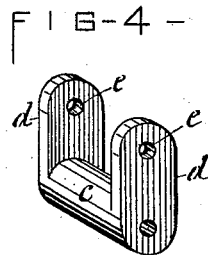
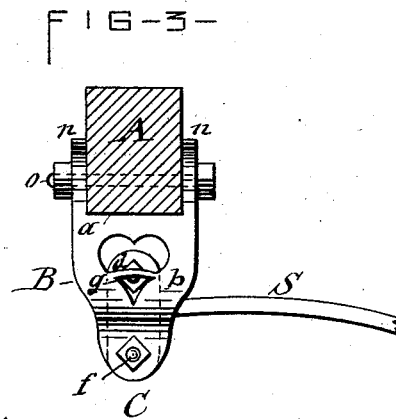
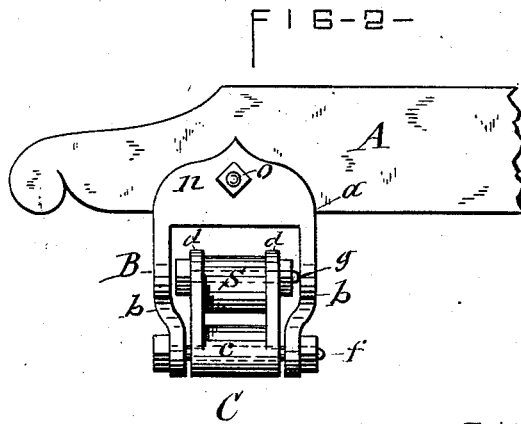
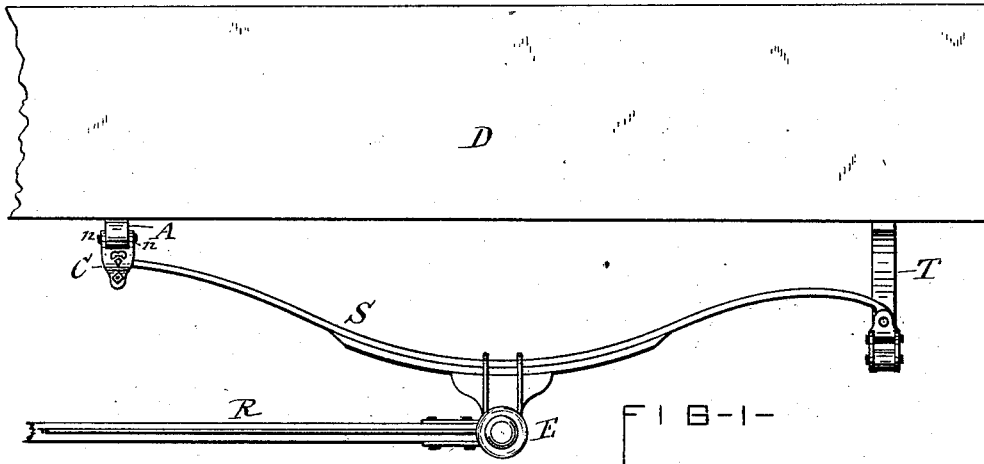


(No. Model.)

L. ROTH.  
SPRING COUPLING.

No. 301,833.

Patented July 8, 1884.



ATTEST —  
*Wm. S. Raymond*  
*W. Bendixen*

INVENTOR —  
*Louis Roth*  
*per H. L. Laas & H. W.*  
*his atty*

# UNITED STATES PATENT OFFICE.

LOUIS ROTH, OF ROME, NEW YORK.

## SPRING-COUPLING.

SPECIFICATION forming part of Letters Patent No. 301,833, dated July 8, 1884.

Application filed February 9, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS ROTH, of Rome, in the county of Oneida, in the State of New York, have invented new and useful Improvements in Spring-Couplings, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to a spring-coupling, which is adapted for combination spring-wagons or platform spring-wagons having a reach, and is more especially designed for connecting the end of a side spring or half platform spring with a cross-bar secured to the body of the vehicle.

The invention consists in a novel construction and combination of the constituent members of the spring-coupling, whereby said members are made to brace each other, and thus form a spring-coupling which possesses greater stability than other couplings of its class, and effectually shields the coupling-link and the bolt which connects the spring with said link, all as hereinafter more fully described, and specifically set forth in the claim.

In the annexed drawings, Figure 1 is a side view of the rear portion of a vehicle-body and its spring-support provided with my improvements. Figs. 2 and 3 are respectively enlarged end and side views of my improved spring-coupling, and Fig. 4 is a detached perspective view of the oscillatory hanger of the coupling.

Similar letters of reference indicate corresponding parts.

S represents a side spring of the rear portion of a platform spring-wagon having a reach, R, for connecting the two running-gears, said side spring being mounted on the hind axle, E, in the usual manner, and having its rear end connected with a cross-spring, T, supporting the rear end of the vehicle-body D. The forward end of the spring S is connected by a coupling, C, with a cross-bar, A, attached to the under side of the body D. It is the aforesaid coupling C for which my invention is chiefly designed. This coupling I construct in the form of a bracket, B, having on its top the usual bearing, a, for the cross-bar A, and provided with upward-projecting flanges n, which embrace the sides of the cross-bar, and are provided with an aperture for the reception of a bolt, o, which passes through said flanges and through the cross-

bar, to firmly attach thereto the bracket B. The bracket is formed with two rigid pendent plates, b b, which are extended completely across the ends of the bearing a, so as to obtain a firm hold thereon, and at the same time become thoroughly braced, and also brace the bearing a. The lower end of the plates b b is provided with an eye for the reception of a bolt, f.

Between the plates b b is arranged the oscillatory hanger, consisting of a tubular sleeve, c, having integral with it the hanger-arms d d. Through the sleeve C passes the bolt f, which has at opposite ends a head and a nut bearing against the outside of the plates b b, and confining the bolt in its position. To the free ends of the hanger-arms d d is connected the end of the spring S, by means of a bolt, g, which passes through eyes e e in the said arms, and through an eye on the spring, in the usual manner. The aforesaid connection of the spring with the hanger is easily effected by swinging the latter outward from between the plates b b sufficient to obtain access to the eyes e e, for introducing the end of the spring between the hanger-arms d d and inserting the coupling-bolt g in the aforesaid eyes. When this is accomplished, the hanger is swung back into its position between the plates b b, which serve to house said hanger, and to prevent the bolt g from working out of its connection.

By making the arms d d integral with the sleeve C, as described and shown, the liability of rattling is to a great extent obviated.

Having described my invention, what I claim as new is—

The improved spring-coupling, consisting in the combination, with the bearing a, of the two rigid pendent plates b b, extended across the two ends of said bearing, and the oscillatory hanger c d d, housed between said plates, substantially in the manner described and shown.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Rome, in the county of Oneida, in the State of New York, this 5th day of February, 1884.

LOUIS ROTH. [L. s.]

Witnesses:

C. S. GRIFFIN.

CLIFFORD C. KNOX.