(Model.)

L. STOUFFER.

SIDE BAR VEHICLE.

No. 326,692. Patented Sept. 22, 1885.

Fig. 1

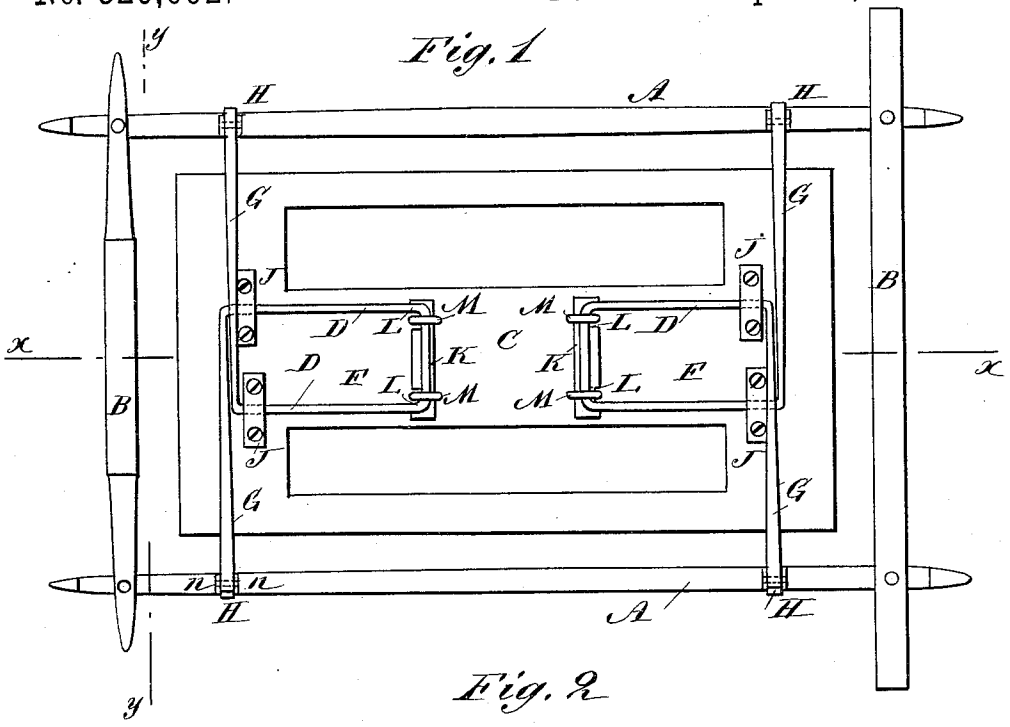


Fig. 2

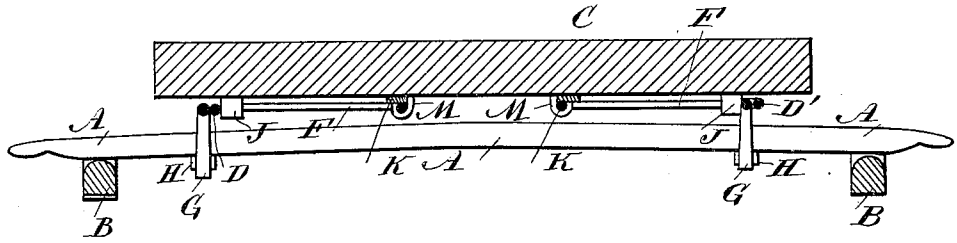
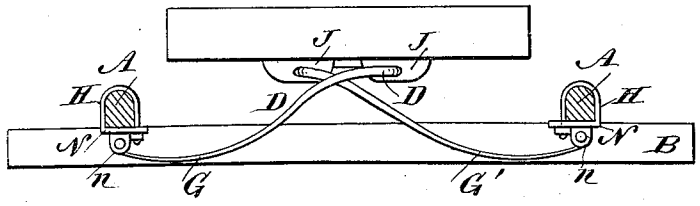


Fig. 3



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UNITED STATES PATENT OFFICE.

LUTHER STOUFFER, OF ST. JOSEPH, MISSOURI.

SIDE-BAR VEHICLE.

SPECIFICATION forming part of Letters Patent No. 326,692, dated September 22, 1885.

Application filed November 29, 1884. (Model.)

To all whom it may concern:

Be it known that I, LUTHER STOUFFER, of St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in Side-Bar Vehicles, of which the following is a full, clear, and exact description.

The object of my invention is to provide certain new and useful improvements in side-bar vehicles, whereby the vehicle will have a more gradual and easy movement than the usual side-bar vehicles.

The invention consists in the combination, with a vehicle-box and side bars, of a spring rod or bar bent to form a square or oblong figure, having its outer ends crossed and extended laterally to the side bars, to which they are secured.

The invention further consists in a shackle-clip formed of a U-shaped clip having a short and a long shank, on which short shank a bottom plate is formed, which is provided at its free end with an aperture, through which the long shank can be passed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the under side of my improved side-bar vehicle. Fig. 2 is a longitudinal sectional elevation of the same on the line *x x*, Fig. 1. Fig. 3 is a cross-sectional elevation of the same on the line *y y*, Fig. 1.

The side bars, A, are secured at their ends to the front and rear cross-bars, B, and between the said bars the box C is supported by the springs D at the front and rear ends. Each spring D is formed of a steel rod bent to form a square or oblong figure, F, the crossed outer end parts of which are extended laterally and beyond the sides of the oblong figure to form the springs G, which are flattened and curved, as shown. The ends of the springs G are held to the under sides of shackle-clips H, held on the side bars. The sides of the oblong figures F are held at their outer ends to the under side of the box by clip-plates J, through which the sides of the oblong-pass. The inner cross-bar of each oblong figure F rests against a metal plate or strip, K, placed on the under side of the box, and provided with a notch, L, at each end in the outer edge. Hook-bolts M are passed through the bottom of the box in such a manner that the hooks embrace the inner cross-piece of the oblong, at each end, and the ends of the hooks pass into the notches L. Nuts are then secured on the upper ends of the hook-bolts and the said hook-bolts are drawn up tightly. The shackle-clips H are formed of a U-shaped rod having one shank longer than the other, and having a bottom clip-plate, N, formed on the lower end of the short shank, the said plate being at right angles to the said shank. An aperture is formed in the free end of the bottom plate, the long shank is passed through the aperture in the said bottom plate, and a nut is then screwed on the end of the long shank, whereby the shackle-clip is closed and clamped on the side bar. The bottom plate, N, of the shackle-clip is provided with jaws or lugs *n n*, for receiving a pin to hold the end of the spring G.

My improved shackle-clip requires but one nut, is simpler than the clip usually used, and costs less.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a vehicle, the combination, with the side bars and box, of a spring secured to the box and to the side bars, which spring is formed of a spring rod or bar bent to form an oblong or square figure, the outer ends of which extend from the side of the figure across the figure, and are extended beyond the sides of the figure to the side bars, substantially as herein shown and described.

2. In a vehicle, the combination, with the box and side bars, of the springs D G, shaped in the manner described, and of the clip-plates J, for holding the springs to the box at the inner ends of the laterally-projecting parts, substantially as herein shown and described.

3. In a vehicle, the combination, with the box and side bars, of the springs D G, shaped in the manner described, the clip-plates J, the plates or strips K, and the hook-bolts M, substantially as herein shown and described.

LUTHER STOUFFER.

Witnesses:

GEORGE M. IRWIN,

JACKSON TITY.