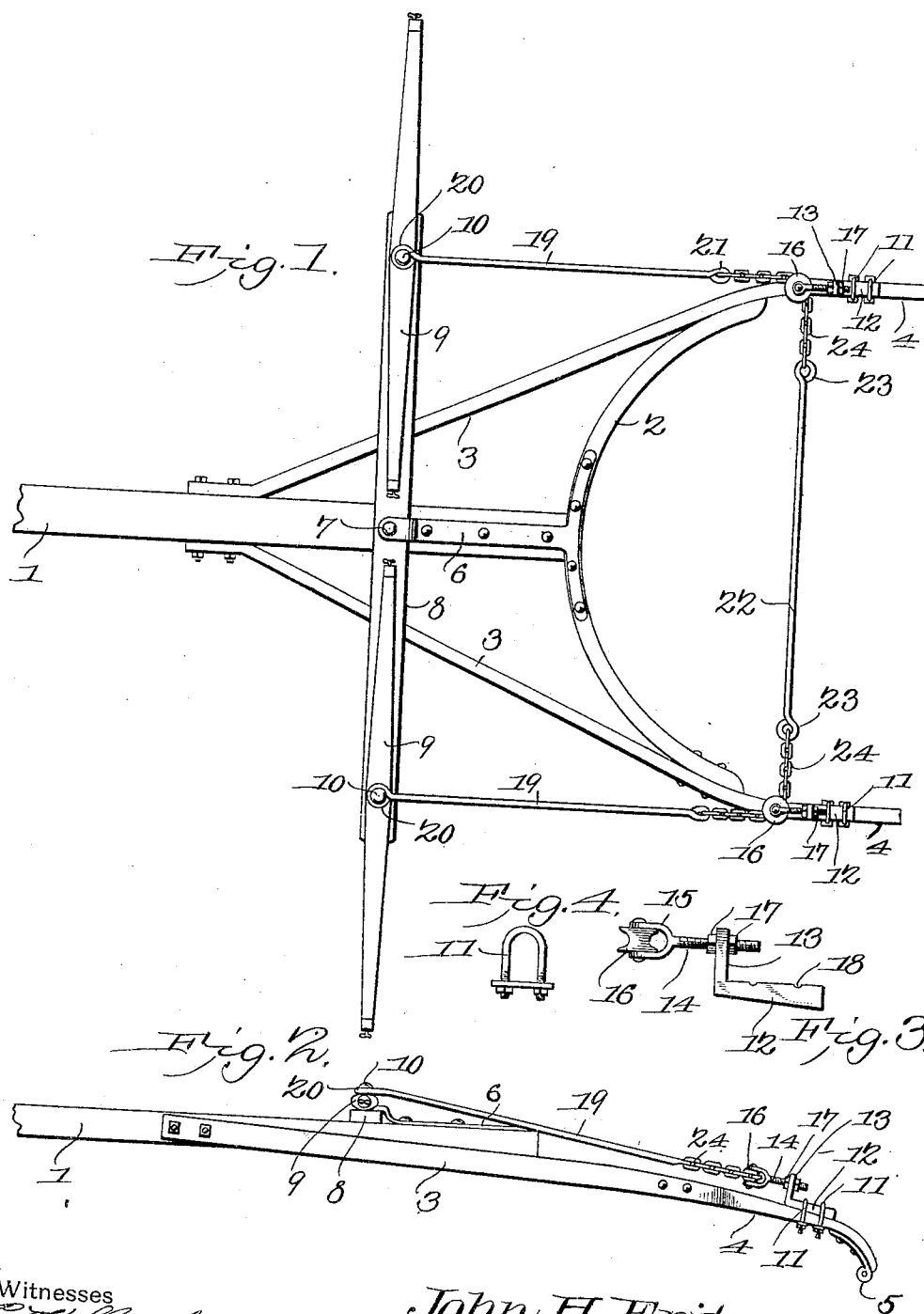


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J. H. FRITZ.
DRAFT ATTACHMENT FOR VEHICLES.
APPLICATION FILED MAR. 30, 1905.



Witnesses
E. H. Stewart
Wm. Bagger

John H. Fritz, Inventor
by *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

JOHN HENRY FRITZ, OF AINSWORTH, NEBRASKA.

DRAFT ATTACHMENT FOR VEHICLES.

No. 813,639.

Specification of Letters Patent.

Patented Feb. 27, 1906.

Application filed March 30, 1905. Serial No. 252,900.

To all whom it may concern:

Be it known that I, JOHN HENRY FRITZ, a citizen of the United States, residing at Ainsworth, in the county of Brown and State of Nebraska, have invented a new and useful Draft Attachment for Vehicles, of which the following is a specification.

This invention relates to a draft attachment for vehicles; and it has for its object to obviate the strain in a forward direction upon the bolts, whereby the swingletrees are connected with the doubletree and the latter with the tongue and which frequently leads to the wrenching and breakage of the parts in case of excessive strain caused by sudden spurts of the draft-animals, whereby the swingletrees and doubletree are caused to roll in a forward direction.

Other objects of the device are to simplify and improve the construction and operation of devices of this character.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention and without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is a top plan view of a draft attachment for vehicles constructed in accordance with the principles of the invention. Fig. 2 is a side elevation of the same. Figs. 3 and 4 are detail views showing parts of the device detached.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

A vehicle-tongue of ordinary construction is provided at its rear end with a curved hound-brace 2, serving to space the rear ends of the hounds 3 3, the forward ends of which are secured to the sides of the tongue and the

rear ends of which have parallel portions 4 4, provided at their rear ends with eyes 5, adapted for connection with the axle-clips. (Not shown.)

6 is the hammer-strap, and 7 the hammer-bolt, whereby the doubletree 8 is mounted upon the tongue. The swingletrees 9 9 are mounted pivotally upon the doubletree by means of bolts 10.

Secured adjustably upon the parallel arms or members 4 4 of the hounds, as by means of clips 11, are L-shaped brackets 12, the upstanding flanges of which, 13, are apertured for the passage of bolts 14, having bifurcated heads 15, in which guide-pulleys 16 are supported for rotation. The bolts 14 are adjustable in the apertures of the brackets 13 by means of nuts 17, bearing against opposite sides of the bracket-flange 13. The brackets 12 are preferably provided with transverse recesses 13 for the reception of the clips in order that they may be retained adjustably and with absolute security by means of said clips.

A pair of longitudinal connecting-rods 19 are provided at their forward ends with eyes 20, engaging the upper ends of the pivotal bolts of the swingletrees. The rear ends of said connecting-rods are provided with eyes 21. 22 is a transversely-disposed connecting-rod which is provided at the ends thereof with eyes 23, which are connected, by means of chains or flexible elements 24, passing over the guide-pulleys 16, with the eyes 21 at the rear ends of the rods 19. By proper adjustment of the bracket members 12 and the adjusting-bolts 14 the connection thus established between the pivotal bolts of the swingletrees may be made perfectly taut. The eyes 21 and 23 upon the connecting-rods 19 and 22 are to be made sufficiently large to constitute stop members by contact with the pulley-bearing bolts when the device is in operation.

The operation of this device will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The device, it will be seen, does not in the least interfere with the pivotal movement either of the doubletree or evener, or of the swingletrees; but the upper ends of the pivotal bolts of the swingletrees are absolutely and without regard to the position

occupied by the device protected against wrenching movement in a forward direction. In other words, the pivotal bolts of the swingle-trees will be at all times sustained in a vertical position, the strain upon the upper ends of said bolts being taken up by the connecting-rods 19 and the strain upon the lower ends of the bolts by their bearings in the doubletree, the supporting means for the upper ends of said bolts being connected in the manner described, so that the strain will be equalized.

By the use of this invention it is absolutely impossible for either the swingle-trees or the doubletree to roll in a forward direction or to be subjected to any wrenching force no matter how suddenly applied by restive animals. The device is extremely simple, and any slack owing to wear or other causes may be quickly taken up by proper adjustment of the bracket members 12 or the bolts 14, according to the amount of slack to be taken up. The invention may be readily applied to ordinary running-gear without materially changing the construction of the latter.

Having thus described the invention, what is claimed is—

In a device of the class described, a tongue, hounds connected therewith, brackets secured adjustably by means of clips upon said hounds and having upwardly - extending flanges, bolts extending through apertures in said flanges and secured adjustably by means of nuts bearing against the front and rear sides of said flanges, said bolts having bifurcated heads, guide-pulleys supported for rotation in said bifurcated bolt-heads, a doubletree pivoted upon the tongue, swingle-trees pivoted upon the doubletree, connecting-rods having eyes engaging the pivotal bolts of the swingle-trees above the latter, and flexible connecting means for said rods engaging the pulleys supported upon the hounds.

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

JOHN HENRY FRITZ.

Witnesses:

WM. M. ELY,
C. A. BARNES.