

C. W. SALADEE.
Side-Bar Wagon.

No. 226,424.

Patented April 13. 1880.

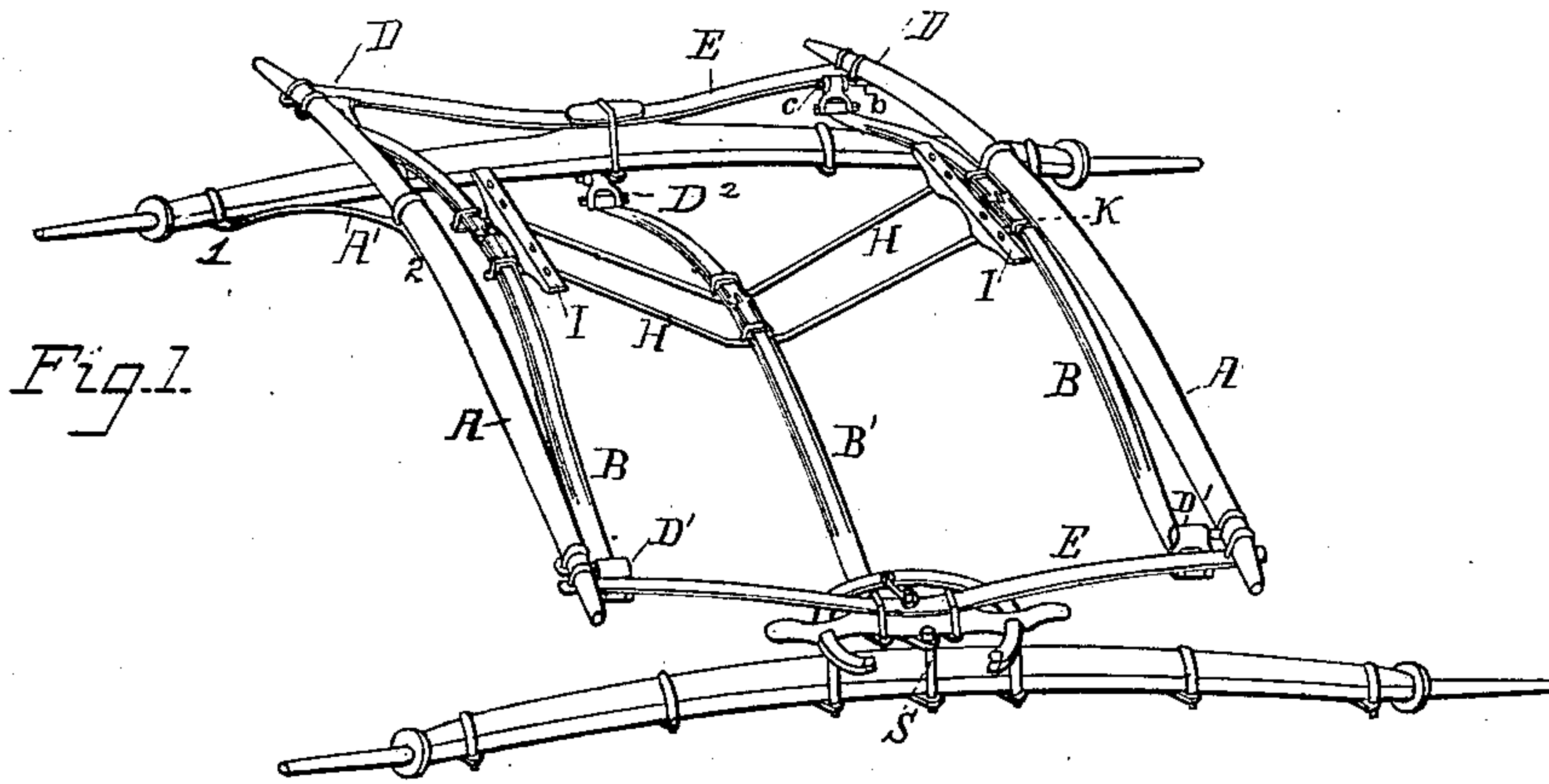


Fig. 1.

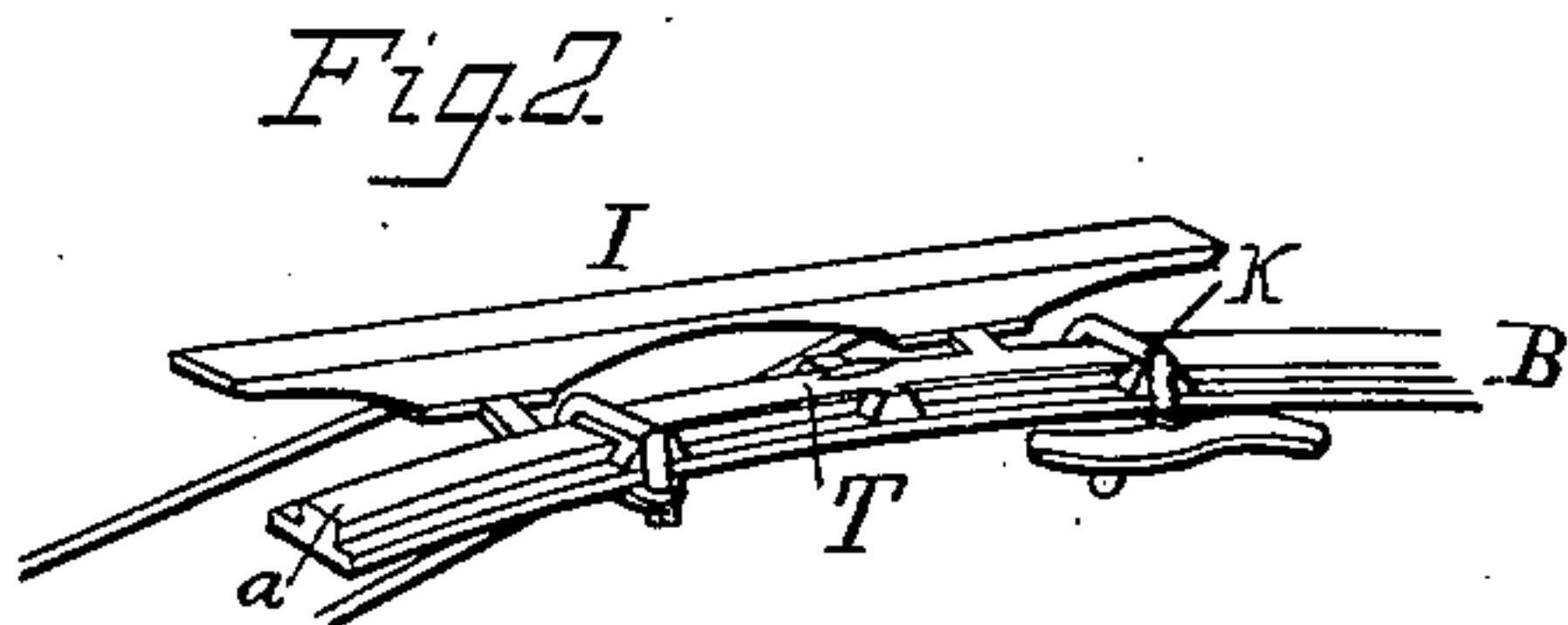


Fig. 2.

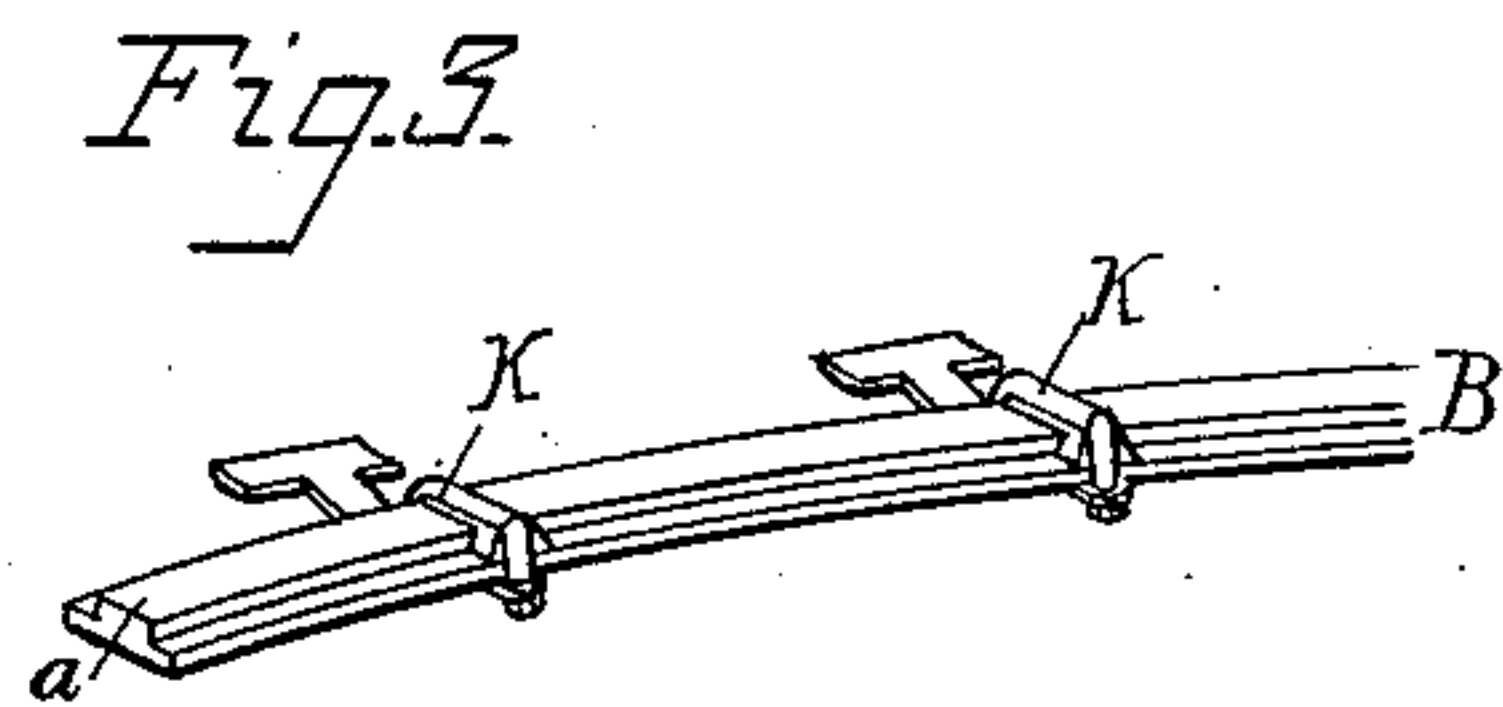


Fig. 3.

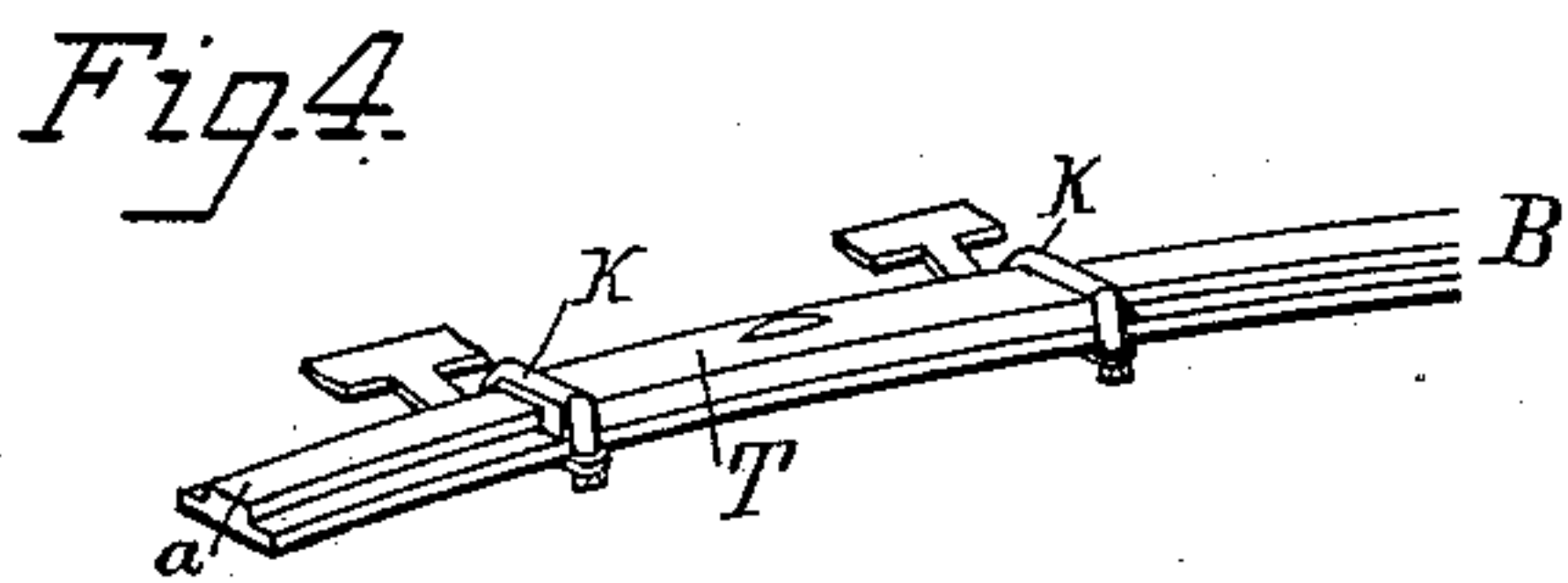


Fig. 4.

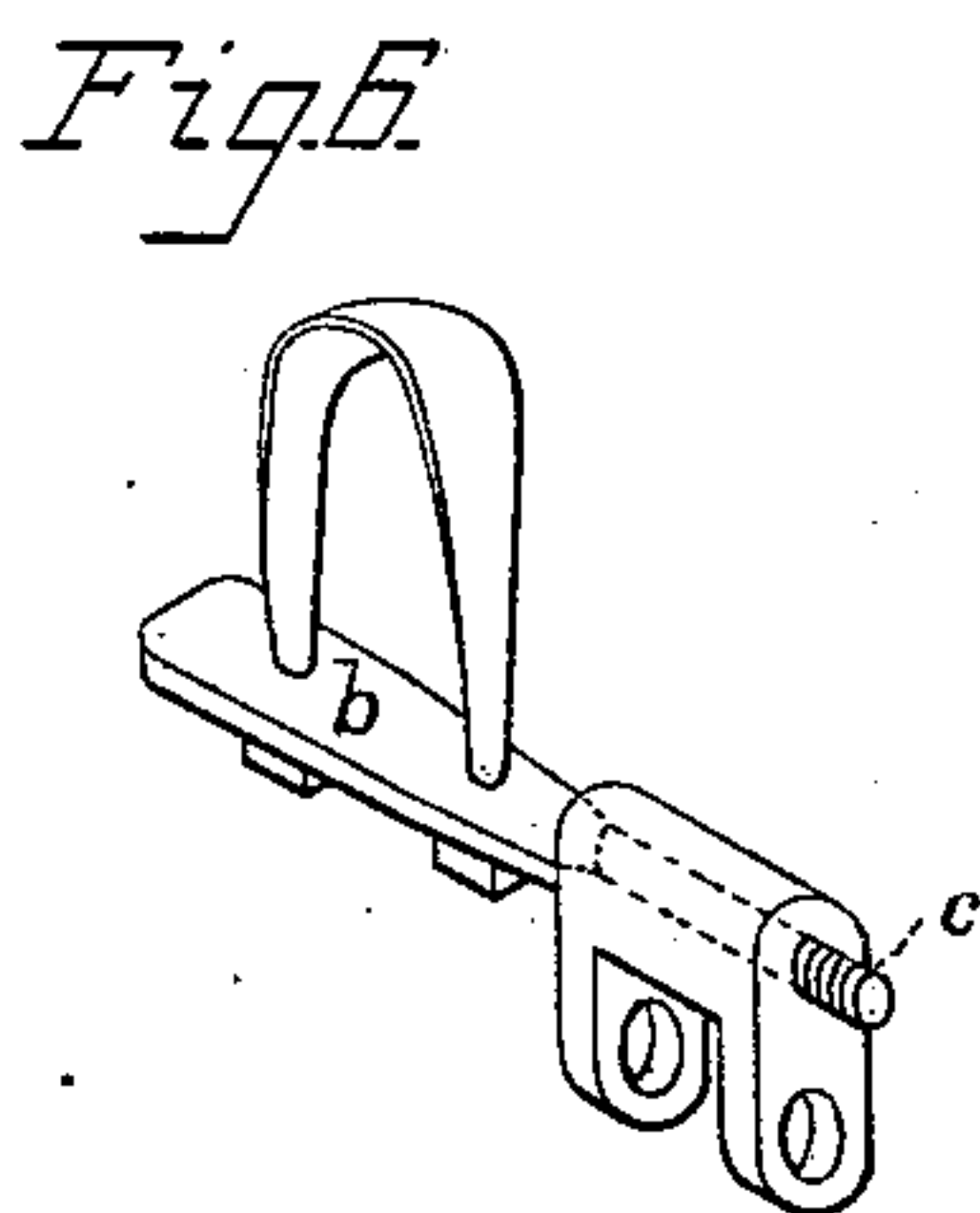


Fig. 6.

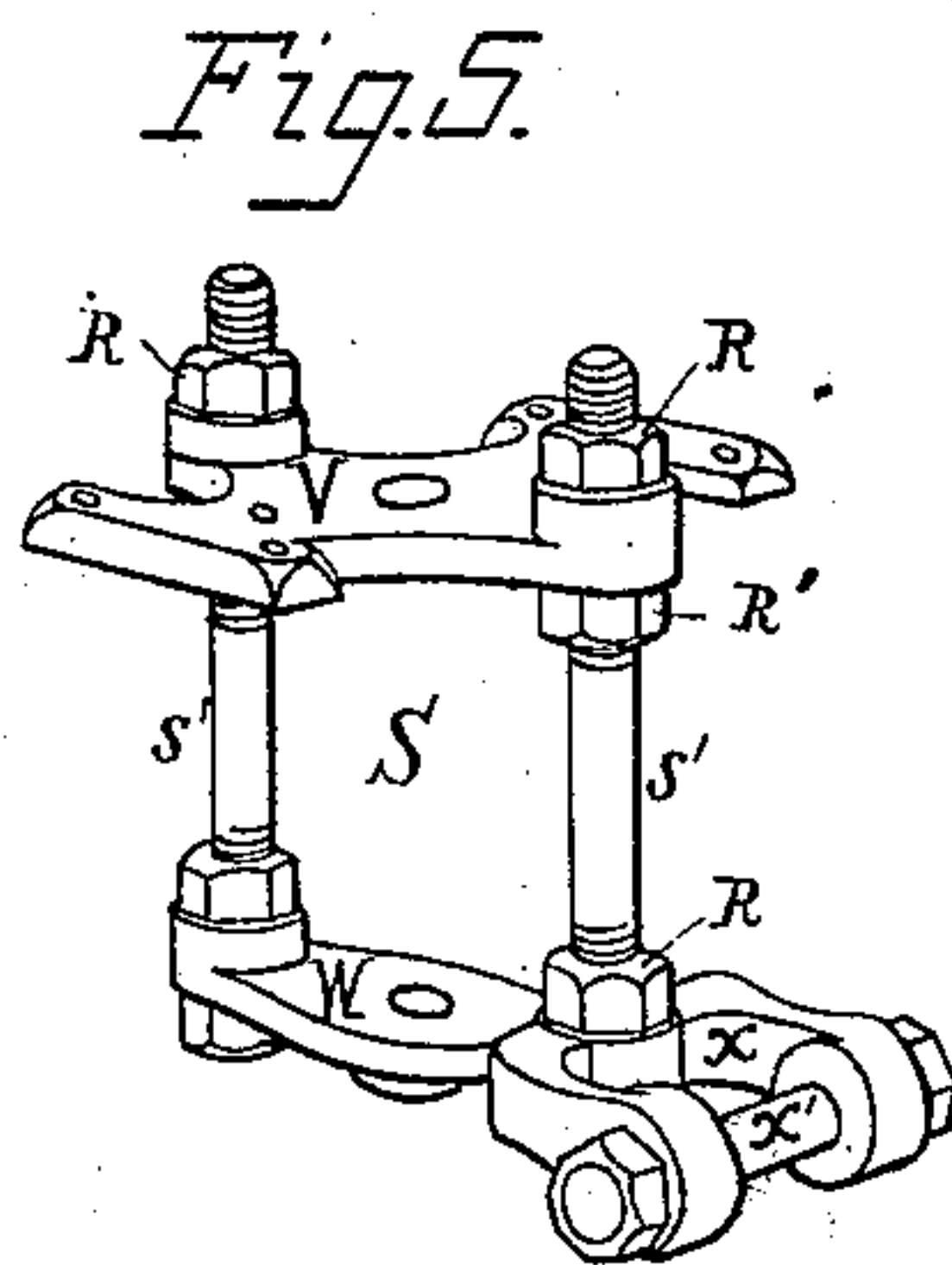


Fig. 5.

Attest:
Courtney A. Cooper
William Barton

Inventor:
C. W. Saladee
By his atty
Charles E. Foster

UNITED STATES PATENT OFFICE.

CYRUS W. SALADEE, OF WASHINGTON, DISTRICT OF COLUMBIA.

SIDE-BAR WAGON.

SPECIFICATION forming part of Letters Patent No. 226,424, dated April 13, 1880.

Application filed January 29, 1880.

To all whom it may concern:

Be it known that I, CYRUS W. SALADEE, of Washington, District of Columbia, have invented an Improved Side-Bar Road-Wagon, of which the following is a specification.

My invention consists in certain improvements in road-wagons whereby I secure an elastic support for the body and facilitate the attachment of the body to the platform, the connection of the springs to their supports, and of different parts of the platform to each other, as fully described hereinafter, and shown in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of sufficient of a road-wagon to illustrate my improvements. Fig. 2 is a detached perspective view, showing the means for connecting the side springs and cross bars or braces or braces and perch; Figs. 3 and 4, modifications of Fig. 2; Fig. 5, a perspective view of the yoke; Fig. 6, a detached view of the side spring, clip, and hanger.

The drawings illustrate a double-platform wagon, although, as will be apparent hereinafter, some of the features of my invention are applicable to wagons of a different construction.

The lower platform may consist of two or more semi-elliptic springs, parallel, converging, or crossed. I have shown, however, a single central spring, B', connecting the front and rear axles in the usual manner.

The upper platform consists of a side-bar frame, composed of the side bars, A A, (resting on end springs, E E, centrally clipped to the rear axle and bolster,) and semi-elliptic springs B B, suspended to or otherwise supported by the side-bar frame.

The spring B may be connected to the side bars from hangers or links, as shown in my Patent No. 148,497, March 10, 1874, and may be connected at any suitable point either to the side bars or end springs, E. I prefer, however, to suspend them at one end, as at D, upon oscillating links, and at the other upon stationary links, as at D'. I will here observe that if both ends of these side springs, B, were pivoted to movable or oscillating links the lower spring-platform, B', serving as a spring-

perch, could not be braced by the cross-stays H, or otherwise, to the side springs, so as to retain the front axle in its requisite upright position when in use, for the obvious reason that, as the draft of the horse pulls forward by the front axle, the side springs, by reason of their resting at both ends in oscillating links, would have a longitudinal motion, and through the cross-stays H carry forward with them the lower platform or spring-perch, B, and thus impart to the front axle a rotating movement, and thereby throw a torsional strain upon the front end spring, E. Therefore, in the absence of rigid perches usually employed in side-bar wagons, and substituting for them, as in my present invention, a lower spring platform or perch, either the front or rear ends of both upper and lower springs, B and B', must pivot to a stationary shackle, and at the opposite ends to oscillating ones, as seen at D D and D².

With the axle and spring frame are combined braces or stays A, by which the opposite shoulders of the rear axle are braced directly to the side bars, and which, while they retain the rear axle in its required right-angled position to the side bars, also serve to cushion the hind wheels against any solid jar, as when striking any unyielding object in the road. For example, any shock received at the rear end of the axle-brace A' at 1 is transmitted directly and laterally to the side bar at 2, and thence transferred to D and D', when it is lost or broken by the end springs, E.

Ordinarily, in this class of vehicles, wherein the combination of side bars, A, and end springs, E, is employed, a rigid perch or perches are interposed between the two axles, and the axle-braces A' are extended directly from the rear axle to these perches, and when the wheels strike any solid object there is no relief afforded to any part of the running-gear. I limit this application of axle-stays A' to the rear axle and side bars, A, only when the latter rest upon end springs, E, at one or both ends, for I am aware that side bars bolted or clipped directly to the rear axle and bolster, and provided with a brace, A', extended from the axle to the side bar, are old, and I make no claim thereto. I secure the same advantage

in cushioning the hind axle and wheels, whether both the front and rear springs, E, or only the rear spring and a bolster or front axle, are employed.

5 I unite the lower and upper springs by the cross-braces H, on which I carry the body, the same as shown in my patent of November 27, 1877, No. 197,669; but in place of securing the body directly to these braces H, as in
10 above-recited patent, I attach to them the body-blocks I, which serve a threefold purpose: first, of giving to the body a longer bearing than when bolted directly to the cross-stays; second, of raising the lower edge of the body
15 above the springs to prevent the latter from obstructing the view of that part of the body which otherwise would be hid between the springs; and, third, to regulate the hang of the body—that is, the body may be raised or
20 lowered at either end, according to the face given these body-blocks I, and besides, being rigidly bolted to the cross-stays H, they assist in maintaining the rigidity of the structure.

The body thus suspended has a double
25 spring-support: first, that afforded by the spring side-bar frame, and second, that furnished by the semi-elliptic spring B, re-enforced, if desired, by the spring or springs of the lower platform, B'.

30 The springs B B' may consist of several leaves, or of a single plate rolled with a central rib, a, as shown. In the latter case I use a metallic clip-seat, T, formed at the lower side to fit the rib a, which retains it laterally, and
35 shaped to afford a proper bearing for one or more of the clips K, by which the ends of the cross-bars or stays are connected. This constitutes a strong, neat, and easily-applied attachment.

40 To facilitate the connection of the end of the spring or springs of the lower platform, B', I construct the yoke S, as shown in Fig. 3,

with a lower shackle-plate, W, terminating in a shackle, x, supporting the spring-bolt x', and perforated to receive the bolts s' s', and
45 the upper plate, V, also perforated to receive said bolts by which the plates are connected to the axle. Both plates are perforated to receive the king-bolt, and may be relatively adjusted by nuts R R', applied to the bolts on
50 opposite sides of each plate, and the upper plate, V, has holes to receive the ends of the clips connecting the bolster.

To facilitate the suspension of the side springs, B, inside the side bars, I extend the
55 lower plate, b, of each clip so as to form a pivot or bolt, c, to which the end of the spring-link is connected.

I claim—

1. The combination of the side-bar frame, 60 springs B B, each secured at one end to said frame by an immovable bolt or pivot and at the opposite end to links suspended therefrom, and lower spring-platform, connected to the upper side springs, substantially as set
65 forth.

2. The combination of the side-bar frame, constructed as set forth, side springs, B, suspended thereto, lower center spring, B', cross-stays H, and body-blocks I I, supported di-
70 rectly by said stays, all as and for the purpose set forth.

3. The yoke S, consisting of the lower shackle-plate, W x, head-block or bolster-plate V, and connecting bolts or clips, substantially as and
75 for the purpose set forth.

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

CYRUS W. SALADEE.

Witnesses:

G. H. WELCH,
MICHAEL BATTEN.