## E. E. HATHEWAY.

WAGON GEAR.

Patented Sept. 29, 1885. No. 327,265. Fig. Z. WITNESSES INVENTOR

## United States Patent Office.

EDWIN EDELBERT HATHEWAY OF ORISKANY FALLS, NEW YORK.

## WAGON-GEAR.

SPECIFICATION forming part of Letters Patent No. 327,265, dated September 29, 1885.

Application filed June 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, EDWIN E. HATHEWAY, a citizen of the United States, residing at Oriskany Falls, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Wagon-Gears; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a plan view. Fig. 2 is a detail sectional view. Fig. 3 is a front elevation. Fig. 4 is

a transverse sectional detail.

My invention has relation to wagon-gears; and it consists in the construction and novel combination of parts, as will be hereinafter fully described, and particularly pointed out in the claim.

Referring by letter to the accompanying drawings, A designates the front axle, and B the rear axle, each of which are bent or curved downwardly intermediately of their ends, in order to place the reach C sufficiently far below the body of the wagon to prevent contact of the two when the springs yield under a load as the vehicle is drawn over the road. The reach C is braced from the rear axle, B, by brace-rods D D, which are flattened where they are secured to the sides of the reach, and extend along the front end of the reach.

A top iron, E, and a bottom iron, F, each having an eye, G, at its forward end, through which a vertical bolt, H, is passed to secure the forward end of the reach, is secured to the reach by bolts in the usual manner.

Clipped to the front axle at its middle is a 40 double bearing, I, comprising an upper and a lower bearing - plate, I' I², between which an eye-plate, I³, on the front end of the reach enters, and through this eye-plate I³ the bolt H also passes and completes the joint at this 45 point.

The springs K L M N are half-elliptical in form, and are placed in pairs one on each side of each axle, and are connected to bearing-irons O, clipped to the axles near the shoul- 50 ders of the journals. The ends of the springs are provided with eyes P, which are slipped upon the ends of the bearing-irons O, and are

secured in place by nuts O'.

A double head-block, Q, rests on the two 55 front springs, and is secured there by the bolts Q', that secure the annular plate Q² to place on the head-blocks. An annular bearing-plate, R, is secured to the under face of the double bolster R' by a clip, R², and a king-bolt, 60 R³, passes down through the bolster R' and the plates Q² and R, and provides the swivel upon which the front axle turns to permit the vehicle to be turned.

Having thus fully described my invention, 65 what I claim, and desire to secure by Letters

Patent of the United States, is-

In a running-gear, the combination, with the front and rear axles, of the reach having the perforated extension, the irons E and F, the 70 plates I' and I<sup>2</sup>, and bolts for connecting the same, substantially as specified.

In testimony whereof I affix my signature in

presence of two witnesses.

EDWIN EDELBERT HATHEWAY.

Witnesses:

H. J. COWLES, LEWIS F. PEET.