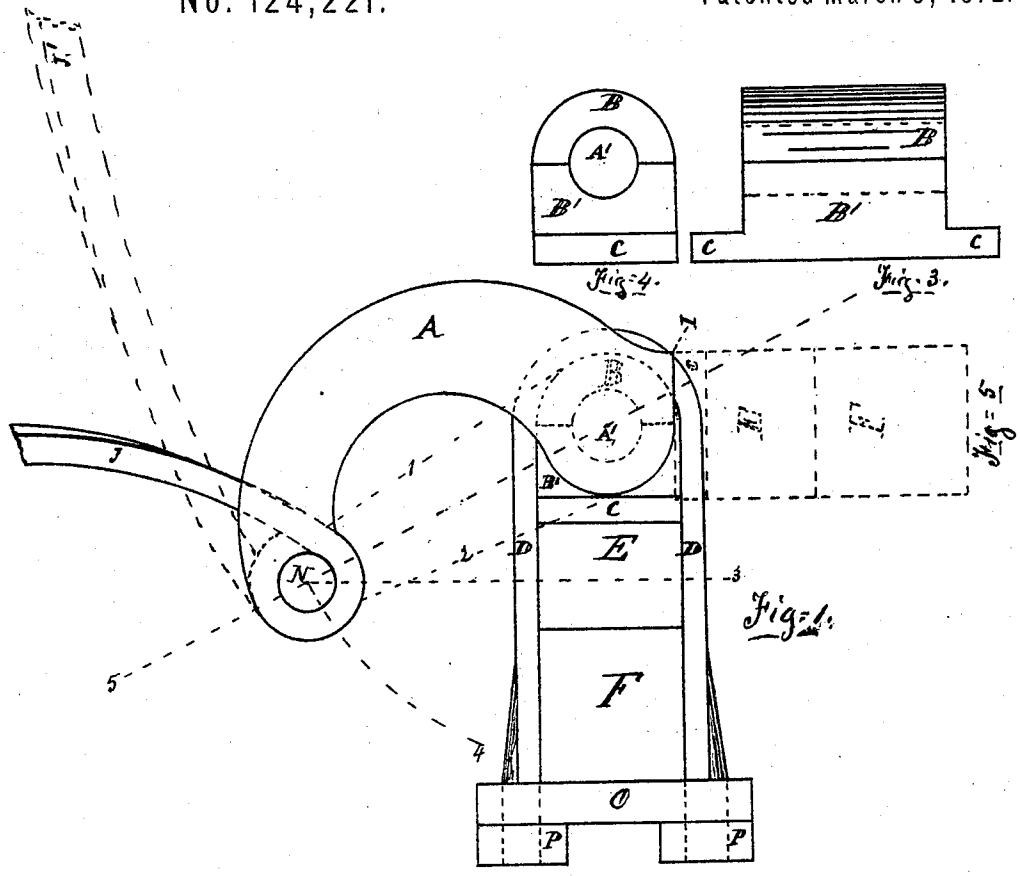
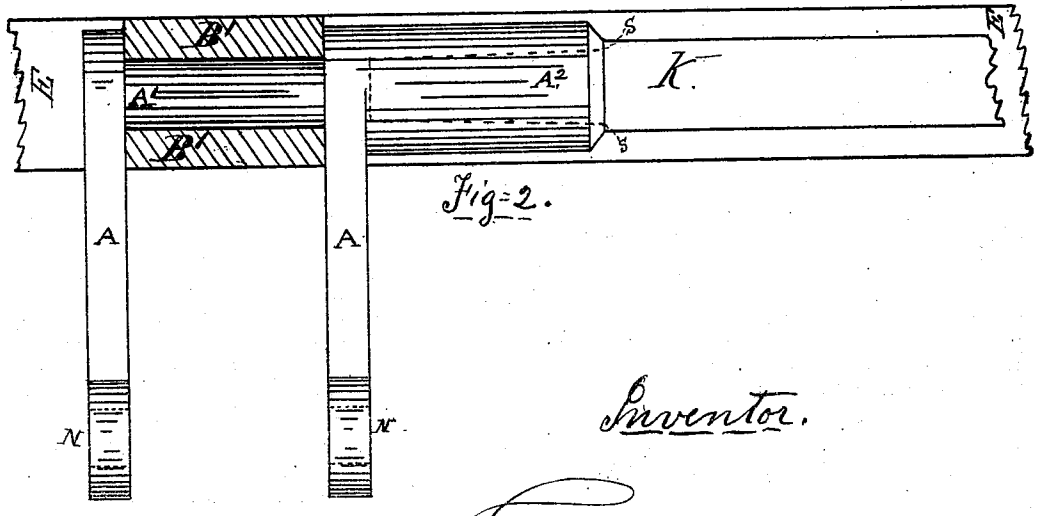
C. W. SALADEE.

Improvement in Connecting Side Springs to Vehicles.

No. 124,221. Patented March 5, 1872.





Witnesses.

V. Eldridge

W. P. Clement

Inventor.

Geo. W. Saladee

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

CYRUS W. SALADEE, OF ST. CATHARINE'S, CANADA.

IMPROVEMENT IN CONNECTING SIDE SPRINGS TO VEHICLES.

Specification forming part of Letters Patent No. 124,221, dated March 5, 1872.

SPECIFICATION.

Be it known that I, CYRUS W. SALADEE, of St. Catharine's, in the Dominion of Canada, have invented certain Improvements in Connecting Side Springs to Pleasure-Vehicles, of which the following is a specification embodying my invention.

My invention has for its object an improved mode of constructing and applying "connecting-rods" to the rear axle and front bolster of side-spring buggies, to which the ends of the springs are connected and equalization of their action effected—that is to say, that the motion of either spring up or down shall be conveyed to the other through said connecting-rods, and compel them to vibrate in unison with each other.

Equalizing the action of springs by means of connecting-rods and short arms or "links" radiating from their outer ends, and connecting to the springs or body, is old and well known, and forms no part of my invention; but the improvement of the rod and its mode of appliance and operation are features of novelty, as hereinafter described, to which I lay claim.

In the drawing, Figure 1 is a side end view of the hind axle E F, and in which is had a full side view of the curved arm A, end of the spring J, journal-box B B′, clip D D, clip-yoke O, screw-nuts P. Fig. 2 is a top view of the axle E, showing one end of the connecting-rod K broken off, and the other being squared and passing into the hub A^2, as seen by the dotted lines S S, and showing the arms A A and journal A^1 formed solid with and made a part of the hub A^2, and showing the lower half of the journal-box B′ in section with the journal A^1 resting therein. Fig. 3 is a full side view of the journal-box, B being the top half of the box, and B′ the lower half; and C C are projections formed upon the lower edge of the box. Fig. 4 is an end view of the same, and showing the hole for the reception of the journal A^1 of the hub A^2, seen in Fig. 2; and the dotted lines, Fig. 5, represent a reversible view of Fig. 1. E and F, in dotted lines, represent the end of the axle, with the outer end of the arm A thrown up above the axle, and the dotted lines J′ represent the spring in this position.

The primary object of my invention, however, is, by means of the journal-box B B′ and clip D, to secure and operate the connecting-rod K immediately over the top of the axle and bolster of the gearing, so as to allow a free movement of the arms A when vibrating the springs. These arms are now universally made straight, as seen by the dotted lines 1 and 2, Fig. 1, and which formation forbids placing the center of motion of the connecting-rod over the center and on the top of the axle or bolster, as may be readily understood by consulting the drawing, Fig. 1, where dotted line 2 is the lower edge of the straight arm, and where it will be seen that to move the outer end N of the arm A down in the direction of the dotted line 4 would be impossible by reason of the contact of the arm with the top of the axle. To overcome this defect I curve the arm A substantially as shown in Fig. 1, and by which form the outer end N is permitted freely to move in the direction of the dotted line 4, as required by the vibration of the springs. These curved arms are connected to the outer ends of the connecting-rods K, either by being formed a part of the hub A^2 and journal A^1, or secured directly to the rod K by being welded thereto, or otherwise rigidly connected to their outer ends, and the space A^1 between the arms A is made to rest in the journal-boxes B B′, and the whole is held in position on the top of the rear axle and front bolster by means of the clip D D, as plainly indicated in Fig. 1. The base of the arm A, Fig. 1, is formed with a shoulder-bearing, I, which, when the arms are used, as shown in the reversed view of Fig. 1 by Fig. 5, will bear upon the projection C of the journal-boxes and prevent the arms from passing their centers, and so as to hold the springs in their proper position.

I claim as my invention—

1. The arms A, curved substantially as and for the purpose set forth.

2. In combination with the curved arms A,

the connecting-rod K, as and for the purpose set forth.

3. Securing and operating the connecting-rod K immediately on the top and over the center of the hind axle and front bolster by means of the bearings A^1 B B′ and clip D D, as and for the purpose set forth.

4. Securing or forming the arms A and journal A^1 upon the outer end of the hub A^2, and the same in combination with the connecting-rod K, substantially as and for the purpose set forth.

5. The projections C C, in combination with the journal-box B B′ and the shoulder-bearing I of the arm A, as and for the purpose set forth.

CYRUS W. SALADEE.

Witnesses:
V. C. CLAYTON,
W. D. CLEMENTS.