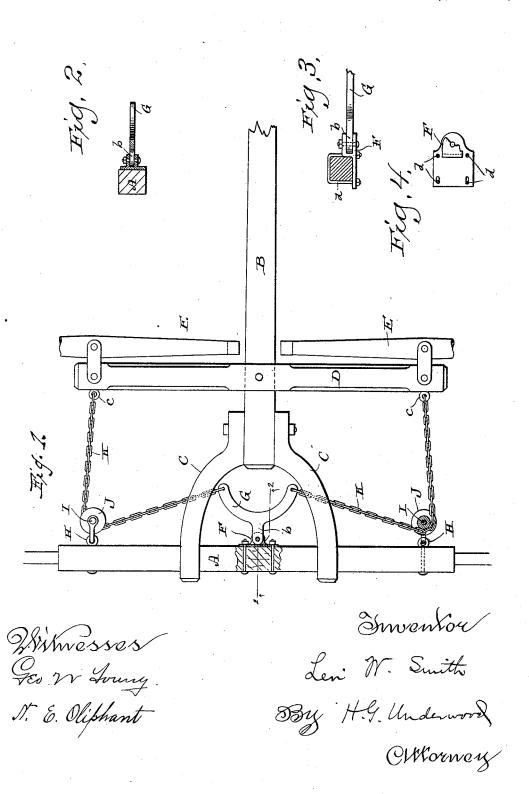
L. W. SMITH.
DRAFT EVENER.

No. 492,995.

Patented Mar. 7, 1893.



UNITED STATES PATENT OFFICE.

LEVI W. SMITH, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF TWO-THIRDS TO JOSEPH FELDMEYER AND CASSINI A. LYON, OF SAME PLACE.

DRAFT-EVENER.

SPECIFICATION forming part of Letters Patent No. 492,995, dated March 7, 1893.

Application filed April 11, 1892. Serial No. 428,661. (No model.)

To all whom it may concern:

Be it known that I, LEVI W. SMITH, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee, and 5 in the State of Wisconsin, have invented certain new and useful Improvements in Draft-Eveners; and I do hereby declare that the following is a full, clear, and exact description thereof.

10 My invention has for its object to apply the draft of a team of horses to the front axle of a wagon, equally divide the incidental strain between the horses and concentrate said draft against resistance without causing 15 any whipping about of the wagon-tongue, as well as to provide for a ready disconnection of the whiffle-tree, that forms part of the draft-mechanism, from the equalizing-mechanism and wagon-tongue. These objects I attain by the peculiarities of construction and combination of parts hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings: Figure 1 represents a plan view illustrating the relative arrangement of parts embodied in my invention, in connection with a whiffletree and front axle of a wagon, this axle being broken away in the center for the purpose of better illustration. Fig. 2, a section on line 2—2 of the preceding figure. Figs. 3 and 4 are detail views illustrating a clevis, particularly designed for use in connection with an iron axle and therefore somewhat different in the matter of detail from the clevis shown on the wooden axle in

Fig. 1.

Referring by letter to the drawings, A represents the front axle of a wagon, B the wagontongue connected to the usual hounds C that are joined to said axle. Pivotally connected to the tongue B is an ordinary whiffletree D having singletrees E joined thereto in the usual manner, and bolted or clipped to the center of the axle is a clevis F for pivotal connection with a lug b that extends rearward from the center of a curved plate G, as best illustrated in Fig. 1.

Pivotally connected to eye-bolts H, attached to the axle A, are hangers I for sheaves J, and chains K, or other suitable devices of a flexible character work on the sheaves, and Letters Patent, is—

are hooked or otherwise detachably connected at their extremities to the plate G and eyes c on the whiffletree above described.

In Figs. 1 and 2 I have shown an ordinary 55 wooden axle with the clevis F in the form of a plate bolted to the front of said axle and having forwardly extended parallel ears provided with openings for the pivot-pin that connects these ears with the interposed $\log b$ 60 on the curved plate G, but in the succeeding figures I show an iron axle, and in this case the clevis-plate lies against the under side of said axle and is clipped thereto, the clipopenings at the rear of said plate being in the form of slots in order that the clips d may be spread or contracted to accommodate axles of various widths.

By the general construction and arrangement of parts above described it will be seen 70 that I gain all the advantages set forth in connection with the device shown and described in my patent No. 410,861, of September 10, 1889, while at the same time I provide for the ready disconnection of the whiffletree 75 D from the draft-evening mechanism, and I also do away with the stay-chains employed in my former patent to prevent movement of said whiffletree on its pivot, it being essential to this present invention that said whiffletree 80 have free pivotal play on the wagon-tongue.

As it often happens that one team is employed for two wagons, one being hauled while the other is being unloaded, the advantages of the construction and arrange- 85 ment of parts above described will be readily apparent, inasmuch as it only requires that the flexible devices K be uncoupled from the whiffletree to permit of the latter, and the team hitched thereto, being detached from 90 one wagon and connected to the other. It also frequently happens that one team is required to help another, and as the whiffletree in the construction above described can be readily detached from the tongue and flexible 95 devices of the draft-evener-mechanism, my invention embodies all the advantages of an ordinary whiffletree in addition to the advantage derived from said draft-evener-mechanism.

Having now fully described my invention, 100 what I claim as new, and desire to secure by Letters Patent is—

1. The combination of the wagon-tongue and the axle, a whiffletree having pivotal play on the tongue, sheaves hung on the axle adjacent to its ends, a plate pivoted to said 5 axle midway of the sheaves, and flexible devices that work on the sheaves and detachably connect said plate and whiffletree, substantially as set forth.

2. The combination of the wagon-tongue and axle, a whiffletree having pivotal play on the tongue, sheaves hung on the axle adjacent to its ends, a clevis rigid on said axle midway of the sheaves, a plate pivotally connected to the clevis, and flexible devices that work on the sheaves and detachably connect the said plate and whiffletree, substantially as set forth.

3. The combination of the axle having

sheaves hung thereon and provided with a clevis that is arranged midway of the sheaves 20 and has a rearward extension provided with clip-openings the rear ones of which are in the form of slots, clips connecting the clevis-extension and axle, a plate pivotally connected to the clevis, a whiffletree, and flexible devices that work on the sheaves and connect said plate and whiffletree, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in 30 the county of Milwaukee and State of Wisconsin, in the presence of two witnesses

LEVI W. SMITH.

Witnesses:

N E. OLIPHANT, JOHN E. WILES.