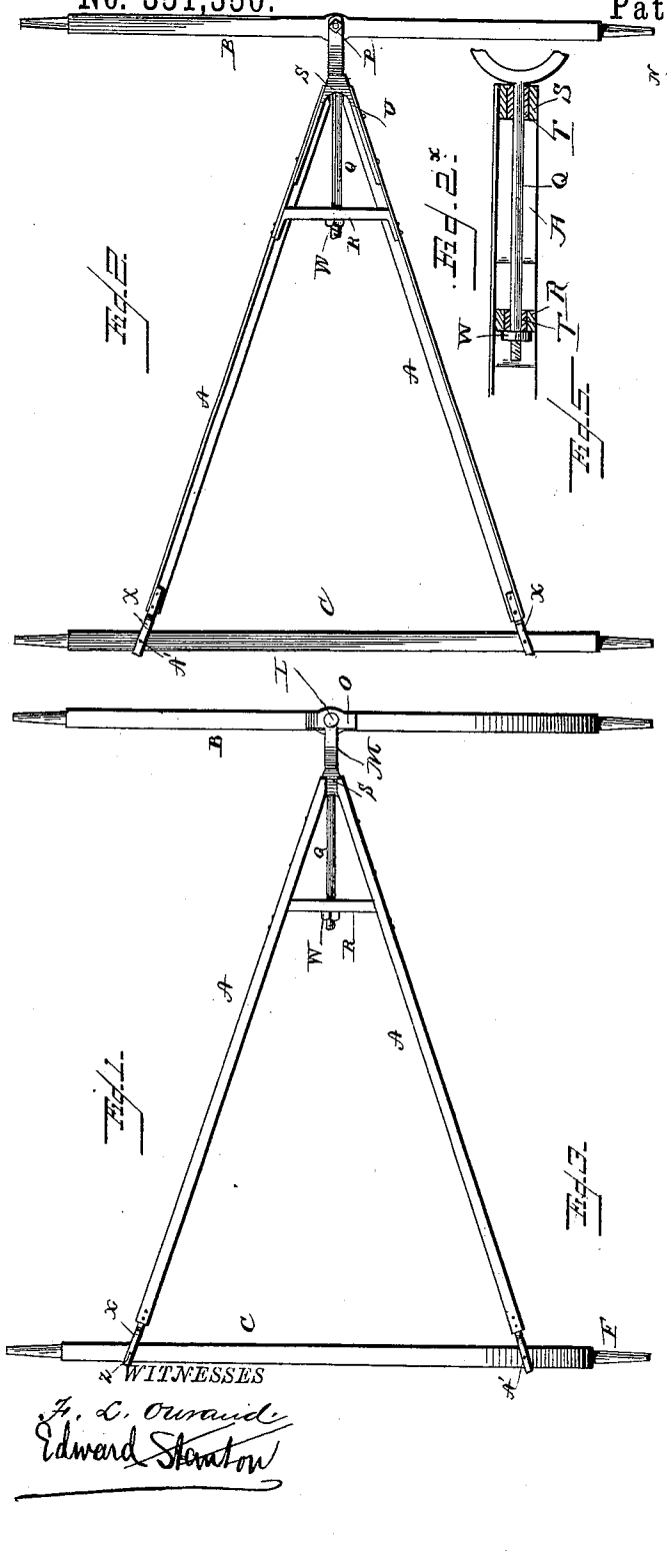
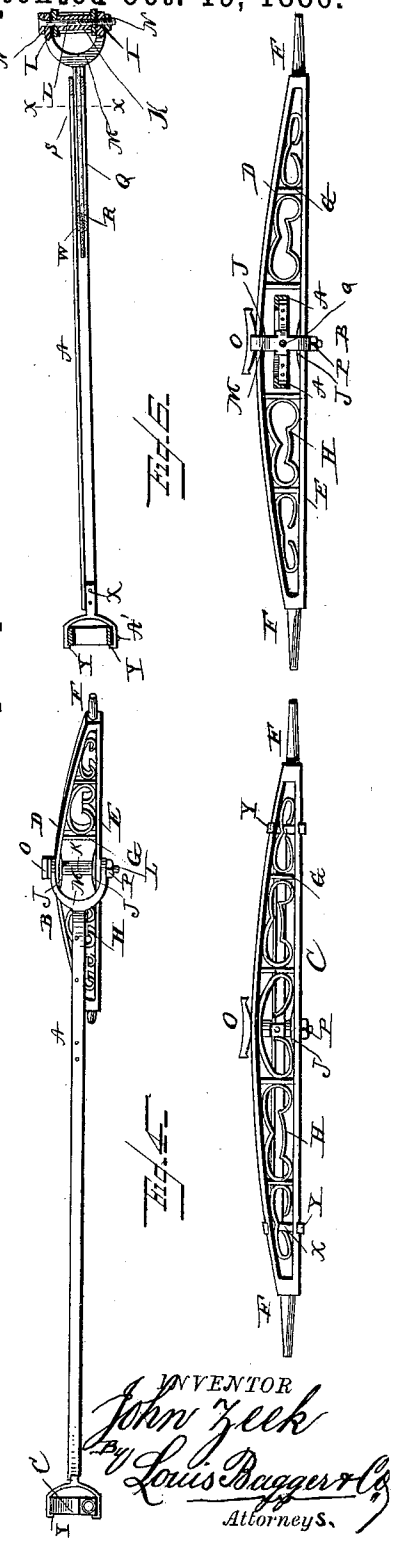
(No Model.)

J. ZEEK.

RUNNING GEAR FOR VEHICLES.

No. 351,350. Patented Oct. 19, 1886.





WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN ZEEK, OF CANBY, OREGON, ASSIGNOR OF ONE HALF TO WILLIAM BLOUNT, OF SAME PLACE.

RUNNING-GEAR FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 351,350, dated October 19, 1886.

Application filed July 17, 1886. Serial No. 208,252. (No model.)

To all whom it may concern:

Be it known that I, JOHN ZEEK, a citizen of the United States, and a resident of Canby, in the county of Clackamas and State of Oregon, have invented certain new and useful Improvements in Running-Gear for Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a top view of as much of the running-gear of a vehicle as will illustrate my invention. Fig. 2 is a bottom view of the same. Fig. 2× is an enlarged detail view of the swivel-bearings. Fig. 3 is a side view showing the front axle slightly turned. Fig. 4 is a rear view; Fig. 5, a longitudinal vertical section; and Fig. 6, a transverse section on line *x x*, Fig. 5.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to running-gear for vehicles; and it consists in the improved construction and combination of parts of such a running-gear in which the forward axle is secured and pivoted in a fork swiveled in a longitudinal bearing with its shank, as hereinafter more fully described and claimed.

In the accompanying drawings, the letters A A indicate the reach, preferably made from bars of L-iron. B is the front axle, and C is the rear axle. The axles are composed each of two bars, D and E, united at the spindles F, and braced and held separated from each other by rods G and suitable scrolls, H, the upper bar being curved and the lower bar being straight. The front axle is formed with perforations I I in the two bars, the perforations registering with each other, and the perforated portions of the bars are re-enforced by means of strips J, secured to the inner sides. A sleeve, K, is placed between the re-enforced and perforated portions of the bars, and the king-bolt L passes through the perforations and through the sleeve, passing through the ends of a fork, M, having perforations N in its ends. The upper branch of this fork is provided with a cross-piece, O, at the perforated end, to which the spring may be attached, and the king-bolt passes with its screw-threaded end through the perforations, having a nut, P, at its lower end. The rearwardly-projecting shank Q of the fork is journaled in bearings R and S, having linings T, of wood, the forward bearing being in the apex of a V-shaped frame, U, having its arms secured to the inner sides of the hounds, while the rear bearing is in a cross-piece, R, secured at its ends to the inner sides of the parts of the reach, and the rear end of the shank of the fork is screw-threaded and provided with a nut, W, bearing against the rear bearing.

Forked straps X X are secured to the rear ends of the reach, and have inwardly-bent lips Y at their ends and perforations Z inside of the lips, so that bolts A′, passing through these perforations and through perforations in the ends of the forked straps, may secure the said ends to the bars, and the lips will serve, furthermore, to secure the axle in the straps.

It will be seen that the axles will be trussed and braced by having the two bars and the spreading rods and scrolls, rendering them very strong in comparison to their weight, and by having the front axle pivoted in the ends of the swiveled fork the axle may have a free motion in vertical planes, as well as in a horizontal plane, preventing the possibility of breaking portions of the running-gear when passing over rough roads, where the wheels will not touch the ground all at the same time in a vehicle which is not provided with the double swivel, and in which case the strain upon the wheels upon which the vehicle rests and the strain upon the parts of the running-gear are liable to break the said parts, while when the vehicle is provided with the double swivel all four wheels may touch the ground at the same time, regardless of the different inclinations upon which the wheels rest, and the vehicle will in this manner be perfectly supported at all times.

The bearings for the shank of the swiveled fork being lined with wood will prevent the said fork from rattling in the bearings, and when the bearings become worn other linings may be made and inserted in a short space of time and at a nominal expense, rendering the bearings as good as new again.

The entire gear is light and strong and durable, and it may be manufactured at a comparatively low cost, the elements composing it being simple of construction.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a running-gear for vehicles, the combination of the rearwardly-diverging reach having straps secured to its rear ends, having forked ends formed with perforations near the inwardly-bent ends, an axle formed by a straight lower bar and a curved upper bar, and bolts passing through the perforations in the forked straps and through the bars of the axle, the inwardly-bent ends of the forked straps bearing against the rear edge of the curved bar, as and for the purpose shown and set forth.

2. In a running-gear for vehicles, the combination, with the reach, forward axle, and king-bolt, of a fork whose shank is swiveled in the reach, and whose upper branch is provided with a cross-piece for the attachment of the forward spring, as herein specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN ZEEK.

Witnesses:
J. S. THRAFF,
T. L. FLETCHER.