(No Model.)

J. B. CALLAN.

ROAD CART.

No. 262,736. Patented Aug. 15, 1882.

Fig. 1.

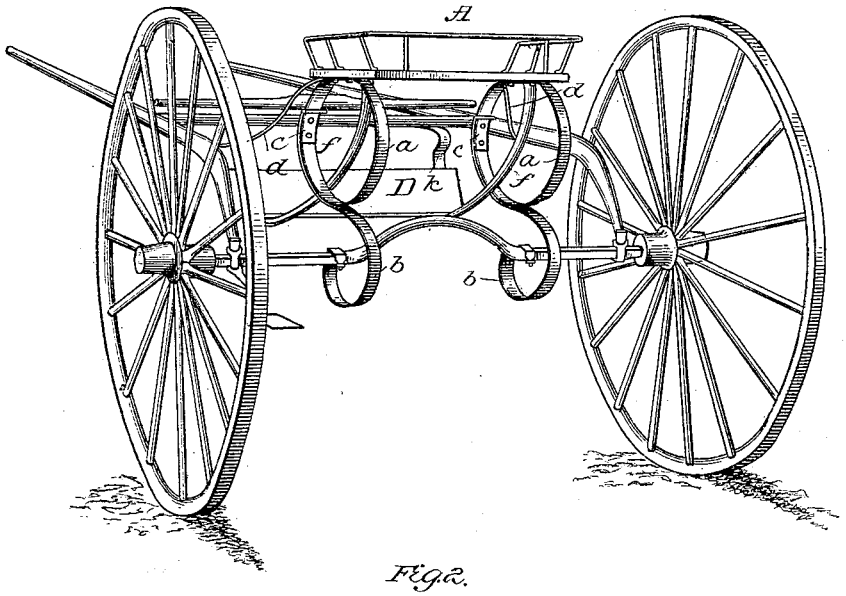


Fig. 2.

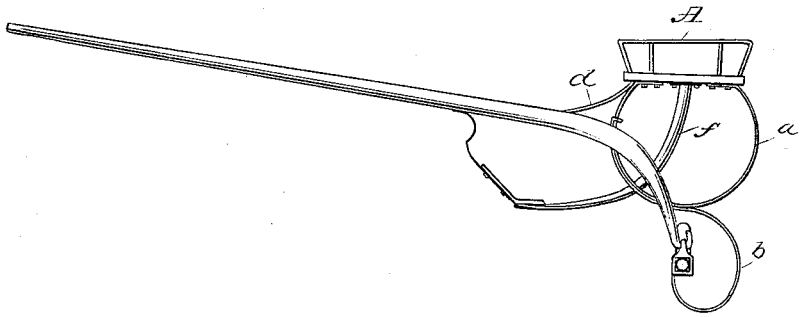
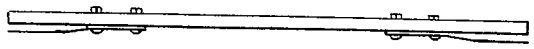


Fig. 3.



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UNITED STATES PATENT OFFICE.

JAMES B. CALLAN, OF QUINCY, ILLINOIS.

ROAD-CART.

SPECIFICATION forming part of Letters Patent No. 262,736, dated August 15, 1882.

Application filed June 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. CALLAN, of Quincy, in the county of Adams and State of Illinois, have invented a new and useful Improvement in Road-Carts; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to a road-cart, and includes a construction by means of which the cart may be converted into a trotting-sulky.

The invention consists in the special construction of the springs, and also in the construction and arrangement of the parts directly and indirectly connected therewith.

In the accompanying drawings, Figure 1 shows a perspective view, and Fig. 2 a side elevation, of my improved road-cart, the wheels in the latter figure being removed. Fig. 3 represents a modification.

The wheels, shafts, and axle, as represented in these figures, are of ordinary construction, the shafts also being connected to the axle in the usual manner.

The seat A rests directly upon springs *a a*, which springs are of ordinary material, and are bent approximately in the form of a circle, the upper ends being brought together and rigidly connected to the under part of the seat. These springs are connected to and supported upon a second set of springs, *b b*, which are bent in the form shown in the drawings. The lower ends of the springs are curved around underneath the axle, and are brought up and suspended from the axle by means of any suitable clips. The upper ends of the springs *b b* are bent so as to fit the forward side of the springs *a a*, extending up to a point not far below the seat, and the ends of the springs *b b* are attached to the springs *a a* by clamps *c*. These clamps are held by means of small bolts, which may be loosened, and the lower spring removed from the upper and from the axle, when the seat may be lowered until the upper springs rest directly upon the axle, to which they may be securely attached by clips of suitable construction.

In order to retain the seat in place and prevent it from surging backward, I provide braces *d d*, which are flexibly connected to the seat, so that they may be hooked either into eyes or staples in the shafts or to the foot-board D. This foot-board is supported upon arms *f f*, rigidly fixed to the bottom of the seat, and extending forward to hold the board in suitable position. I bolt these arms to the seat in such a manner that they may be easily removed therefrom when it is desirable to convert the cart into a trotting-sulky. This construction of the spring and other parts described serves to nicely balance the seat, and the motion of the horse does not give any motion to the person riding. The motion of the horse is counteracted by means of the spring in the form of a half of the letter B, which spring (marked *k*) hooks into a buckle underneath the cross-bar, connecting the foot-rest to the cross-bar. I may make this spring in the form shown in Fig. 3. In this figure the spring is represented as made of two pieces of steel, one running from the bow of the foot-rest and connecting with the other, which is bolted to the cross-bar and bent down so as to come one and a half inch from the cross-bar at the end, where it connects with the other part of the spring. This construction is somewhat simpler.

The peculiar form of the springs *b b* and their suspension from the axle also have a tendency to counteract the motion of the horse. This peculiar construction of the spring gives another advantage of great importance in this class of vehicles, that if the lower spring breaks the seat can drop only about four inches until it comes in contact with the axle, and as the seat is not thereby thrown backward a drop of that distance is not dangerous. The braces described serve to prevent the seat from being thrown backward under any circumstances.

Having thus described my invention, what I claim is—

1. In a road-cart or trotting-sulky, the combination of the springs *a a* and the springs *b b*, both constructed as described, and attached to the axle and the seat, as set forth.

2. The combination of the seat and axle, the springs *a a*, and the braces *d d*, adapted to be attached either to the shaft or foot-board, substantially as described.

3. The combination of the seat, the axle, the springs *a a* and *b b*, the foot-board, and the supporting-arms, substantially as described.

4. In combination with the axle of a road-cart or trotting-sulky, the springs *b b*, suspended from the axle, and upper springs between the said springs *b b* and the seat, substantially as described.

5. The combination of the seat, the springs *a a*, braces *d d*, and suspending-springs suspended from the axle and supporting the upper spring, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES B. CALLAN.

Witnesses:
EDMUND K. ALDRICH,
HARRY W. HALE.