

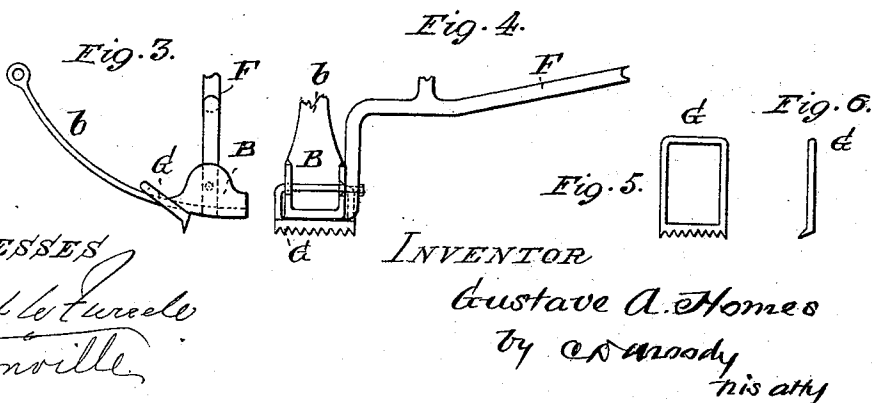
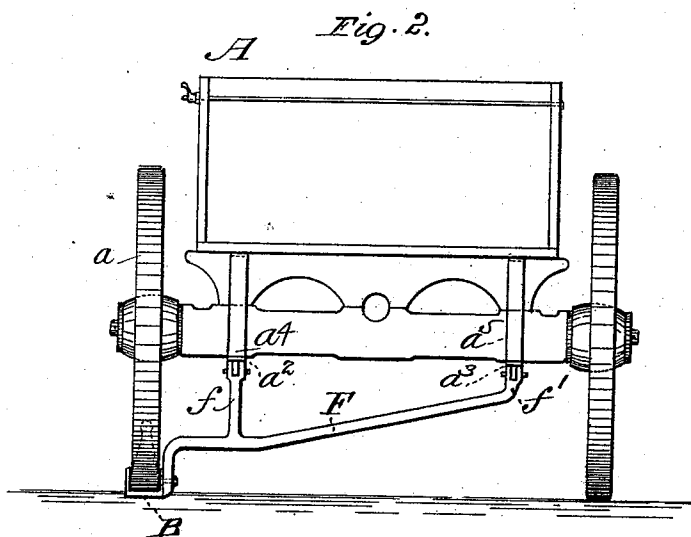
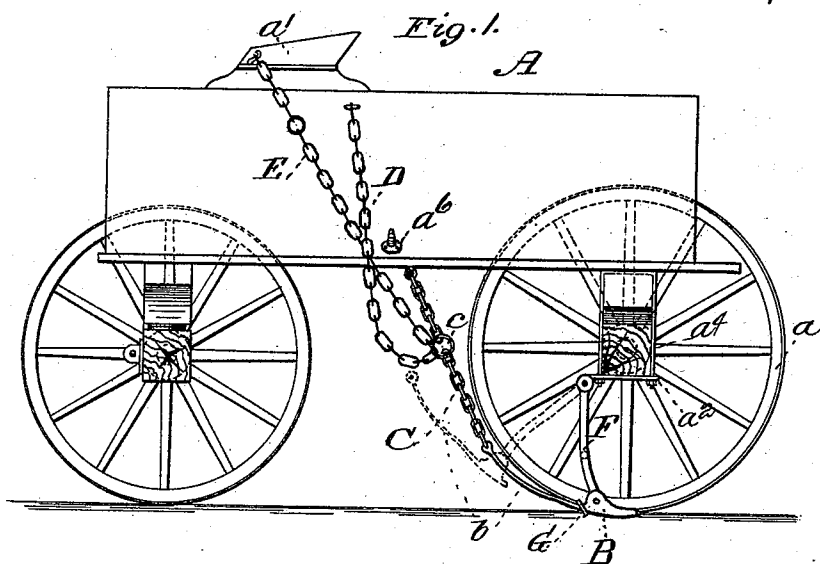
(No Model.)

G. A. HOMES.

WAGON DRAG.

No. 488,812.

Patented Dec. 27, 1892.



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GUSTAVE A. HOMES, OF ST. LOUIS, MISSOURI.

WAGON-DRAG.

SPECIFICATION forming part of Letters Patent No. 488,812, dated December 27, 1892.

Application filed June 13, 1892. Serial No. 436,579. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVE A. HOMES, of St. Louis, Missouri, have made a new and useful Improvement in Wagon-Drags, of which the following is a full, clear, and exact description.

The improvement consists, substantially as is hereinafter described and claimed, aided by the annexed drawings, making part of this specification, in which—

Figure 1 is a sectional elevation of the wagon equipped with the improved drag: Fig. 2 a rear end elevation of the same: Fig. 3 a side elevation of the shoe including a portion of the shoe-arm: Fig. 4 an end elevation of the shoe and arm: Figs. 5 and 6 respectively a side and an edge elevation of a calk with which the shoe may be provided.

The same letters of reference denote the same parts.

A represents any wagon or other vehicle to which the improvement is adapted.

B represents the shoe. This part in itself is shaped in any suitable form, and the wheel, *a*, coacts with it in the usual manner.

C represents the chain or other tie for anchoring the shoe to the vehicle when in position to carry the wheel, and D represents any chain or other tie by which the shoe can be readily lowered and raised and be suspended in its up-position when not in use.

E represents another tie which may be employed to operate the shoe from a higher level. It leads upward, say to the wagon seat, *a'*, or to a higher level, to enable the driver of the vehicle to adjust the shoe without leaving his seat or position upon the load in the vehicle.

All the parts thus far described are of a familiar character. The distinguishing feature of the construction is the means by which the shoe, when released, readily and correctly drops into position for the wheel to ride up onto it.

F represents an arm jointed to a bearing or bearings upon the vehicle, and at or toward its free end attached to the shoe, and all so that the arm when turned upon its bearing shall guide the shoe to and from its position beneath the wheel. The two positions of the shoe and arm are substantially indicated respectively in the full and the broken lines in Fig. 1. The preferable form of the arm is shown. From its point of connection with the shoe it leads transversely in the ve-

hicle, and by means of its extensions *f*, *f'*, it is jointed to the vehicle and preferably to the cross-plates, *a²*, *a³*, of the clips *a⁴*, *a⁵*, respectively and which are suitably extended therefor, substantially as shown. The arm can thus swing in a vertical, or substantially-vertically, plane, and in such movement carry the shoe as described. The arm also serves another purpose, namely, to brace the shoe, including the wheel upon the shoe, against lateral strains when the shoe is in position beneath the wheel.

To enable the shoe to obtain a better hold at times, as in icy weather, upon its supporting surface is provided with an adjustable calk C. This last named part is in the form of a band or ring adapted to be slipped onto the shoe, substantially as shown, and having its lower end or portion serrated or suitably constructed to score the surface over which the wagon may be traveling, and when thus in position restraining the shoe from sliding too rapidly. By being made in this way the calk can be readily adapted to be used whenever it is needed, it only being necessary, and by any suitable means, to drop the calk onto the shoe where it comes into position for use without any further adjustment, as the calk slips upon the shoe until it encounters the part used to support the shoe whereupon it becomes held in position for use. When the calk is not needed it is withdrawn from the shoe. In this manner the driver of the wagon can quite readily adapt the shoe to the condition of the road; if only the shoe is needed the calk is withdrawn from it, but if the calk is needed it can be at once brought into position for use. All this, as well as the adjustment generally of the shoe, in the manner suggested, can be effected without requiring the driver to get down from his seat.

I claim:—

1. The combination in a wagon drag, of the shoe, the pivoted arm, and the calk, substantially as described.

2. In a wagon drag, the combination of the shoe and a calk, said calk being in the form of a band adapted to be slipped onto and off from the shoe, substantially as described.

Witness my hand this 6th day of June, 1892.

GUSTAVE A. HOMES.

Witnesses:

C. D. MOODY,
A. BONVILLE.