

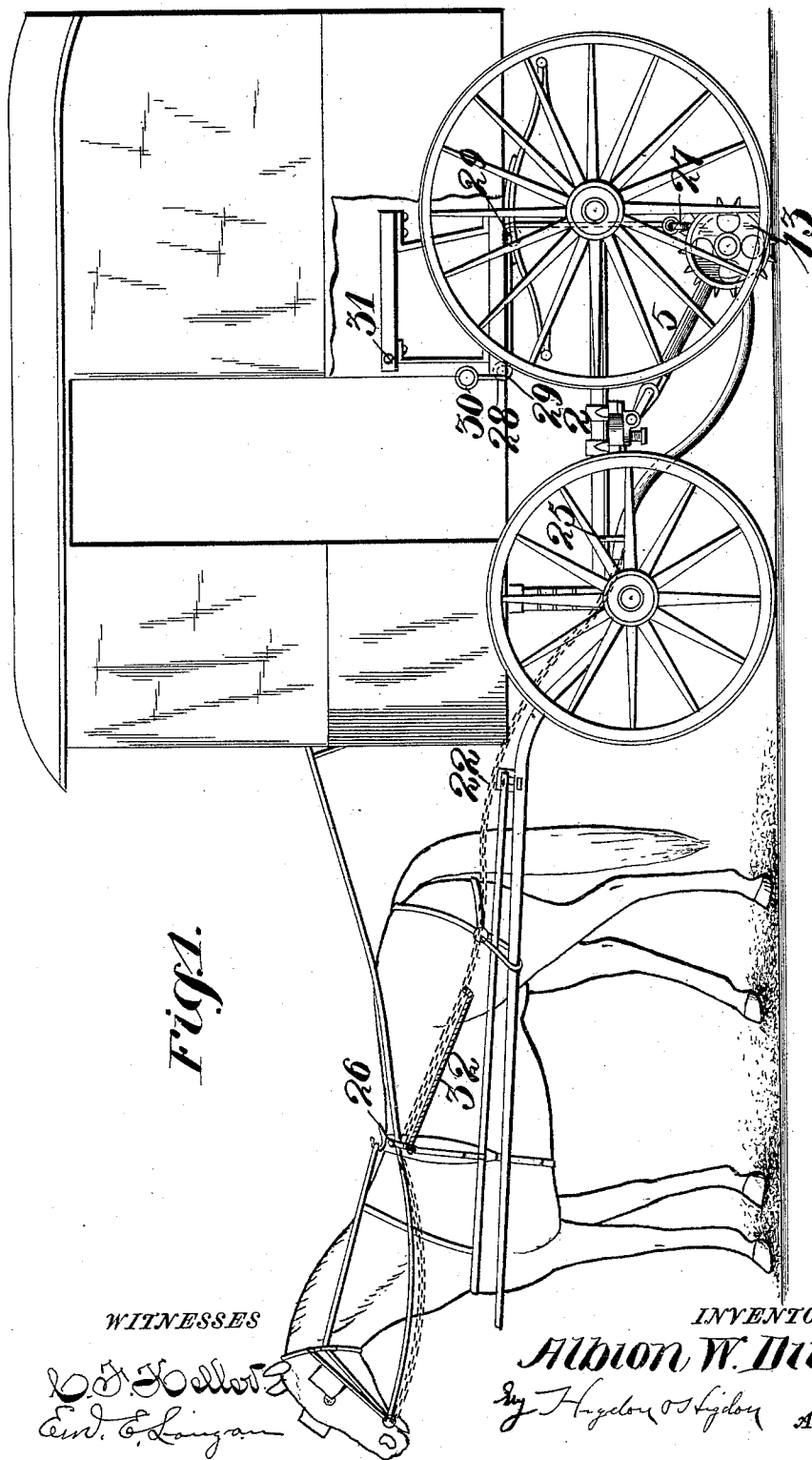
(No Model.)

2 Sheets—Sheet 1.

A. W. DUDLEY.
DEVICE FOR HITCHING HORSES.

No. 466,667.

Patented Jan. 5, 1892.



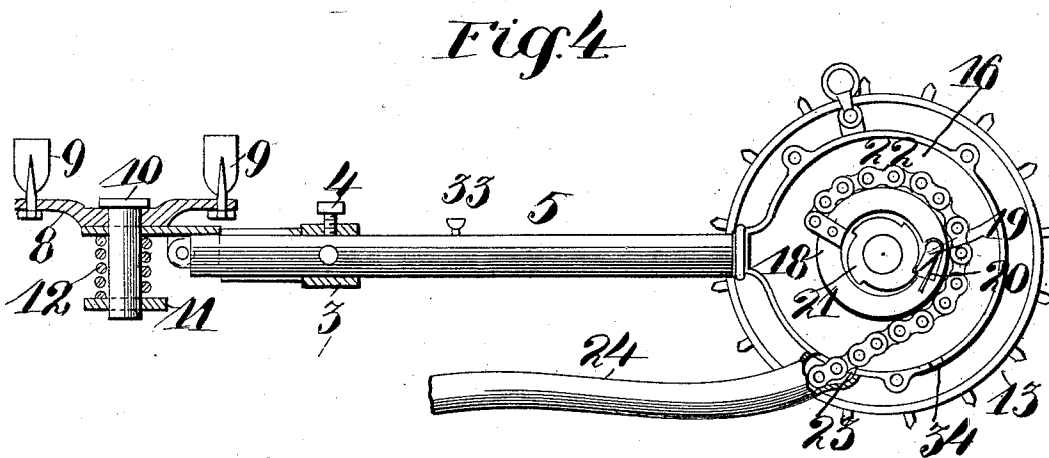
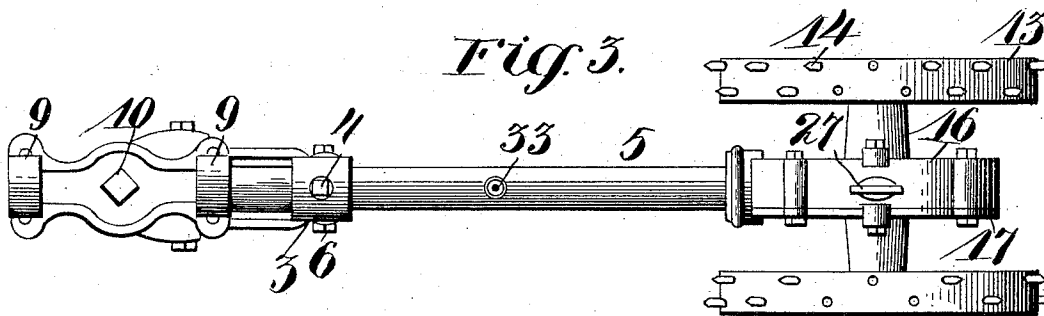
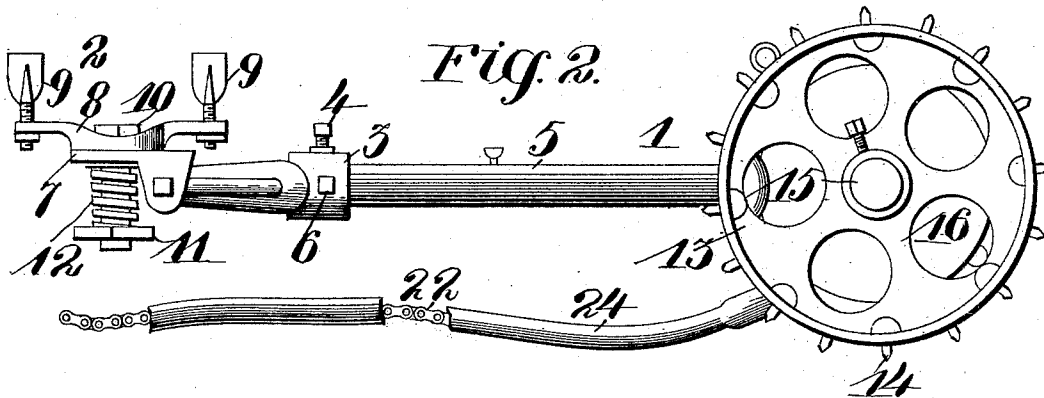
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WITNESSES

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UNITED STATES PATENT OFFICE.

ALBION W. DUDLEY, OF ST. LOUIS, MISSOURI.

DEVICE FOR HITCHING HORSES.

SPECIFICATION forming part of Letters Patent No. 466,667, dated January 5, 1892.

Application filed June 1, 1891. Serial No. 394,748. (No model.)

To all whom it may concern:

Be it known that I, ALBION W. DUDLEY, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Devices for Hitching Horses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in devices for hitching horses; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described, and designated in the claims.

In the drawings, Figure 1 is a side elevation of a wagon, showing my invention applied thereto when in use. Fig. 2 is a side elevation of the same detached from wagon. Fig. 3 is a top plan view; and Fig. 4 is a side elevation with one wheel and plate removed, and also a section of the mechanism by which my invention is secured to the vehicle.

The object of my invention is to construct a device for hitching horses, the same designed to take the place of an ordinary weight, which is in common use.

I will further describe the use and application of my invention in connection with a description of the mechanism embodied in the same. It may be premised in this connection that my device may be secured in any suitable and mechanical manner, either to the wagon-reach or front or hind axle of the wagon, but is preferably attached as shown in Fig. 1, where it is shown attached to the vehicle-reach.

Referring to the drawings, 1 indicates the device itself, which consists of the mechanical parts, as will be more fully hereinafter specifically described, and 2 indicates the mechanism by which the device is secured to the wagon.

I will first describe the latter mechanism, prefacing, however, that I do not wish to limit myself to the specific construction as illustrated and described for securing my invention to the wagon.

3 indicates a sleeve of the construction as illustrated in Fig. 2, the same being provided with set-screw 4. Said sleeve 3 is slipped over a hollow shaft 5 and secured thereto by means of bolt 6, passing through said sleeve and shaft.

Pivottally secured to one end of said sleeve is a plate 7 of the construction as shown in Fig. 2, and pivottally mounted upon said plate is another plate 8, carrying clips 9, which clips are adapted to pass over the wagon-reach or the front or hind axle of the vehicle. Plate 8 is pivottally secured to plate 7 by means of a bolt 10. Said bolt 10 is provided with a nut 11, and interposed between said nut and plate 7 is a spiral spring 12, which takes up the slack caused by the wearing away of plates 7 and 8, and thereby always keeping a tight bearing between said plates.

Having described the mechanism by which the essential part of my invention is secured to the wagon, I will now proceed to describe the essential part in detail.

13 indicate wheels made of castings, the same being provided with a series of pegs or projections 14, which are adapted to be pushed into the soil and retard the progress of the wheel. Said wheels are rigidly mounted on a shaft 15 in any suitable and mechanical manner. Interposed between said wheels 13 and rigidly mounted upon shaft 15 is a smaller wheel or drum 16, the same being provided with a removable plate 17. Located in wheel 16 and interposed between said wheels and the removable plates 17 is an annular ring 18, carrying a dog 19, which is actuated by a spring 20, and located in said annular ring 18 and rigidly mounted on shaft 15 is a ratchet-tooth wheel 21. Secured to ring 18 is a chain 22 of the construction as illustrated in Fig. 4. It can be readily perceived from this description that when the device is pulled forward wheel 18 will rotate and wind up the chain 22 on the same. One end of chain 22 is secured to wheel 18, as hereinbefore stated, and the other end of the same passes through an aperture or hole 23 and passes through a rubber tube 24, one end of which is secured to wheel or drum 16 in any suitable and mechanical manner, and the other end of the same is secured to wagon-reach by means of a clip 25, or in any other suitable mechanical manner. The chain then passes forward over the front axle of the vehicle, thence through the ring secured to the back-band 26 of the harness, and terminates by being secured in any desirable manner to the bridle-bit.

27 indicates a ring or loop, which is secured to wheel or drum 16, to which a chain 28 is secured, the same passing upwardly over pulleys 29 and terminating in the wagon-box, and can be pulled therefrom, and consequently the device 1 may be elevated or lowered from the wagon-box by the driver, premising, however, that one end of said rope is secured to the ring 30, the same being adapted to pass over pin 31, which will hold device 1 in an elevated position when not in use.

32 indicates a rubber or any other yielding strap, one end of which is secured to chain 22 and the other end of the same is secured to ring 26, the function of which is to keep the weight of the chain from being brought to bear on the horse's mouth when the horse is standing still.

33 indicates an oil-cup, through which oil or kerosene may be poured. It will then run down the hollow shaft 5 and oil the mechanism located in wheel 16, and may then run out at an opening 34, formed in said wheel.

Having fully described my invention, what I claim is—

1. The herein-described mechanism for hitching horses, having wheels 13, provided with projections 14 for impinging the ground, said wheels mounted on a shaft 15, a wheel or drum 16, mounted upon said shaft, a ratchet-wheel 21, located within said wheel 16 and mounted upon shaft 15, a ring 18, located within said wheel concentrically with ratchet-wheel 21, a dog 19, mounted in wheel 18, and a spring 20 for actuating the same, a chain, such as 22, one end of the same secured to ring 18 and the opposite end passed forward and secured to the bridle-bits, and means for connecting said wheel or drum 16 to the vehicle, substantially as set forth.

2. The herein-described mechanism for hitching horses, having wheels 13, provided with projections 14 for impinging the ground, said wheels mounted on a shaft 15, a wheel 16, mounted upon said shaft, a ratchet-wheel 21, located within said wheel 16 and mounted upon shaft 15, a ring 18, located within said wheel concentrically with ratchet-wheel 21, a dog 19, mounted in ring 18, and a spring 20 for actuating the same, a chain, such as 22, one end of the same secured to ring 18 and the opposite end passed forward and secured to the bridle-bits, a hollow shaft, such as 5, provided with an oil-hole secured to said wheel 16, a sleeve, such as 3, mounted on said hollow shaft, a plate 7, pivotally secured to said collar or sleeve, a plate, such as 8, pivotally secured to said plate 7, and clips, such as 9, adapted to pass over wagon-reach,

the front or hind axle secured to said plate 8, substantially as set forth.

3. The herein-described mechanism for hitching horses, having wheels 13, provided with projections 14 for impinging the ground, said wheels mounted on a shaft 15, a wheel 16, provided with a removable plate mounted upon said shaft, a ratchet-wheel 21, located within said wheel 16 and mounted upon shaft 15, a ring 18, located in said wheel concentrically with the ratchet-wheel 21, a dog 19, mounted in ring 18, and a spring 20 for actuating same, a chain, such as 22, one end of the same secured to ring 18 and the opposite end passed forward and secured to the bridle-bits, a hollow shaft, such as 5, provided with an oil-hole secured to said wheel 16, a sleeve, such as 3, mounted on said hollow shaft, a plate 7, pivotally secured to said collar or sleeve, a plate, such as 8, pivotally secured to plate 7, and clips or cleats, such as 9, adapted to pass over the wagon-reach, the front or hind axle secured to said plate, and means for elevating and lowering wheels 13 direct from the wagon-box, substantially as set forth.

4. The herein-described mechanism for hitching horses, having wheels 13, provided with projections 14 for impinging the ground, said wheels mounted on a shaft 15, a wheel 16, provided with removable plate mounted upon said shaft, a ratchet-wheel 21, located within said wheel 16 and mounted upon shaft 15, a ring 18, located in said wheel concentrically with the ratchet-wheel 21, a dog 19, mounted in ring 18, and a spring 20 for actuating same, a chain, such as 22, one end of the same secured to ring 18 and the opposite end passed forward and secured to the bridle-bits, a hollow shaft, such as 5, provided with an oil-hole secured to said wheel 16, a sleeve, such as 3, mounted on said hollow shaft, a plate 7, pivotally secured to said collar or sleeve, a plate, such as 8, pivotally secured to plate 7, and clips or cleats, such as 9, adapted to pass over the wagon-reach, the front or hind axle secured to said plate, an elastic rubber or other elastic band, such as 31, one end of which is secured to chain 22 and the other adapted to be secured to ring 26, and means for lowering and elevating wheels 13, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ALBION W. DUDLEY.

Witnesses:

ED. E. LONGAN,
E. F. KELLER.