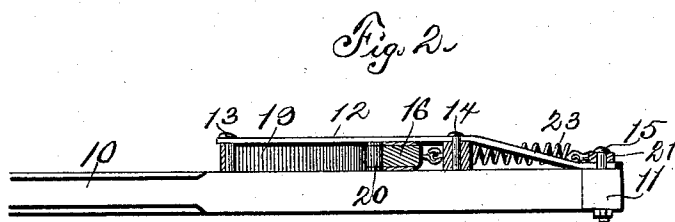
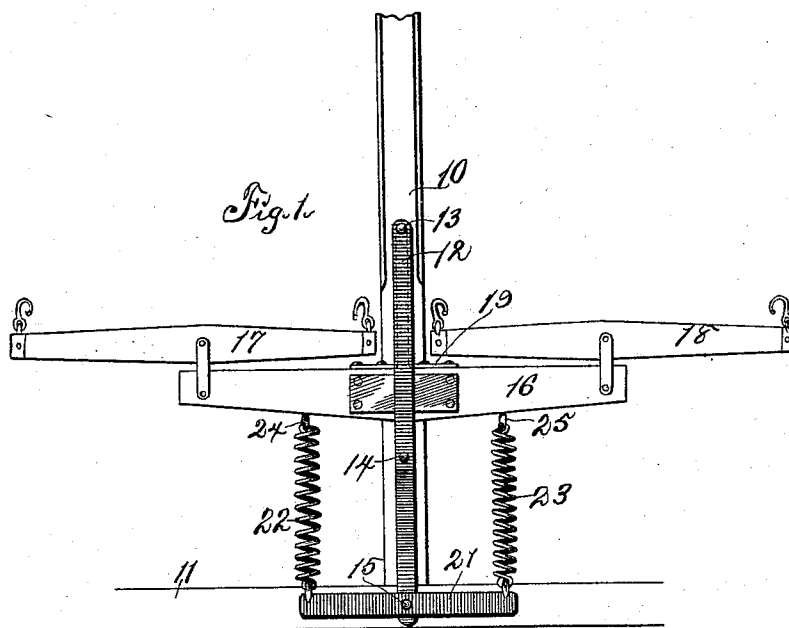


(No Model.)

J. HOOK, Jr.
EVENER FOR TWO HORSE VEHICLES.

No. 571,134.

Patented Nov. 10, 1896.



Witnesses: *W. C. Orwig.*
S. C. Sweet.

Inventor: *James Hook, Jr.*
By *Thomas G. Orwig, Attorney.*

UNITED STATES PATENT OFFICE.

JAMES HOOK, JR., OF MANILLA, IOWA.

EVENER FOR TWO-HORSE VEHICLES.

SPECIFICATION forming part of Letters Patent No. 571,134, dated November 10, 1896.

Application filed March 26, 1896. Serial No. 584,989. (No model.)

To all whom it may concern:

Be it known that I, JAMES HOOK, Jr., a citizen of the United States of America, and a resident of Manilla, in the county of Crawford and State of Iowa, have invented a new and useful Evener for Two-Horse Vehicles, of which the following is a specification.

The object of my invention is to provide improved means for attaching horses to a vehicle in order that the draft of the horses may be cushioned relative to the vehicle and that in a descent the whiffletrees will be drawn rearwardly away from the legs of the horses and the traces retained taut.

My invention consists in the combination of a whiffletree mounted to slide and oscillate on a vehicle-tongue, an evener mounted on said tongue and yielding pressure devices connecting said evener and whiffletrees, whereby the whiffletrees are normally held in proximity to the vehicle.

My invention consists, further, in the construction, arrangement, and combination of elements hereinafter set forth, pointed out in my claims, and illustrated by the accompanying drawings, in which—

Figure 1 is a plan showing a tongue, axle, and my devices mounted thereon. Fig. 2 is a sectional elevation longitudinally of the tongue.

In the construction of the device as shown the numeral 10 designates a vehicle-tongue attached at its rear end to an axle 11. A clip 12 is mounted above the tongue and fixed thereto by bolts 13 14, a space being left between the clip and tongue for the admission of the whiffletrees, as hereinafter described. The rear end of the clip 12 is fixed to the axle 11 by a bolt 15. The whiffletrees comprise an evener-bar 16 and singletrees 17 18, pivoted in a common manner to the ends of said evener-bar. A bridle 19, made of a metal strap, is mounted on and extends forward from the front edge of the evener-bar 16 and surrounds the bolt 13 when the evener-bar is mounted between the clip 12 and tongue 10, thereby providing a slot within which the bolt 13 passes. A notch 20 is formed in the forward edge of the evener-bar 16 and is designed for engagement with the bolt 13 when the evener-

bar is drawn forwardly into contact with said bolt. A metallic evener 21 is mounted on the pin 15 and normally lies parallel with the axle 11. The ends of the evener 21 are apertured and engage by said apertures hooks formed on the ends of coil retractile springs 22 23, which springs extend forward from the evener and connect by means of hooks on their forward ends to eyebolts 24 25 in the evener-bar 16.

In practical use the team is attached to the whiffletrees by traces hooked to the singletrees in a common manner, and when draft is applied thereto the whiffletrees are drawn forward along the tongue against the resilience of the springs 22 23, according to the amount of draft applied. When the draft is relaxed, as occurs when the vehicle descends, the springs 22 23 contract and draw the whiffletrees back relative to the vehicle sufficiently to maintain the traces taut, thus preventing said traces from becoming slack and accidentally detaching from the singletrees. The bridle 19 guides the whiffletrees in forward-and-backward movement along the tongue and prevents the endwise displacement of the evener-bar from the clip 12. The notch 20 in the forward end of the evener acts to center the evener-bar on the bolt 13 and prevent unequal leverage thereof. The bolt 14 acts to limit the reciprocation of the whiffletrees. The evener acts in conjunction with the springs and whiffletrees to uniformly and regularly reposition the same after an oscillation thereof.

I claim as my invention—

1. An evener, comprising an evener-bar mounted to slide and oscillate on a tongue, singletrees carried by the ends of said evener-bar, an evener mounted adjacent to said evener-bar and yielding pressure devices connecting said evener and evener-bar, as set forth.

2. An evener comprising an evener-bar carrying singletrees and provided with a bridle whereby the bar is mounted for reciprocation and oscillation on a vehicle-tongue, an evener, and springs connecting said evener and evener-bar.

3. In a device of the class described, the

combination of a vehicle-tongue, a clip mounted on said tongue, bolts traversing said clip and tongue, an evener-bar mounted between said clip and tongue and between the bolts, a
5 bridle on said evener-bar inclosing the forward bolts, an evener mounted in the rear of the evener-bar, retractile coil-springs con-

necting the ends of said evener with the evener-bar and singletrees carried on the ends of said evener-bar, as set forth.

JAMES HOOK, JR.

Witnesses:

M. J. McNERTNEY,
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