

(No Model.)

C. E. BOSTWICK.
WAGON GEAR.

No. 574,878.

Patented Jan. 12, 1897.

FIG. 1.

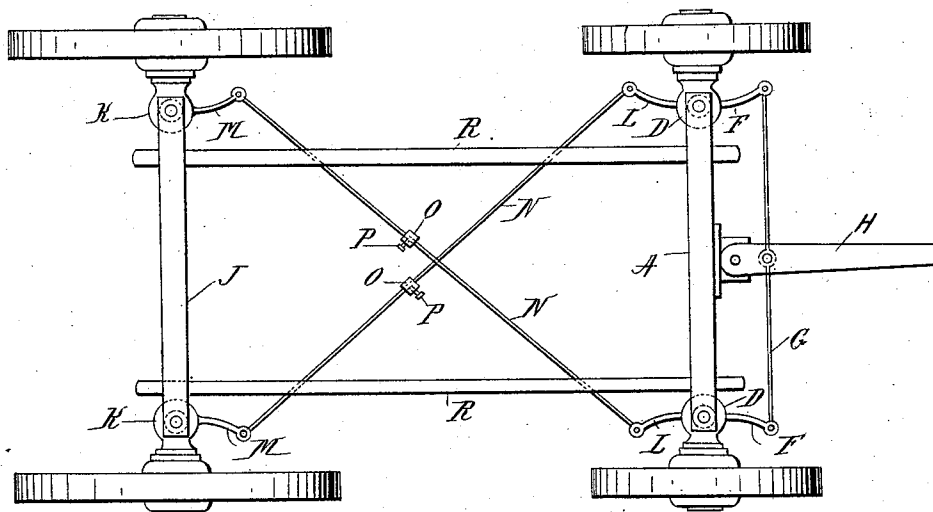
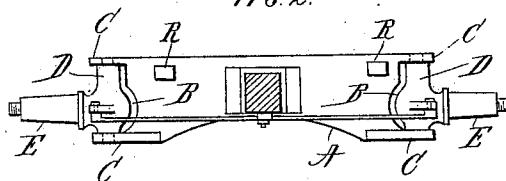


FIG. 2.



WITNESSES:

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WAGON-GEAR.

SPECIFICATION forming part of Letters Patent No. 574,878, dated January 12, 1897.

Application filed May 31, 1895. Serial No. 551,035. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. BOSTWICK, a citizen of the United States, and a resident of West Stockbridge, county of Berkshire, and State of Massachusetts, have invented certain new and useful Improvements in Wagon-Gears, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to wagons, and particularly to the running-gear thereof; and the object is to provide means whereby the wagon may be turned in much smaller space than usual and with less strain thereon, especially where it is required to both back and cramp the wagon in order to make the turn.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 represents a plan of a wagon with my improvement attached; and Fig. 2, an end view of the forward part thereof, the pole or tongue being shown in section.

My invention is designed as an improvement on what is known as the "Champion" wagon, in which the spindles or shafts on which the forward wheels are mounted are each formed integral with a vertical head, which is pivotally supported in recesses formed in the ends of the forward axle, and in the accompanying drawings this arrangement is clearly shown in Fig. 2.

The forward axle A is cut out at each end, forming transverse recesses B and top and bottom extensions C, or if the axle is formed of iron the recesses may be cast therein at the time the axle is cast; and within the recesses B are pivotally mounted the heads D of the spindles E by means of the extensions C.

In the style of wagon hereinbefore referred to the heads D are each provided with forwardly and outwardly directed arms F, which are connected by means of a cross-bar G, which passes across and is secured to the pole or tongue H, as clearly shown in Fig. 1.

In my improvement I connect the spindles or shafts on which the rear wheels are mounted with the rear axle J in the same manner as hereinbefore described with reference to the fore wheels and axle, the vertical heads

K, integrally with which the rear spindles or shafts are formed, being mounted at each end of the axle J, as shown in Fig. 1. I also form on the heads D of the forward spindle rearwardly-extending arms L, similar to the forwardly-extending arms F on said heads, and on the heads K of the rear spindles or shafts similar forwardly-extending arms M.

To the ends of the rearwardly-extending arms L, connected with or formed on the heads of the forward spindles or shafts, are pivotally connected rods N, each of which is carried diagonally across and to the opposite arm M, formed on the head K of the rear spindles or shafts and pivotally connected therewith, the arrangement being such that the rods N cross each other, as shown, and each of said rods is preferably provided with a sliding shoe O, each of which is provided with a set-screw P, the function of which parts will be hereinafter described.

The rods N may be formed continuous or integral, if preferred, and the arms M, L, and F may be of any desired form and the connection between said arms and the rods N may be made in any desired manner.

The operation will be readily understood from the foregoing specification, taken in connection with the accompanying drawings. The turning of the pole or tongue turns all of the wheels. For instance, if the pole is turned to the right the two right wheels will be turned inward toward the wagon-body, and the left wheels will be turned outward therefrom to the same extent and in corresponding lines, and when the pole is turned to the left this position of the wheels will be reversed, as will be readily understood. By this means the wagon may be turned in a much smaller space than usual with the ordinary running-gear, and this arrangement is particularly advantageous where the space within which the wagon is to be turned is so limited as to require the cramping and backing thereof in order to make the turn.

The axles are provided with the usual reaches R, by which they are secured rigidly together, and the object of the shoes O on the rods N is to prevent too great a movement of the wheels in the direction of the bed or body of the wagon, and the consequent rubbing thereon by said wheels, the movement of

the rods being limited by the shoes or rubbers O, arranged in proximity to the point at which said rods cross, as shown in Fig. 1, and the position of the shoes or rubbers O may be adjusted, as desired, by means of said screws P.

Having fully described my invention, I claim and desire to secure by Letters Patent—

A wagon-gear constructed and arranged substantially as herein shown and described, with the front and rear axles transversely recessed at each end and having top and bottom extensions, front and rear spindles provided with enlarged heads pivoted in said recesses forward and rearward extending arms integral with the forward spindles and for-

ward-extending arms integral with the rear spindles, diagonal rods crossing each other pivotally connected at their ends the forward arms of the rear spindles and with the rear arms of the forward spindles, and adjustable shoes or stops fitted on said diagonal rods and provided with means for holding them in place, as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 25th day of May, 1895.

CHARLES E. BOSTWICK.

Witnesses:

PATRICK J. FALLON,
FREDRICK W. SCOTT.