

W. HEMME.

Running-Gears for Vehicles.

No. 147,324.

Patented Feb. 10, 1874.

Fig. 1.

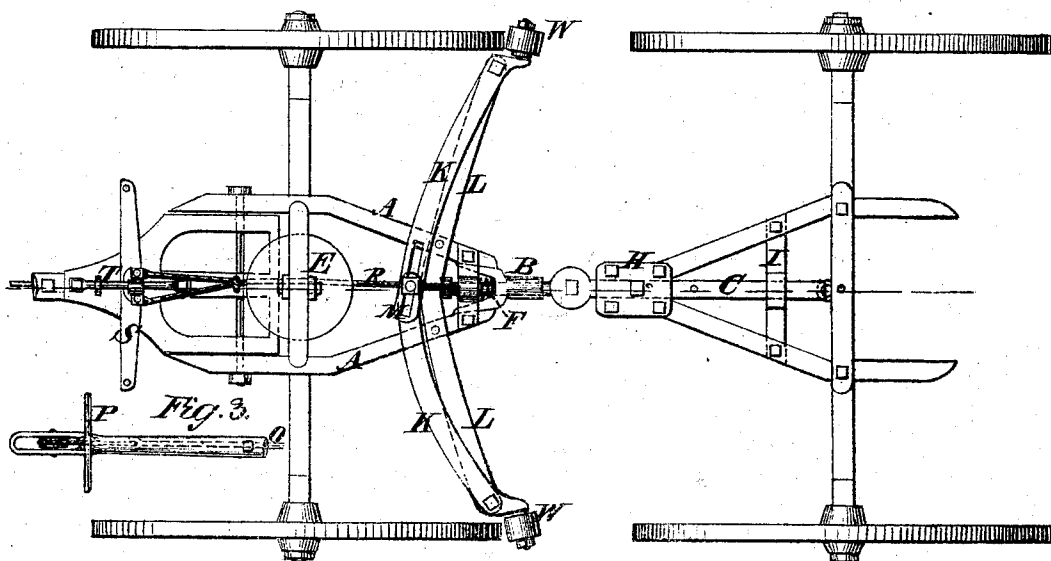


Fig. 3.

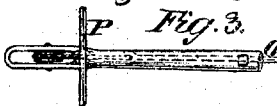


Fig. 4.

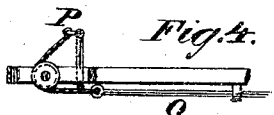
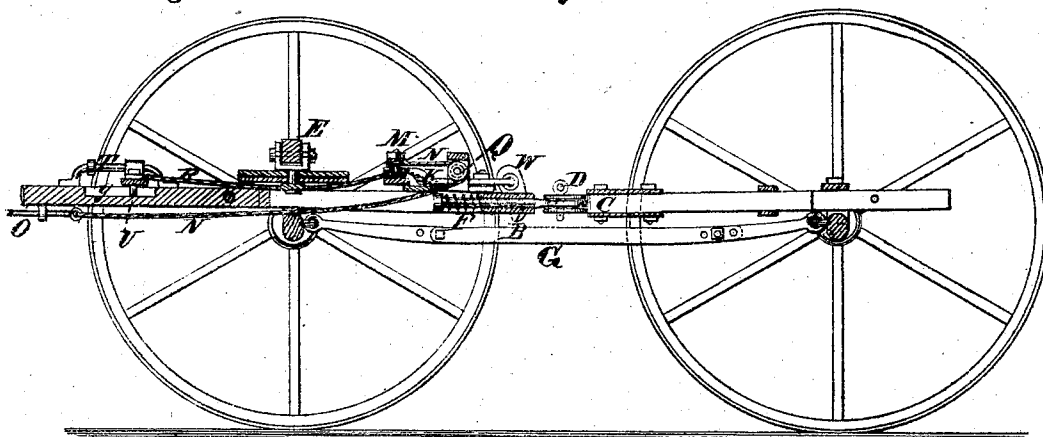


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM HEMME, OF MICHIGAN VALLEY, KANSAS.

IMPROVEMENT IN RUNNING-GEARS FOR VEHICLES.

Specification forming part of Letters Patent No. **147,324**, dated February 10, 1874; application filed December 21, 1872.

To all whom it may concern:

Be it known that I, WILLIAM HEMME, of Michigan Valley, in the county of Osage and State of Kansas, have invented a new and useful Improvement in Wagons, of which the following is a specification:

My invention relates to the arrangement of means for connecting the front and rear axles.

Figure 1 is a plan view of the running-gear of a wagon constructed according to my improvements. Fig. 2 is a longitudinal sectional elevation on the line *xx* of Fig. 1. Fig. 3 is a plan view of a portion of the front end of the tongue, and Fig. 4 is a side elevation of Fig. 3.

Similar letters of reference indicate corresponding parts.

The rear extensions A of the front hounds join together at the center, a short distance from the axle, and have a swivel, B, which connects with the reach C by a pivot-joint, D, so that the front and hind parts may oscillate vertically to any extent, and may oscillate horizontally at the center, between the front and hind parts. The front bolster E is pivoted to the plate, so that it can also oscillate vertically to a greater extent than the ordinary bolster to facilitate the oscillation at the swivel. A spring, F, is combined with the rod and socket of the swivel, so that the draft will be transmitted through it when not too great, so that the irregular resistance of the hind wheels will be less severe on the horses than when positively connected. The axles are also connected by a system of jointed rods, G, which remain slack except when the limit of the contraction of the spring is reached, when they come to its aid, and sustain a portion of the draft. The reach-bar C is adjustable in the plates H, attached to the rear hounds for gear-

ing the wagon short or long, and the rods G can be taken up and let out to correspond. The brake-levers K are pivoted on arms L, attached to the rear extensions of the hounds, and jointed together at the inner ends, which lap each other, by a bolt in one and a slot in the other, to be moved together; and, at this joint M, they are connected, by a cord, N, and rod O, with the neck-yoke P, the cord passing over a pulley, Q, behind the joint, so that when the horses hold back and draw the neck-yoke back the brakes will be forced onto the wheels. The said joint M is also connected by a cord or chain, R, with the evener S, which is fitted on a rod, T, and with stud-pins U in slots Y in the tongue, to slide forward when the horses draw to throw the brakes off the wheels again. I propose in some cases to employ a spring, either alone or in combination with the neck-yoke attachment for throwing the brakes on the wheels. The brake-shoes W are eccentric blocks pivoted on the ends of the levers to be turned by the wheels, and increase the pressure until the wheels stop. I propose to make them of hard vulcanized india-rubber.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the jointed reach G with the spring F and swiveled coupling B, whereby an elastic connection of the two axles is provided for ordinary draft, and an inelastic connection for heavy or sudden draft, as shown and described.

WILLIAM HEMME.

Witnesses:

WILLIAM BARNETT,
THOS. DARLING.