(No Model.) 2 Sheets—Sheet 1.

JAMES McTURK & JOHN McTURK.

SPRING AXLE FOR VEHICLES.

No. 590,234. Patented Sept. 21, 1897.

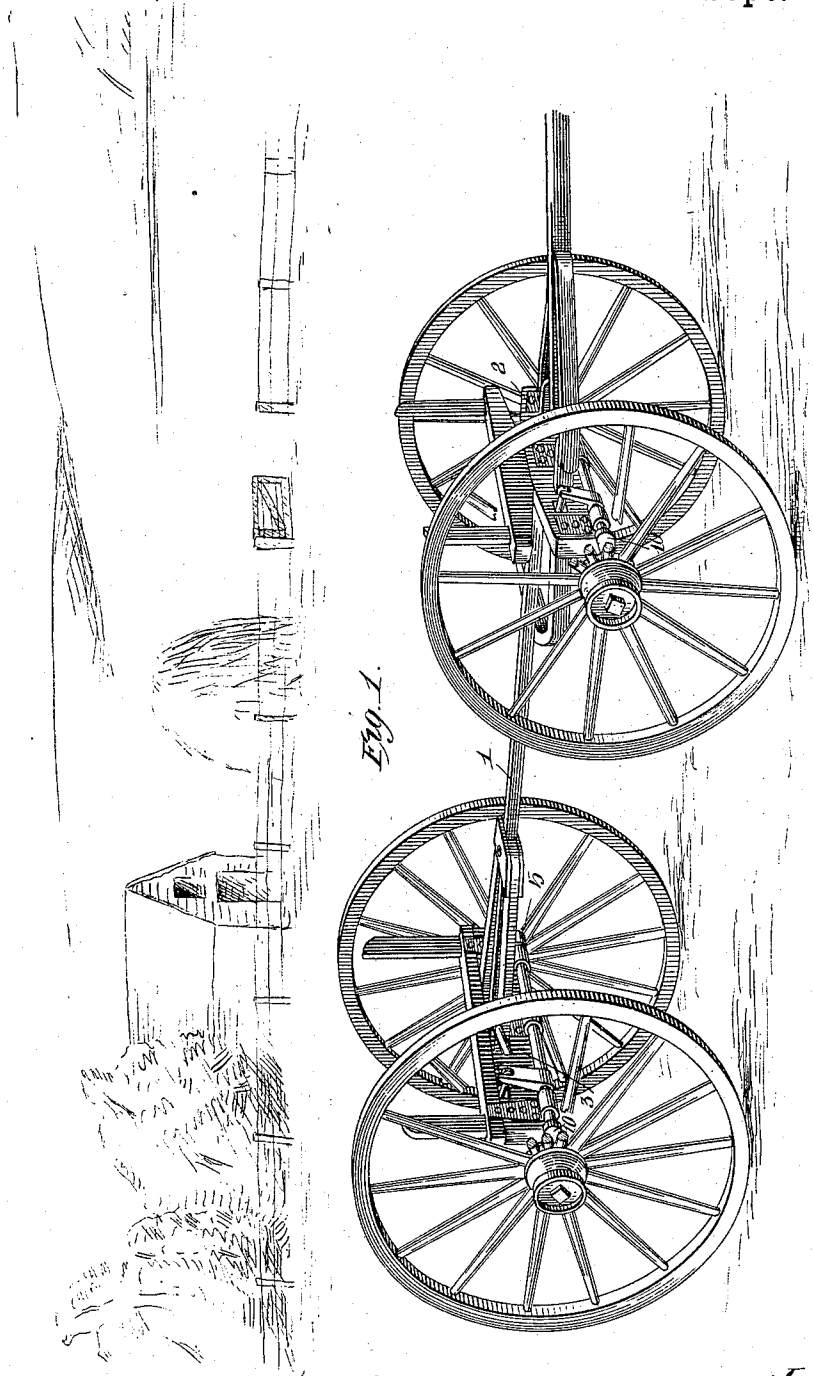


Fig. 1.

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(No Model.) 2 Sheets—Sheet 2.

JAMES McTURK & JOHN McTURK.

SPRING AXLE FOR VEHICLES.

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Fig. 2.

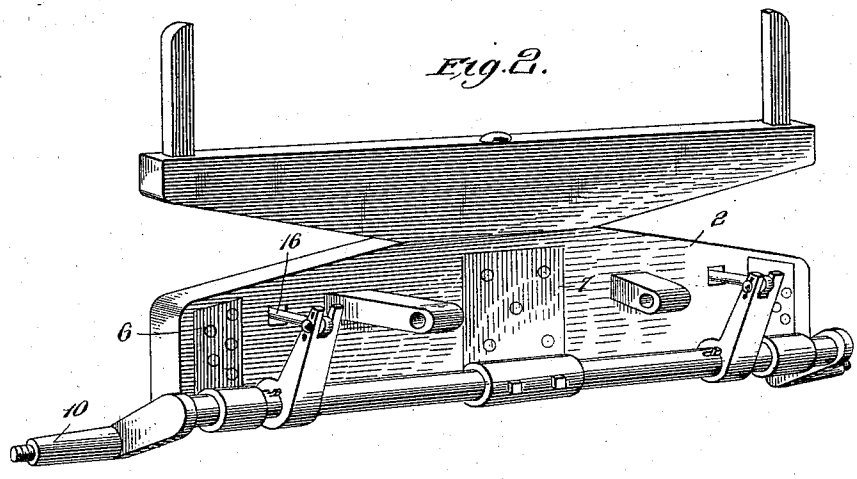
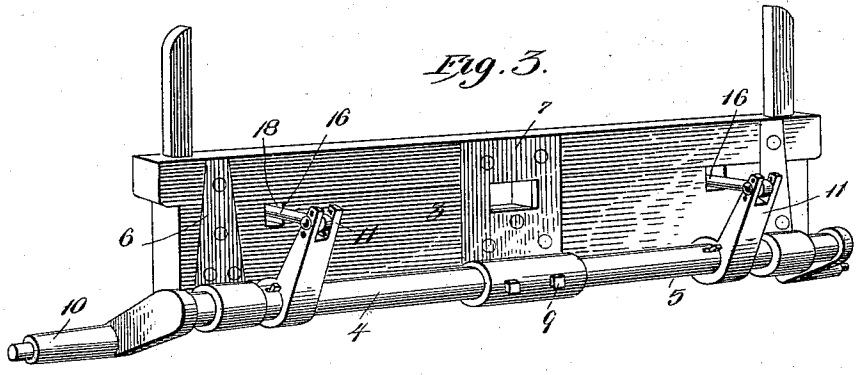


Fig. 3.



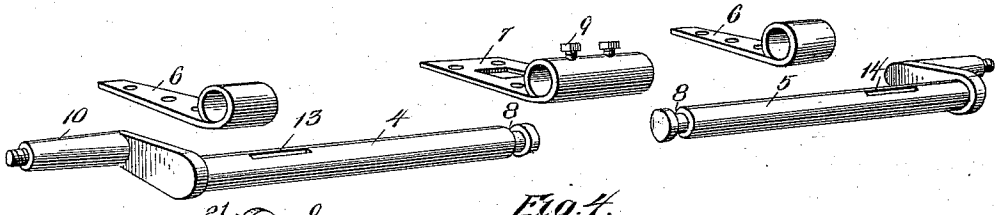


Fig. 4.

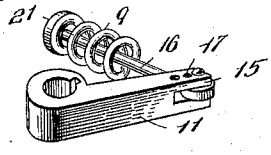
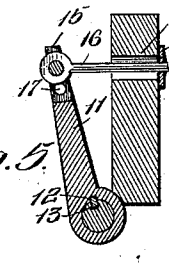


Fig. 5.



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UNITED STATES PATENT OFFICE.

JAMES MCTURK AND JOHN MCTURK, OF CRYSTAL, IOWA.

SPRING-AXLE FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 590,234, dated September 21, 1897.

Application filed April 10, 1897. Serial No. 631,660. (No model.)

To all whom it may concern:

Be it known that we, JAMES MCTURK and JOHN MCTURK, residing at Crystal, in the county of Tama and State of Iowa, have invented a new and useful Spring-Axle, of which the following is a specification.

This invention relates generally to carriages and wagons, and more particularly to a spring-axle for such vehicles.

The object of our invention is to provide means for yieldingly controlling each wheel, so that when the wheel passes over any obstruction or unevenness the usual jarring or tilting of the wagon will be avoided. To accomplish this object we divide the axle, so that each wheel is on a separate axle, and fix an arm on each section of axle and yieldingly connect it with the wagon-body bolster; and our invention, broadly stated, consists of the above arrangement of parts and of certain other novel details of arrangement and construction that will be hereinafter described, and set forth in the claims.

In order that our invention may be fully understood, we will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a wagon having our invention applied thereto. Fig. 2 is a perspective view of the front body-bolster having the divided axle journaled thereto. Fig. 3 is a perspective view of the rear body-bolster and divided axle. Fig. 4 is a detached perspective view of the divided axle and other parts connected therewith. Fig. 5 is a detail sectional view.

In the said drawings, 1 represents the reach of the running-gear of a wagon connecting the front bolster 2 and the rear body-bolster 3. To the front and rear bolsters we journal the divided axle or separate axles, if preferred, on which the wheels are journaled. The same arrangement of axle is provided for on the front and rear bolsters, and a description of one will therefore suffice for both.

4 and 5 represent the two parts of the axle, and they are journaled to the bolsters by means of the hangers 6, at the ends of the bolsters, and the central hanger 7. The ends of the axles fitting in the hanger 7 are formed with a groove 8, in which the set-screws 9 fit in order to hold the ends in the hanger. The outer ends of the axle are formed with the cranks 10, on which the wheels are journaled.

11 represent arms fixed to the axles 4 and 5 by means of the feather 12, which fits in grooves 13 and 14, formed for it in the axle and eye of the arm 11, and they are provided at their upper ends with the projections 15, between which the eyes of rods 16 are held. The projections 15 are provided with a number of openings 17 to allow for the adjustment of the rod, according as a heavy or light load is on the wagon, between the projections.

The rods 16 extend through openings 18 in the bolsters, and they are held by means of springs 19, which fit between the washers 20 and 21 on the rod. The washer 21 is held by means of the nut 22, working on the screw-threaded end of the rod.

From the above description it will be observed that each wheel is held by means of a spring, so that when the wheel rides any obstruction or unevenness the spring will prevent any tilting or jarring of the wagon-body.

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

1. In a wagon, the combination of the body-bolsters the divided axles, the end and central hangers fixed to said bolsters in which the axles are journaled, grooves formed in the ends of the axle fitting in the center hanger, set-screws fitting in said grooves, and suitable means for yieldingly connecting the axle with the body-bolsters, substantially as shown and described.

2. In a wagon, the combination of the body-bolsters the divided axles journaled thereto, arms fixed on each section of said axles and having projections at its upper end which are provided with openings, rods having one of their ends held between said projections, and their other ends passed through the body-bolster, and springs on said ends between the body-bolster and the free ends of the rods, substantially as shown and described.

JAMES MCTURK.
JOHN MCTURK.

Witnesses:
J. A. PINKERTON,
R. P. KEPLER.