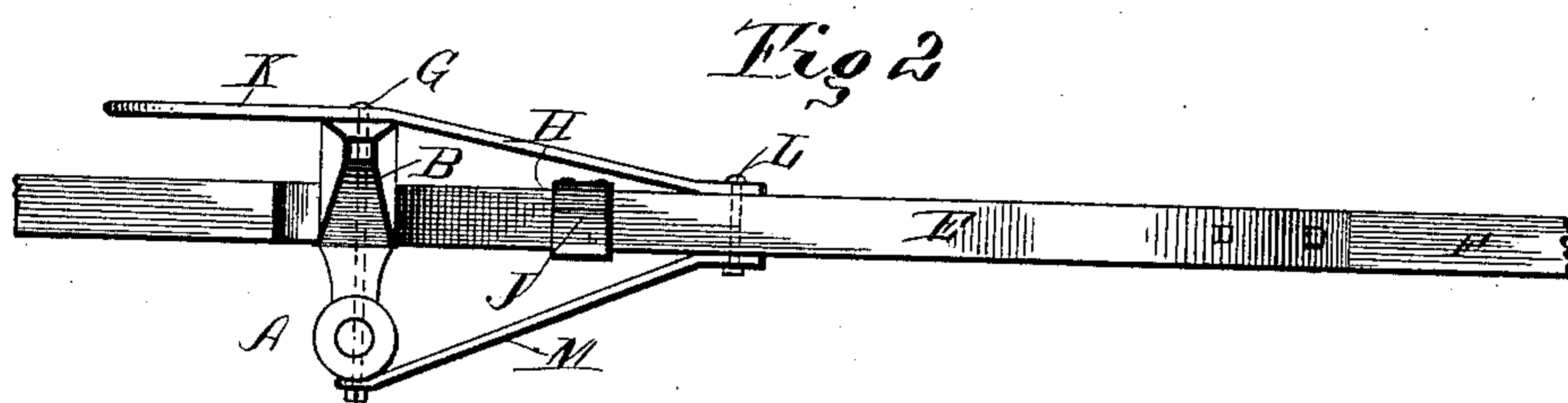
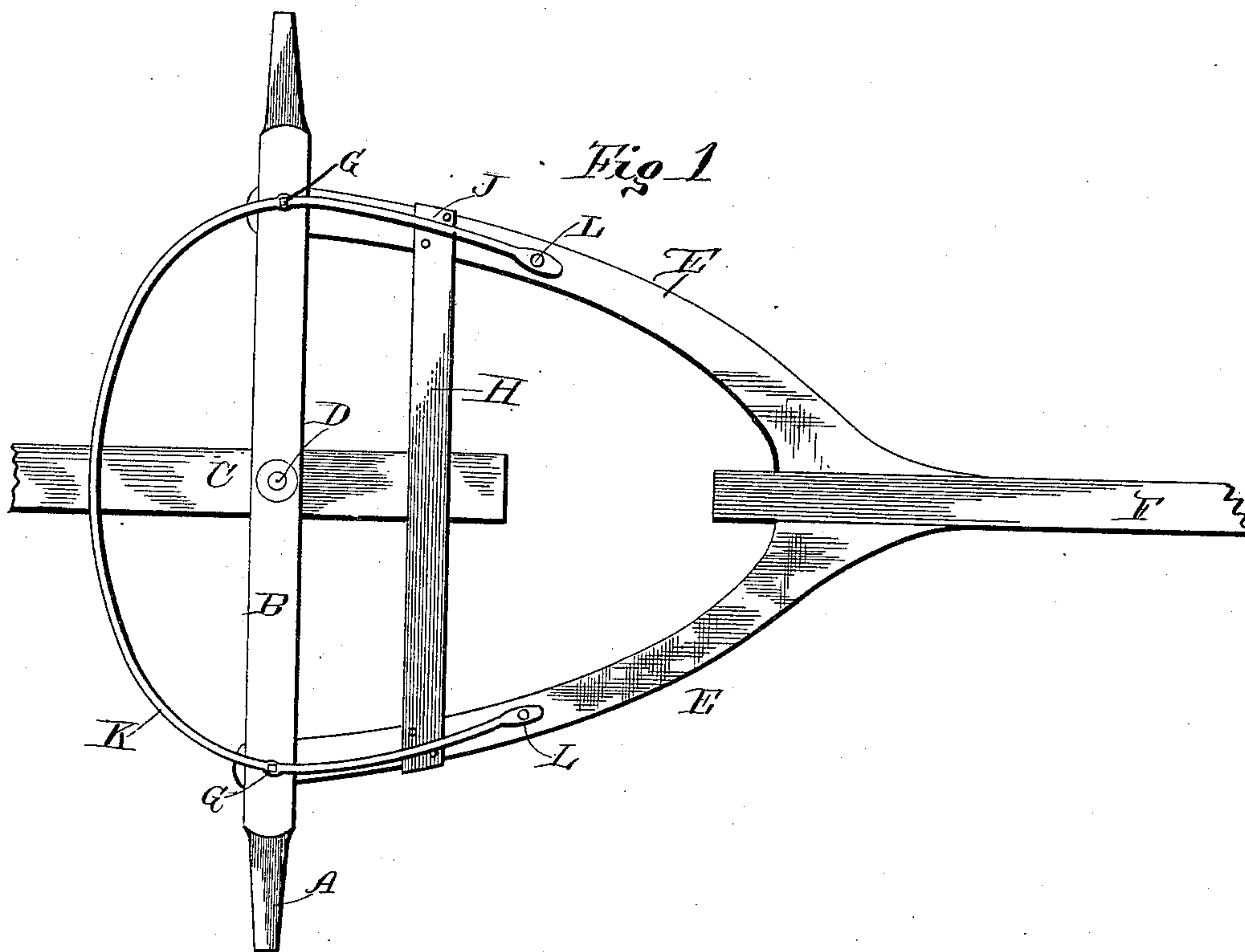


(No Model.)

R. READER & C. W. WEINLAND.  
RUNNING GEAR FOR VEHICLES.

No. 444,103.

Patented Jan. 6, 1891.



Witnesses  
C. C. Burdine  
J. O. Davis.

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att.

# UNITED STATES PATENT OFFICE.

RICE READER AND CHARLES W. WEINLAND, OF PRIMGHAR, IOWA.

## RUNNING-GEAR FOR VEHICLES.

**SPECIFICATION** forming part of Letters Patent No. 444,103, dated January 6, 1891.

Application filed August 4, 1890. Serial No. 360,875. (No model.)

*To all whom it may concern:*

Be it known that we, RICE READER and CHARLES W. WEINLAND, citizens of the United States, residing at Primghar, in the county of O'Brien and State of Iowa, have invented certain new and useful Improvements in Wagon Running-Gear; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention pertains to an improvement in the construction and arrangement of the running-gear of heavy double-horse vehicles—such as lumber-wagons, &c.—but more particularly relates to the formation of the front or tongue hounds in connection with the tongue, reach, and front axle and sand-board. The object in view is to so arrange these parts as to dispense with a cross-slide connecting the hounds back of the axle and passing beneath the reach, and at the same time to greatly simplify the construction and condense the parts to produce a cheap, strong, and durable structure.

With these ends in view our invention consists in the peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claim.

Referring to the accompanying drawings, Figure 1 represents a plan view of our invention, and Fig. 2 a side elevation.

The axle A and sand-board B are of the usual form, and the coupling-pole or reach C runs through between them at the center, and these parts are pivotally connected together by the king-bolt D in the usual manner, the reach, however, extending out in front of the axle about eight inches or one foot, for a purpose hereinafter described.

The hounds E are secured in the ordinary way to the rear end of the tongue F and diverge, their rear ends extending between the sand-board and axle and being secured there to by vertical bolts G. The hounds are connected between the rear end of the tongue and the axle a few inches in front of the latter by a cross-piece of slide-bar H, which is rigidly bolted at its opposite ends to said hounds and passes over the top of the projecting end of the reach. A heavy strip of strap-iron J extends the full length of the

cross-piece H and is turned down over its ends and underneath the hounds to strengthen the coupling between these parts. The hounds are further braced and strengthened by a metal bow K, secured at its forward end to said hounds by bolts L and to the sand-board by the vertical bolts G. To still further strengthen the part, we provide under braces M, which are also secured to the hounds by the bolts L and extend beneath the axle, being fastened on the bolts G. By this construction we obtain an exceedingly compact, simple, and strong arrangement of parts, the advantages of which may be briefly stated, as follows:

By dispensing with all the mechanism back of the axle, especially the slide-bar, which is usually passed beneath the reach, the strain on the latter caused by the sagging of the tongue is avoided, and the running-gear thereby rendered more durable.

Loading and unloading can be performed with greater facility and convenience, as the hounds do not extend farther than the axle and sand-board, and hence cannot project in the way when the front wheels are turned and the loading is in progress, and especially in loading logs the chain will sometimes catch under the rear ends of the hounds with the old arrangement; but in my device this inconvenience cannot occur. A still further advantage gained by my arrangement is that a shorter turn can be made when the box or body is not used, for the wheels can be turned until they strike the reach, which cannot be done with the old-style hounds.

Altogether a compact and simple arrangement is effected, which is exceedingly strong and durable in itself, and also acts to render the whole running-gear of the wagon more stable.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the axle and sand-board, the tongue, a pair of diverging hounds connected to the latter and extending between said axle and sand-board, a slide-bar connecting the hounds in front of the axle, the reach extending between the axle and sand-board and beneath said slide-bar, a bowed brace-rod secured at its forward ends to said hounds,



its bowed portion extending over the sand-board, under brace-rods secured at their forward ends to the hounds and extending beneath the axle, and vertical bolts passing  
5 through the bowed brace-rod, the sand-board, the axle, and said under brace-rods and securely connecting these parts together, as described.

In testimony whereof we affix our signatures in presence of two witnesses.

RICE READER.

CHARLES W. WEINLAND.

Witnesses:

O. H. MONTZHEIMER,

REBECCA EDDINGTON.