnects it from the loop.

7. In a draft-connector for vehicles, a thill, a looped rod mounted upon and having a limited movement longitudinally of the thill, a holdback-ring loosely embracing the rod and proportioned to pass freely over the loop, a trace, a trace end provided with a pivoted hook for engagement with the loop, and means whereby raising the trace end moves the hook angularly upon the pivot and disconnects the trace from the loop permitting the holdback-ring to slip freely from the rod.

8. In a draft-connector for vehicles, a loop, means attaching the loop to the vehicle, a trace, a trace end comprising a channel member, a hook member pivoted in the channel member and engaging the loop, and means whereby when the trace end is raised the hook member is moved angularly within the channel member and disengaged from the loop.

9. In a draft-connector for vehicles, a loop, means attaching the loop to the vehicle, a trace, a trace end comprising a channel member secured to the trace, a hook member pivoted in the channel member, means retaining the hook-shank normally within the channel member and the hook in engagement with the loop, and means whereby raising the trace end moves the hook angularly within the channel upon the pivot and disengages it from the loop.

10. In a draft-connector for vehicles, a thill and whiffletree, a bracket rigidly secured to the thill, a looped rod mounted on said bracket and slidably movable longitudinally of the thill, means connecting the rod and the whiffletree, a holdback-ring loosely embracing the rod and normally abutting the bracket, a trace, a trace end comprising a channel member, a hook member pivoted in the channel member, means retaining the shank of the hook normally within the channel member and in engagement with the loop of the rod, a band connected with the trace end, and means whereby raising the strap moves the hook angularly within the channel upon the pivot and disengages the trace from the loop permitting the holdback-ring to slip freely from the rod.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

VERNON OSCAR SEARER.

Witnesses:

JACOB PLETCHER,
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