

J. B. AUGUR.
BUGGY GEARING.

No. 102,905.

Patented May 10, 1870.

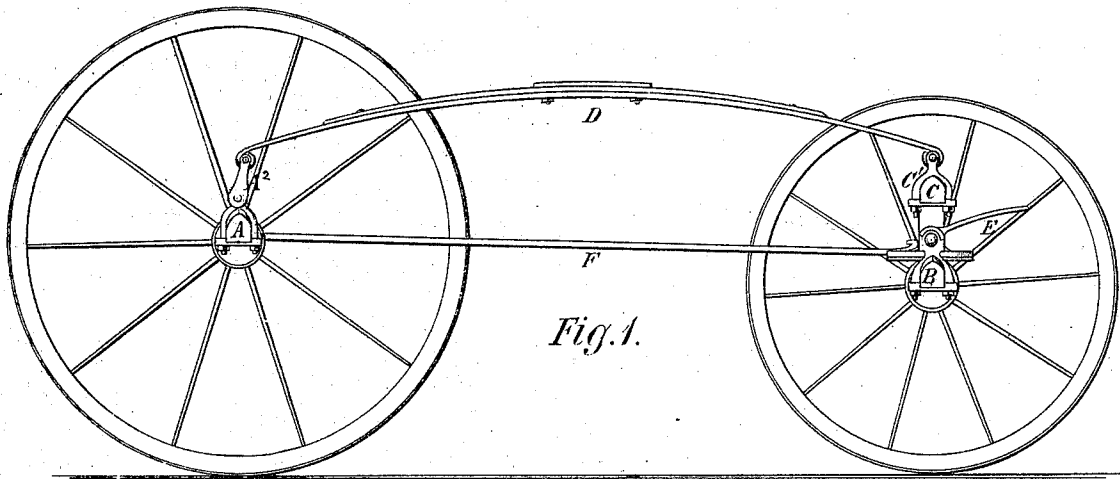


Fig. 1.



Fig. 4.

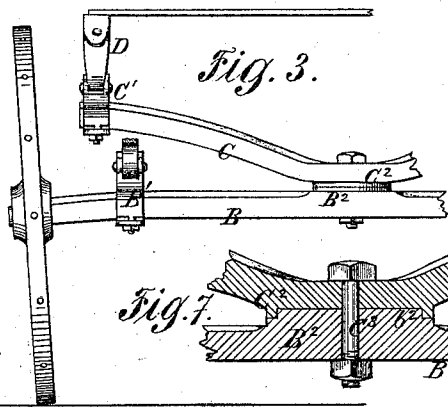


Fig. 3.



Fig. 5.

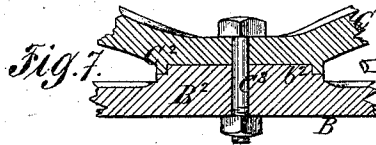


Fig. 7.

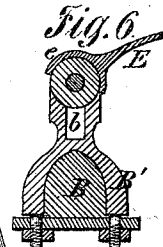


Fig. 6.

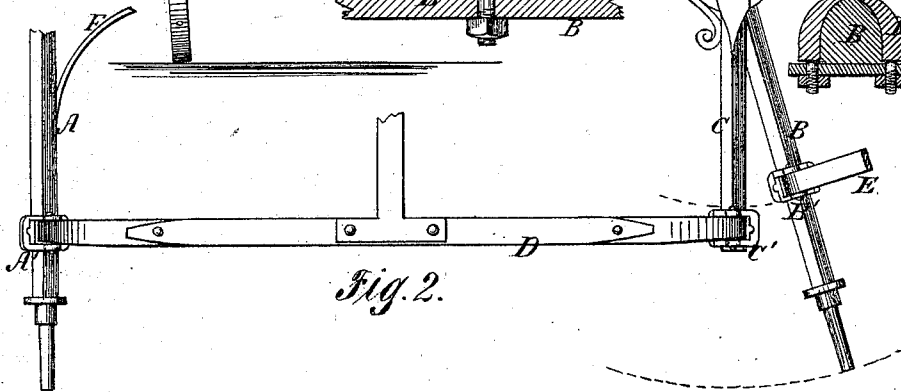


Fig. 2.

Witnesses:

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JOHN B. AUGUR, OF POUGHKEEPSIE, NEW YORK.

Letters Patent No. 102,965, dated May 10, 1870; antedated January 13, 1870.

IMPROVEMENT IN BUGGY-GEARING.

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, JOHN B. AUGUR, of Poughkeepsie, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Buggy-Gearing, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings which make part of this specification, and in which—

Figure 1 represents a side elevation of the running-gear of a buggy having my improvements attached;

Figure 2, a half-plan or top view of the same;

Figure 3, a half-front view of the same;

Figure 4, a vertical section of one of the back axle-clips;

Figure 5, a similar view of a front bolster-clip;

Figure 6, a similar view of a shaft-clip; and

Figure 7, a vertical longitudinal section through a portion of the front axle and bolster, showing the manner of connecting the same.

The object of my invention is to provide an improved construction of the axles, bolster, and clips of a vehicle, whereby strength, lightness, and the easy operation of the springs will be secured; to which ends,

My improvements consist—

First, in forming the axles and bolster flat or square at bottom, and elliptical or symmetrically curved to a central edge at the top, whereby a stronger and lighter axle may be made, and the same adapted to conveniently receive a wooden bed, if desired.

Second, in providing the clip of the hind axle with a pivoted link, by which it is connected to the spring, thereby enabling the same to work easily and effectively, when the load is brought upon it, without rolling the axle over and straining at the points of junction with the reach or perch of the carriage by the extension of the distance between the points of the springs' support.

Third, in forming a circular center or bearing-plate upon the front axle, having a projecting face which fits in a circular recess in a similar plate formed upon the bottom of the front bolster, the two being connected by a center-pin or bolt, around which the front axle can be turned at pleasure.

Fourth, in providing the clips by which the shafts are connected to the front axle with rubber or other packing, placed in recesses beneath the ends of the shafts, by which all noise or rattling of the same is prevented when in operation, and in extending the shaft-iron over its joint with the clip, to form a shield whereby the joint is kept free from dirt.

In the accompanying drawings, which show a convenient arrangement of parts for carrying out the objects of my invention—

A represents the hind axle of a buggy, B the front axle, and C the front bolster, to which it is connected, as hereinafter described, in such manner as to admit of swiveling motion.

F is the reach or perch, rigidly and permanently connecting the rear axle and bolster.

By reference to figs. 4, 5, and 6, the form of the axles and bolster will be clearly seen. They are made flat at bottom, with sides perpendicular thereto, and curved symmetrically to a central edge at top, by which construction a neat, light, and strong axle and bolster can be made, and a wooden bed or bottom can be conveniently attached to the axle if desired.

A¹ and C¹ represent the clips by which the springs which carry the buggy are connected to the back axle and bolster, respectively. These clips are made in the form of yokes, embracing the axle and bolster and secured to plates beneath the same by rivets or screw-bolts, formed in one piece with the clips.

The springs D are connected at their rear ends to pins, a', upon the links A², which are pivoted at bottom to pins a, upon the back axle-clips A¹. The front ends of the springs are connected to pins c, at the top of the bolster-clips C¹, the pins c having a small amount of play in the clips. By this arrangement the rear ends of the springs are free to move longitudinally when the weight is brought to bear upon them, without having to overcome the rigidity of the connection of the rear axle with the perch, and thereby strain the structure, but, on the contrary, having full scope for the exercise of their elasticity.

B¹ represents the shaft-clips, which are secured to the front axle B in a similar manner to the clips just described.

The shaft-irons E are connected to pins at the tops of the clips, beneath which are formed recesses b, which are fitted with rubber or other suitable packing, for the purpose of preventing noise or rattling of the same when the vehicle is in motion.

The shaft-irons are also constructed so as to extend over and cover their connection with the clips, as seen at e, fig. 6, for the purpose of preventing any deposit of dirt or moisture on or around the bolt of the joint.

A circular center or bearing-plate, B², is forged upon the front axle B, having a circular projecting face, b², at top, and a similar plate, C², is forged upon the bolster C, having a circular recess at bottom, in which face b² of the lower plate fits.

The axle and bolster are united by a center pin or bolt, C³, secured by a screw and nut, or split pin, or any convenient and suitable device.

This arrangement enables the front axle to be readily turned in either direction for the purpose of changing the line of motion of the buggy to the right

or left, the arrangement of the plates B² C² enabling the proper swelling motion to be allowed without risk of disconnection.

The projection of the lower plate into the recess of the upper plate prevents the retention of dirt when, by any accident, it may have been deposited there, and permits it speedily to find its way out. In ordinary course of travel dirt would be, in fact, prevented from reaching the faces of the plates.

My improvements are of simple construction, and readily applicable to the ordinary class of vehicles, and by their use the strength, durability, and comfort of the same are greatly enhanced.

Having thus fully described my invention,

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

1. An axle or bolster flat at bottom and elliptical or symmetrically curved at top to a central edge, substantially as described, in combination with the pivoted bearing and bolster-plates B² C², recessed as specified, for the purpose set forth.

2. The pivoted links A², connected at bottom to the rear axle-clips, and at top to the rear ends of the springs D, in combination with the springs and clips of a wagon-gearing, substantially as and for the purpose set forth.

3. Rubber or other packing placed within the shaft-clips and beneath the ends of the shafts, for the purpose of preventing noise or rattling of the same, as set forth.

4. The combination of the shield e with the shaft-iron E and their axle-clips B¹, substantially as and for the purpose set forth.

In testimony that I claim the foregoing improvements, I have hereunto set my hand this 22d day of March, 1869.

J. B. AUGUR.

Witnesses.

W. FARRINGTON,
JNO. P. M. FALLMAN.