

(No Model.)

R. S. HUNZEKER.
SIDE BAR VEHICLE.

No. 339,188.

Patented Apr. 6, 1886.

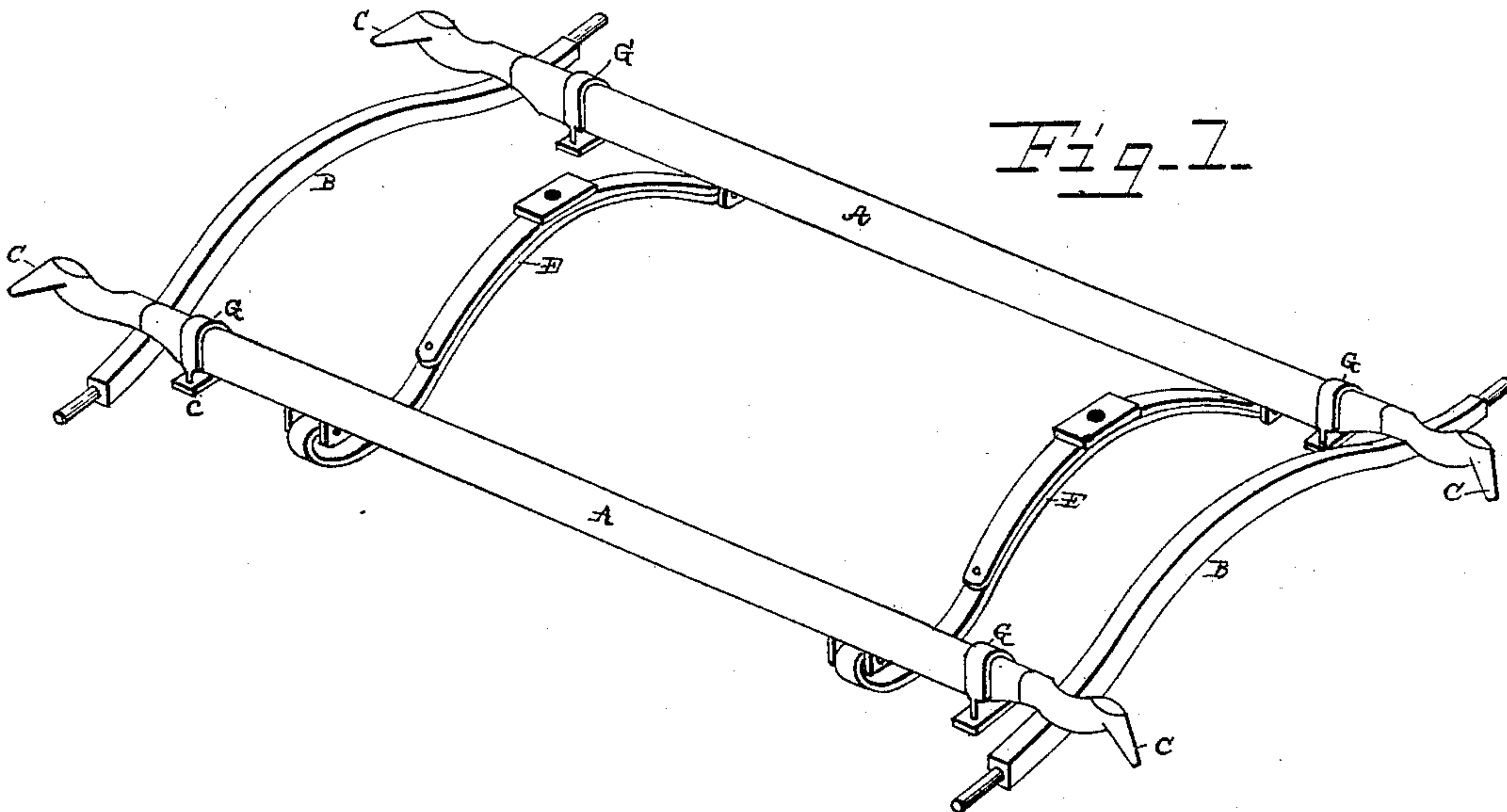


Fig. 2.

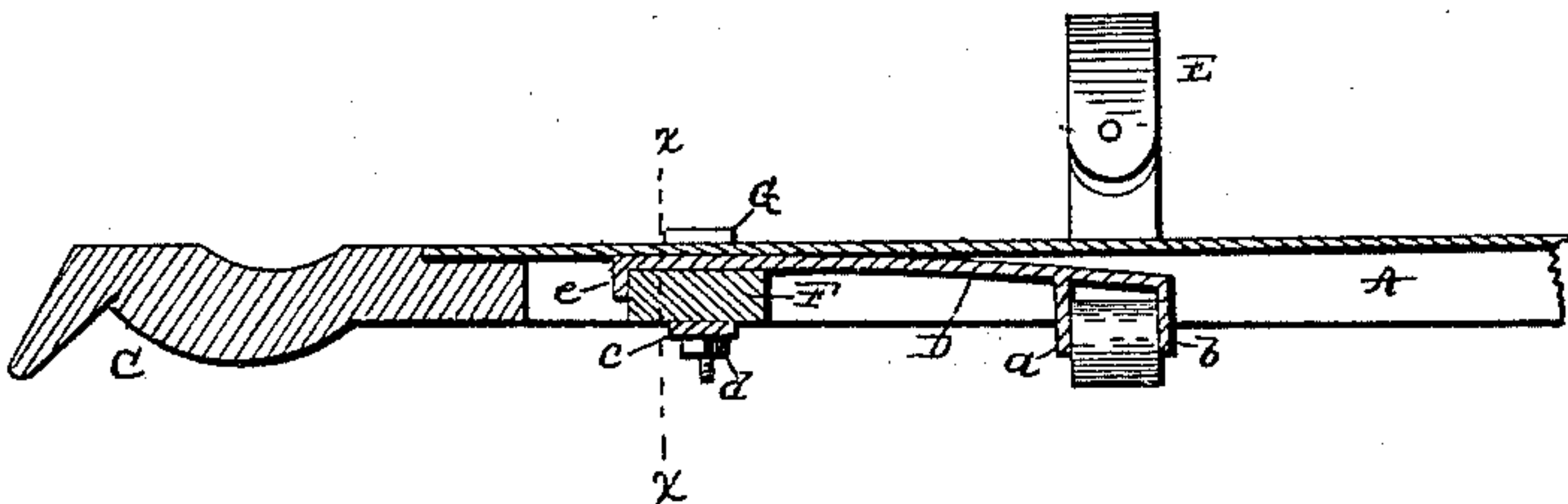
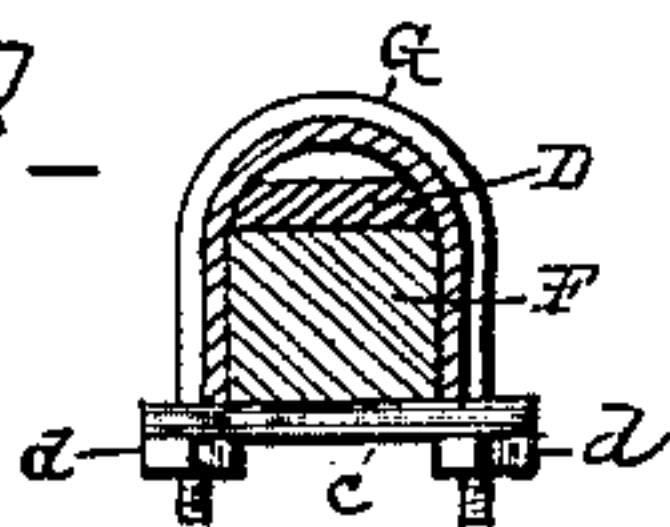


Fig. 3.



WITNESSES

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RUDOLPH STUWART HUNZEKER, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR
TO THE PITTSBURG SPRING COMPANY, (LIMITED,) OF SAME PLACE.

SIDE-BAR VEHICLE.

SPECIFICATION forming part of Letters Patent No. 339,188, dated April 6, 1886.

Application filed August 6, 1885. Serial No. 173,785. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH STUWART HUNZEKER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Side Bars and Springs for Vehicles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in side bars and in springs connected thereto, for attachment to the body of vehicles.

The object of my invention is to provide a light, comparatively cheap, and strong side bar for vehicles of all kinds.

My invention consists in securing in the under side of the hollow side bars strap-springs, to which the cross-bars of the body of the vehicle are directly attached, or to which the ordinary springs of the body may be secured, as will more fully hereinafter appear.

Referring to the drawings, Figure 1 is a view in perspective of my improved side bar as applied to the axles of a vehicle. Fig. 2 is a longitudinal sectional view of a portion of one of my improved side bars, showing the spring attached thereto. Fig. 3 is a view in cross-section of my improved side bar and spring, taken on the line *x x* of Fig. 2.

A indicates the side bars, which are mounted upon or secured to the axles B in any convenient or desirable manner. The side bars, A, are made of a good quality of steel, and are of U shape in cross-section, as shown in Fig. 3, and owing to their peculiar construction are readily stamped out of steel plates or bars. The side bars, A, are placed in position on the axles B, with their open side downward, which renders them specially adapted for the bearing of heavy loads, and the U shape given thereto acts to sustain the load and resists the thrusts in the same manner as that of an arch.

C are pieces of wood or other suitable material, secured in the ends of the side bars, which may be ornamented in any suitable manner.

D are strap-springs, made of steel or other

suitable material, the front ends of which are provided with lugs *a* and *b*, to which the ends of the springs E, or the ordinary cross-bars which support the bed or body of the vehicle, are secured. The springs D are secured in the under side of the side bars by means of the wooden block F, which is made to conform to the internal shape of the side bars, the end of the spring D being clamped between the under side of the side bar and the wooden block F by means of the clamping ring or band G, which is held in position by the cross-bar *c* and nuts *d*, which engage with screw-threads formed on the ends of the bands G. The ends of the springs D are provided with a flange or bent portion, *e*, which lies against the end of the wooden block F, and are thus held in position against longitudinal displacement.

The advantages of my invention will be apparent to those skilled in this art, inasmuch as the side bars herein shown and described can be made very light, and at the same time possess a degree of strength and elasticity not found in the ordinary side bars; and, furthermore, the strap-spring D, when used in connection with the ordinary cross-bar of the carriage-bed, the expensive spring ordinarily used can be dispensed with; but when it is desirable to use the ordinary spring, as E, in connection with the strap-spring D, a double spring is produced, which is very desirable in pleasure-carriages.

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

1. As an improvement in the running-gear of vehicles, the side bars constructed of steel plates struck up or stamped into U shape in cross-section, in combination with the strap-springs confined at one end in the hollow of the bars and extending below the same at the other end, where they are provided with connections for the transverse springs which support the body of the vehicle, substantially as specified.

2. The hollow side bars, A, having the springs D located therein, in combination with the blocks F, clip G, and cross-bar *c*, whereby

the said springs are confined at one end within the body of the side bars and the free end allowed to project below the same to be secured to the transverse supporting-springs of the vehicle, substantially as and for the purpose specified.

3. In running-gear for vehicles, the hollow steel side bars, the leaf springs secured at one end within said side bars, and at the other ends to the transverse supporting-springs of

the body of the vehicle to which the side bars are fastened, substantially as and for the purposes specified.

In testimony whereof I affix my signature in presence of two witnesses.

RUDOLPH STUWART HUNZEKER.

Witnesses:

J. J. McCORMICK,
JOSEPH WILLIAMS.