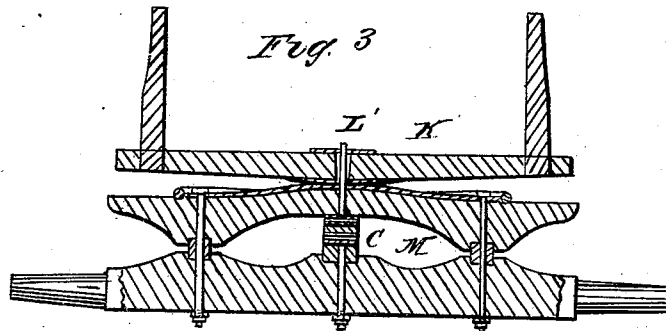
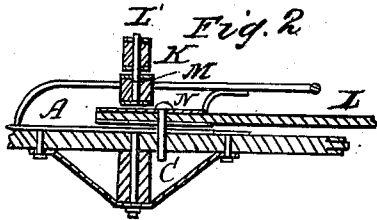
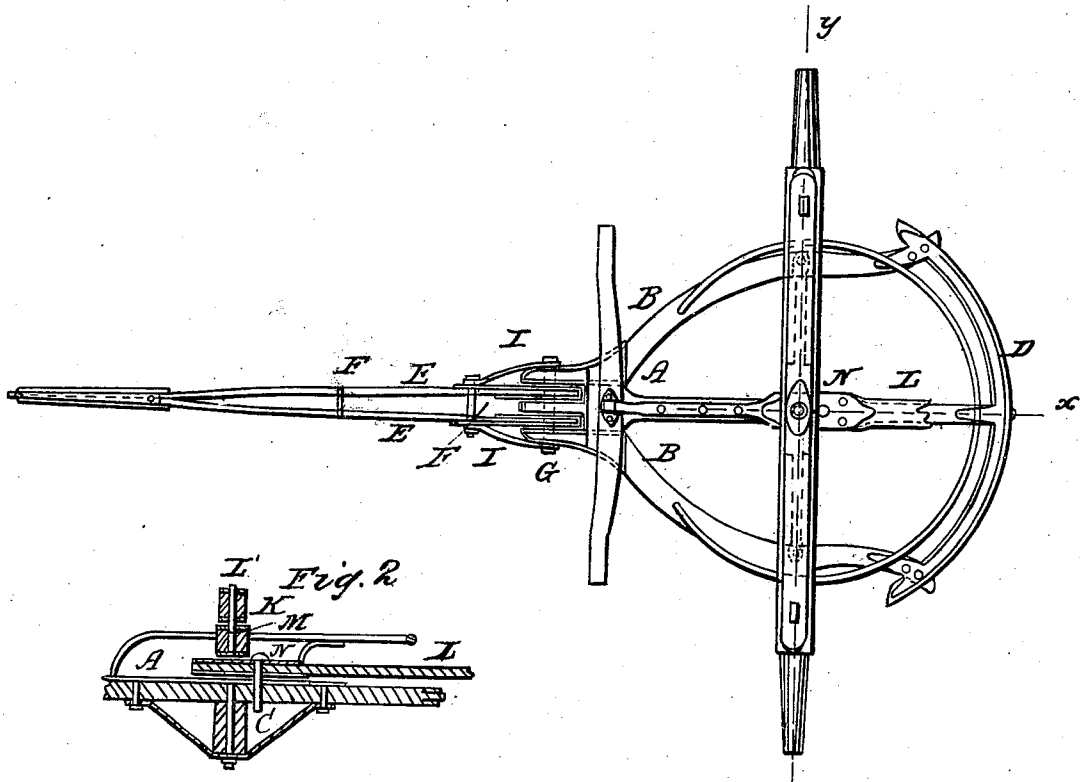


A. FINLEY.
Wagon Running-Gear.

No. 92,948.

Patented July 27, 1869.



witnesses
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Geo W. Mabee

Inventor
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United States Patent Office.

A. FINLEY, OF BAINBRIDGE, INDIANA.

Letters Patent No. 92,948, dated July 27, 1869.

IMPROVED FRONT GEAR FOR WAGONS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, A. FINLEY, of Bainbridge, in the county of Putnam, and State of Indiana, have invented a new and improved Front Gear for Wagons; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in the construction of the front gear of the running parts of wagons, whereby it is designed to cheapen the cost and to provide a more desirable front gear than is now constructed.

The invention consists in an improved arrangement of the framing to which the tongue is connected; also, an improved construction of the tongue; and also, an improved arrangement for connecting the bolster and coupling-bar; all as hereinafter more fully specified.

Figure 1 represents a plan view of my improved front gear;

Figure 2 represents a section on the line *x-x* of fig. 1; and

Figure 3 represents a transverse section on the line *y-y* of fig. 1.

Similar letters of reference indicate corresponding parts.

I arrange a straight piece of wood, A, between the ends of the hounds B, and running back through a recess in the top of the axle, and bolted thereto at C, to the curved oscillating bar D at the centre thereof.

This bar is designed mainly for taking the drawing-strain of the coupling-bar.

The front end, for a considerable extent where it is joined to the hounds, is recessed on each side for the connection of the tongue, which I propose to form of two flat bars E, joined together at the front end, but separated in the rear, for bracing, by metallic plates F, having studs at the ends passing through and lapping over the edges of the bars, and riveted down thereon.

The rear ends of the said bars are plated, and are fitted into the recesses between the hounds and the front end of the bar A, and pivoted on the bolt G.

Each part E of the tongue is braced to one side of the hounds by braces I, secured by the bolt G to the hounds, and by studs projecting from the rear plate F to the said parts of the tongue.

Instead of connecting the bolster K and the coupling-bar L to the front axle and sand-board by a large king-bolt, which greatly weakens the parts, especially the axle, I propose to connect the bolster by a bolt, L', rising up from the top of the said bar M, and rigidly connected to it through a hole in the bolster, made larger at the top to permit the required oscillation of the bolster.

And I connect the coupling-bar to the bar A, behind the axle, by a bolt, N.

By this arrangement the drawing-strain of the hind part of the wagon is transmitted directly through the bar A, and the axle relieved of the tendency to oscillate on its axis common to the old arrangement, whereby the king-bolt is cramped, and the holes in the axle worn so as to weaken it.

Another advantage is, that the front part may be turned further, either right or left, without the wheels striking the box.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the hounds, the axle, and curved bar D, of the bar A, arranged as specified.

2. The tongue, constructed of two parts E, and connected to the hounds in the two recesses by the bolt G and braces I, all arranged as specified.

3. The arrangement of the bolster K, sand-board M, and fixed bolt L', all substantially as specified.

A. FINLEY.

Witnesses:

GEORGE W. STARR,
HARVEY C. BLACK.