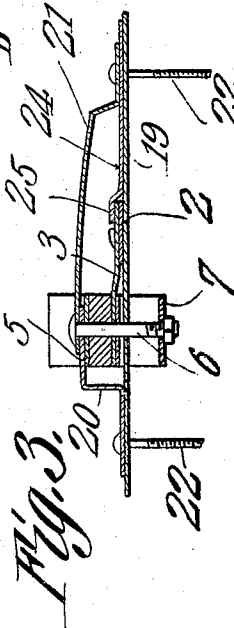
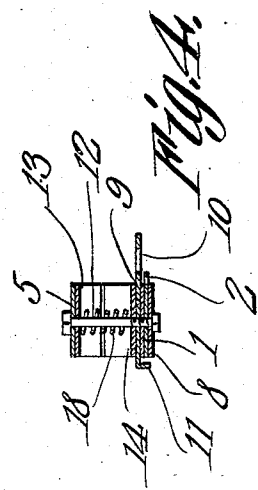
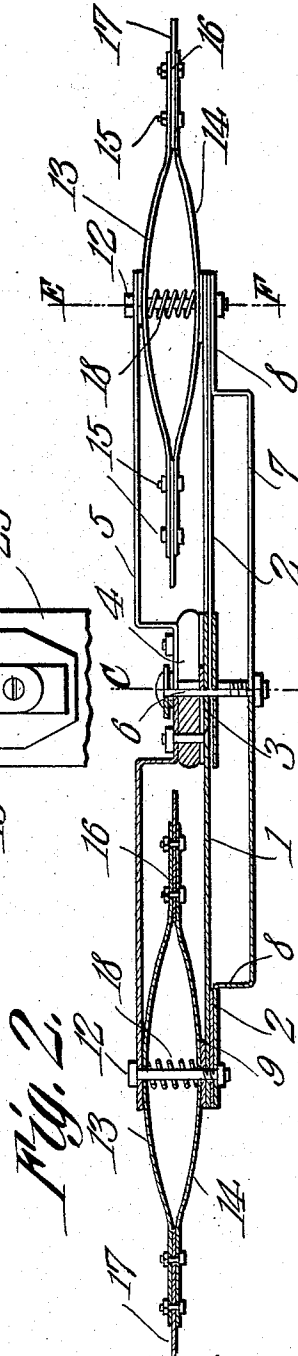
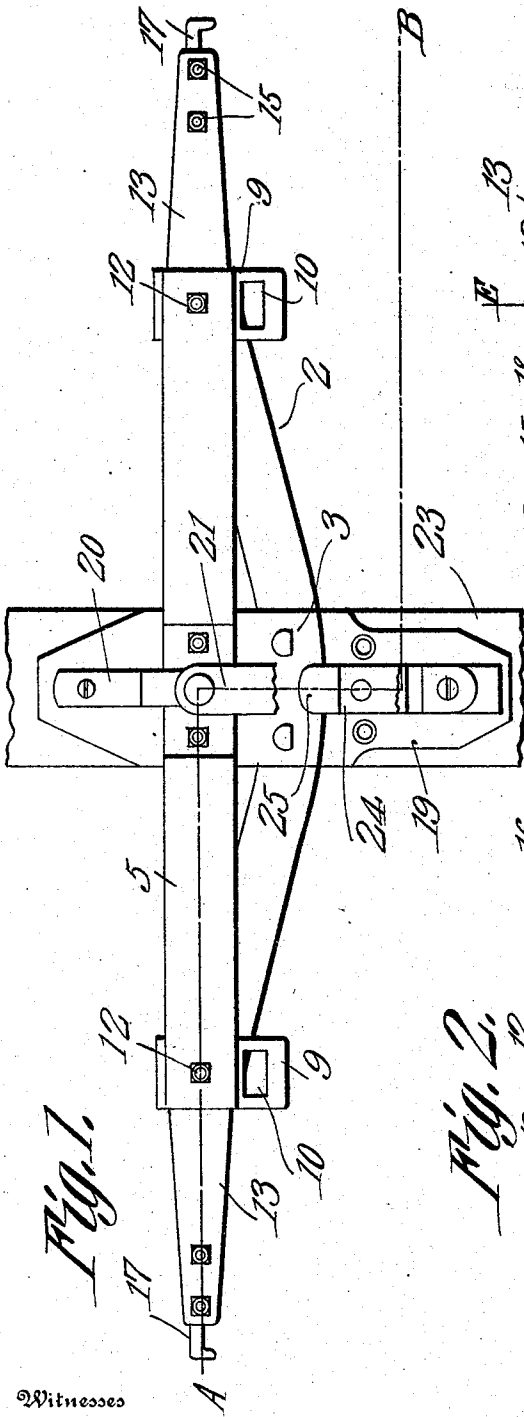


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DRAFT ATTACHMENT FOR VEHICLES.
APPLICATION FILED NOV. 10, 1908.

932,639.

Patented Aug. 31, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES V. PAUL, OF SHERIDAN, OREGON.

DRAFT ATTACHMENT FOR VEHICLES.

932,639.

Specification of Letters Patent.

Patented Aug. 31, 1909.

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To all whom it may concern:

Be it known that I, CHARLES V. PAUL, a citizen of the United States, residing at Sheridan, in the county of Yamhill and State of Oregon, have invented a new and useful Draft Attachment for Vehicles, of which the following is a specification.

This invention relates to draft attachments for vehicles and more particularly to double-trees and swingle-trees, one of the objects of the invention being to provide all metal trees which are practically noiseless in operation and which will automatically take up wear between the swingle and double trees.

Another object is to provide simple and efficient means for attaching the double-tree to the tongue of a vehicle, means being provided for positively holding the double tree against tilting movement during the application of power to the trees.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a plan view of the draft attachment constituting the present improvements, the retaining strap through which the pivot bolt passes being partly broken away. Fig. 2 is a section on line A—B Fig. 1. Fig. 3 is a section on line C—D Fig. 1. Fig. 4 is a section on line E—F Fig. 2.

Referring to the figures by characters of reference 1 designates an elongated metallic strap constituting the base of the draft attachment and to the end portions of which are attached the terminals of a curved guide strap 2, the two straps 1 and 2 being further connected at their centers by a tie plate 3 which is riveted or otherwise attached to them. Secured upon this coupling plate and directly above the middle portion of the base strap 1 is a spacing block 4 on which is secured the depressed middle portion of a holding strap 5 arranged substantially parallel with the base strap 1 and having its terminals directly above the terminals of said base strap. The pivot bolt 6 is designed to extend through this depressed portion of strap 5 and also through the block 4 and the strap 1, the lower portion of said bolt 6 being located within the middle por-

tion of a retaining strap 7 spaced, for the greater portion of its length, from the base strap 1 but having its terminals 8 bent upwardly and secured to the terminal portions of the strap 1 in any preferred manner. Plates 9 are preferably disposed above the terminals of the straps 7 and 1 and extend rearwardly therefrom, each plate having an eye or opening 10 therein designed to receive a check strap (not shown).

As disclosed in Fig. 4, the front ends of the plates 9 are preferably provided with retaining flanges 11 designed to further prevent the withdrawal of the plates 9 from their positions above the straps 1 and 7.

A pivot bolt 12 connects each terminal of the holding strap 5 with the adjoining ends of the straps 1, 2 and 7, said bolt also serving to retain the adjoining plate 9 in position. Pivotaly mounted on each of the bolts 12 is a swingle-tree consisting of oppositely bowed metal strips 13 and 14 arranged one above the other and connected at their ends by bolts 15, which extend through plates 16 provided with trace hooks 17 extending beyond the strips 13 and 14. A coiled spring 18 is arranged on each bolt 12 and bears at its end against the strips 13 and 14 so as to hold them pressed yieldingly against the terminals of the straps 5 and against the plate 9.

A bearing plate 19 extends under the base strap 1 and the guide strap 2 and is provided upon the front portion thereof with an angular retaining strap 20 and upon the rear portion thereof with another retaining strap 21, said straps lapping above the recessed or downstruck portion of the strap 5 and having the bolt 6 extending through them. Additional bolts 22 extend through the outer ends of the straps 20 and 21 and the corresponding portions of the plate 19 and these bolts constitute means for securing said plate 19 to the tongue 23 of a vehicle. The tongue is designed to extend between the straps 1 and 7 and the pivot bolt 6 extends through it and constitutes the pivotal connection between the tongue and the double tree formed by the straps. An elongated strip 24 is secured in any suitable manner upon the plate 19 and has a lip 25 at one end which laps the guide strap 2, as clearly indicated in Figs. 1 and 3.

As heretofore stated, the tongue of a vehicle is designed to extend between the straps 1 and 7 and the pivot bolt 6 by ex-

tending therethrough constitutes a pivotal connection between the parts. The plate 19 is secured upon the tongue by means of the bolts 22 and when the traces have been attached to hooks 17 the device will operate in the same manner as an ordinary whiffletree and swingle-tree. The springs 18 serve to hold the upper and lower portions of the swingle-trees yieldingly in contact with the straps 5 and 1 so as to prevent rattling, and the plates 24 and 3 and the straps 1 and 2 operate to prevent the device from tilting forward when subjected to pulling action, this being principally due to the fact that the lip 25 laps the guide strap 2 and the rear end of plate 3 and assists the straps 20 and 21 in holding the bolt 4 constantly perpendicular to the tongue.

It will be noted that the entire draft appliance or attachment is formed of metal with the possible exception of the spacing block 4, which can be made of wood, and inasmuch as the metal parts are nothing more than straps, it will be noted that the device is comparatively light, although, by reason of its construction, possessing equal if not greater strength than the ordinary wooden trees usually employed.

Obviously various changes may be made

in the construction and arrangement of parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

A draft attachment for vehicles including a base strap, a retaining strap parallel therewith and having angular terminals below and extending toward the base strap, a holding strap parallel with the base strap and disposed thereabove, said holding strap having a depressed intermediate portion, a spacing block interposed between the said depressed portion and the base strap, a pivot bolt extending through the spacing block and the middle portions of the base, retaining and holding straps, a curved guide strap having its terminals disposed between the ends of the base and retaining straps, pivot bolts extending through the terminals of all of the straps, and swingle trees mounted upon said bolts and between the base and holding straps.

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

CHARLES V. PAUL.

Witnesses: •
GLEN ALLEN,
ERNEST W. HAAS.