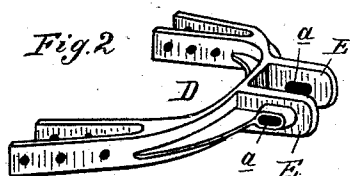
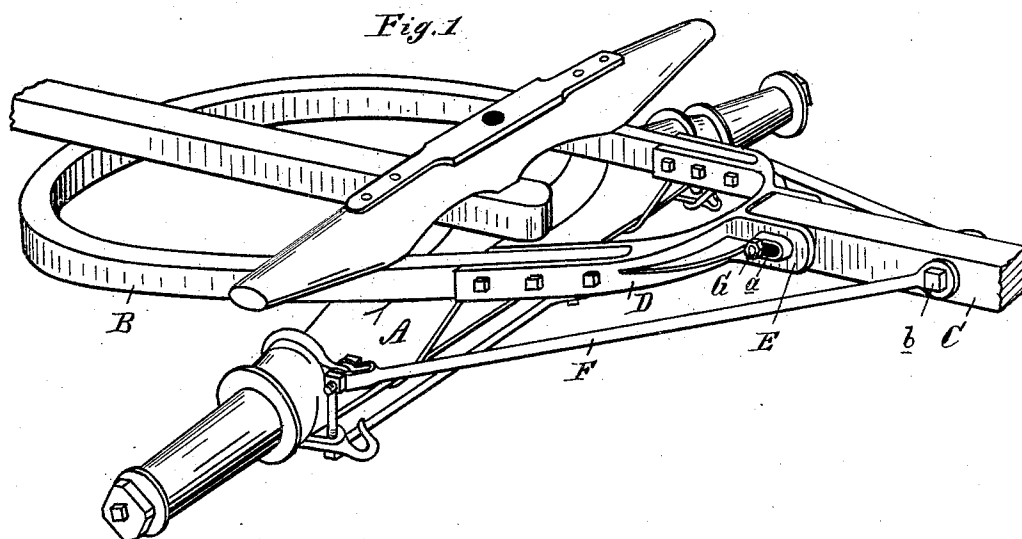


(No Model.)

J. H. WHITING.  
WAGON RUNNING GEAR.

No. 357,882.

Patented Feb. 15, 1887.



Attest:  
*John Schuman*  
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by his Atty  
*Thos. J. Sprague*

# UNITED STATES PATENT OFFICE.

JAMES H. WHITING, OF FLINT, MICHIGAN.

## WAGON RUNNING-GEAR.

SPECIFICATION forming part of Letters Patent No. 357,882, dated February 15, 1887.

Application filed November 11, 1886. Serial No. 218,559. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. WHITING, of Flint, in the county of Genesee and State of Michigan, have invented new and useful Improvements in Wagon Running-Gear; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in wagon running gear.

The object of the invention is to provide a means for securing the tongue or pole whereby a free vertical swing of the pole is provided for, while at the same time all draft-strain is relieved from the hounds or hanger which supports the rear end of the tongue.

The invention consists in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the accompanying drawings, which form a part of this specification, my invention is shown in perspective in Figure 1, and Fig. 2 is a detached perspective of the hanger, and in which A represents the axle, B the hounds, and C the tongue, forming a portion of the front running-gear of a wagon. In this construction, D is a hanger, to which the front and forwardly-projecting ends of the hounds are rigidly secured, said hanger being provided with two horizontally-projecting ears, E, in each of which is formed a horizontal slot, a.

To the axle A, by any suitable means and preferably near the shoulders of such axle or axle-arm, draft-rods F are pivotally secured, the forward ends of which are pivotally secured to the tongue C by means of a bolt, b, which passes through them.

The rear end of the tongue C is secured between the ears of the hanger by means of a bolt, G, which passes through such tongue and the horizontal slots in said ears. By this con-

struction it will readily be seen that a free vertical "swing" or play of the tongue is provided for, as when the point of said tongue is raised or lowered the bolt securing the rear end of the pole between the ears of the hanger will slide forward in the slots in said hanger; and it will further be observed that the draft-force is exerted directly upon the axle and near the shoulders thereof by means of the draft-bars F.

While I have shown and described my hanger as secured to the front ends of the hounds, it is evident that in other constructions of running-gear wherein the hounds do not project to the front of the axle said hanger may be secured directly to the axle without departing from the spirit of my invention as above described.

What I claim as my invention is—

1. In a running-gear for wagons, the hanger D, provided with parallel forwardly-projecting ears, said ears being provided with horizontally-elongated slots, substantially as and for the purposes set forth.

2. In a wagon running-gear, the hanger D, constructed substantially as described and rigidly connected directly or indirectly to the axle, with a pole, C, pivotally connected with said hanger, and draft-rods F, as and for the purposes described.

3. In a wagon running-gear, the combination of the axle A, hounds B, slotted hanger D, rigidly secured to said hounds, tongue C, bolt G, passed through said tongue and the slots in the hanger, and draft-rods F, pivotally connected with the tongue and axle, all constructed, arranged, and operating substantially in the manner and for the purposes specified.

JAMES H. WHITING.

Witnesses:

H. S. SPRAGUE,  
E. SCULLY.