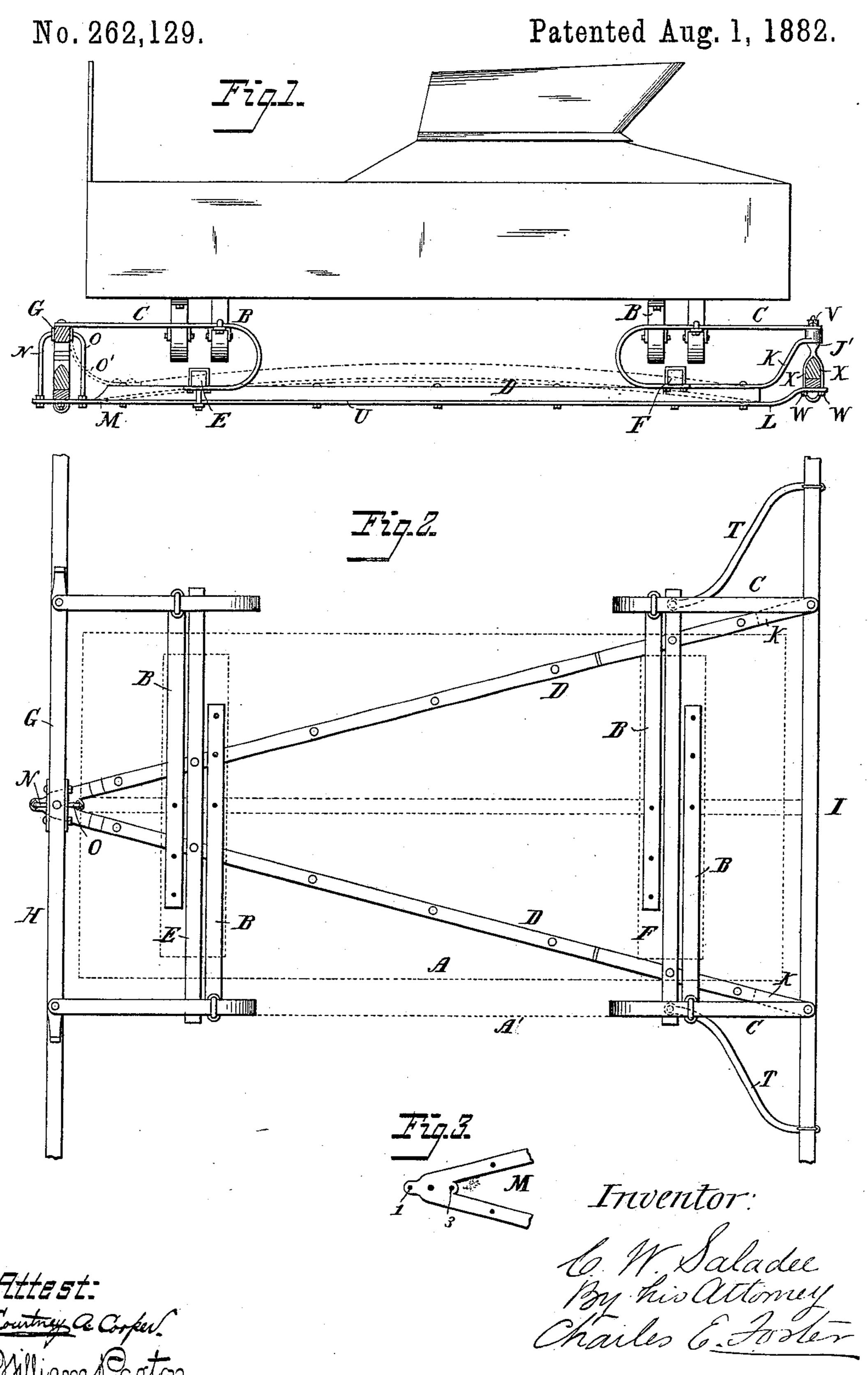
## C. W. SALADEE.

## RUNNING GEAR FOR VEHICLES.



## United States Patent Office.

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## RUNNING-GEAR FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 262,129, dated August 1, 1882.

Application filed May 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, CYRUS W. SALADEE, of Torrington, Litchfield county, Connecticut, have invented certain Improvements in Run-5 ning-Gears for Vehicles, of which the following

is a specification.

My invention relates to running gear for vehicles, the main feature of which consists in providing the same with a front and rear platto form adapted to receive and carry respectively the front and rear cross-springs supporting the body, and has for its object the application of the various well-known styles of approved springs now used in combination with "side bars" with-15 out the employment of the latter, and to admit not only of carrying the body as low as in a side-bar gear, but to facilitate the "crampping" or turning of the vehicle in a much smaller circle than the presence of side bars would ad-20 mit of.

To carry the body of a pleasure-vehicle as low as it is possible to hang it is a requirement which heretofore has been generally found practical only in that class of running-gear de-25 nominated "side-bar" gear; but, while this object is thus attained, the presence of the side bars, between which to hang the body, results in certain defects, which it is the object of my invention to remove, and which I effect by the 30 construction shown in the drawings, in which—

Figure 1 is a side elevation of a buggy in which are represented my improvements. Fig. 2 is a top or plan view of the gear, and Fig. 3 is a detached view of the iron stay supporting

35 the front ends of the perches.

The axles H I are connected by perches D D, which may be straight or slightly arched, as shown in dotted lines, Fig. 1, converging toward the front, while their rear ends are se-40 cured to the axle at widely-separated points. A third perch, as shown in dotted lines, Fig. 2, may be added in all cases when greater strength is required. The front ends of these perches rest upon a forked plate or brace, M, 45 Fig. 3, the ends of which may be welded to the plates U, applied to the bottom side of the perches. This brace-plate M has its front end secured to the bottom of the front axle by the king-bolt, and the two hanger-bolts N O, ex-50 tended from the opposite sides of the bolster G, are passed down through the holes 1 and 3 | the front wheel would come in contact with the

in the said plate M. An extra brace, O', (see dotted lines, Fig. 1,) may be extended from the top of the perches to the bolster G when greater strength is required. The rear ends of the 55 perches D are attached to the axle by plates K and L, extending above and below the axle, as shown. Bars E and F extend transversely across the perches D, as seen in Fig. 2, and spring-braces C are supported at each corner 60 of the structure, and diagonal braces T extend from the opposite ends of the axle to the ends of the cross-bar F. The spring-braces C are extended in front from the bolster G to the cross-bar E, the inner ends of the braces C be- 65

ing curved downward, as shown.

It will now be seen that this construction and arrangement of gear admit of the application and use of most, if not all, of the approved springs now used in side-bar gears with- 70 out the employment of side bars; but for general purposes I prefer that class of springs shown in the drawings, being the old and wellknown crossed springs attached to the bottom of the body, at the sides, then crossing each 75 other and the bottom of the body in the usual way; but in place of having their outer ends attached to side bars, as in the old way, they are secured to the spring-braces C of the end frames or platforms. It will now be seen that 80 as the weight is imposed upon the springs B, it is transferred to the end platforms or frames, C. It will be apparent that these end frames or platforms, supporting the springs, may be made in different ways.

The absence of side bars in the construction of this gear imparts to it two very important advantages not attainable in side-bar gears first, a full side view of the body is not obstructed, as is the case when side bars are used, 90 and the body depressed between them as it is when loaded; and, second, the absence of side bars admits of the front wheels turning or cramping around against the body in place of coming in contact with the side bar. This lat- 95 ter point of advantage, resulting from the absence of side bars, may be now clearly understood by reference to Fig. 2, where dotted line A' will represent the position of a side bar and dotted line A the side of the body. It reco will thus be seen that in turning the vehicle

side bar on line A'; but in the absence of the latter the wheel could "cramp" around some three or four inches farther till it came in contact with the bottom-edge line A of the body, thus admitting of turning the vehicle in a much shorter space, and yet retaining every desirable feature of the side-bar class of buggies.

The rear ends of the perches D and spring-braces C, composing the rear platform of the gear, are secured to the rear axle, I, by means of "saddle-clips," having prongs X X inclosing the axle I, and passing through the lower brace, L, of the perch, and securing the latter up against the under side of the axle by nuts W W. At the upper end of this clip is a shoulder, J', above which projects a bolt, that passes through the ends of both the upper perchbrace, K, and rear end of the spring-brace C, which are secured by a nut, V.

The precise arrangement herein shown and described for connecting the axles and for combining the spring-braces C, or their equivalents, with the perch D and bolster and axle is not

essential.

I claim—

1. In a running-gear for vehicles, the com-

bination of the perch or perches connecting the axles, the bolsters, and braces C C, connected to the bolsters, arranged at the corners of the gear, and supporting the springs upon 30 which the body rests, substantially as and for the purpose set forth.

2. The combination of the body, the springs BB, attached to the bottom of the body at the sides, then crossing each other below the body, 35 and spring-supporting braces CC on opposite sides, supported by the frame, substantially as

shown and described.

3. The combination of the saddle-clip having prongs X X and shoulder J', and pin, with 40 the perch-braces K L, and rear axle, I, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two sub-

scribing witnesses.

CYRUS W. SALADEE.

Witnesses:
C. L. McNeil,
ISAAC W. Brooks.