M. DONNELLY.

Side-Bar Wagon.

No. 163,853. Patented June 1, 1875.

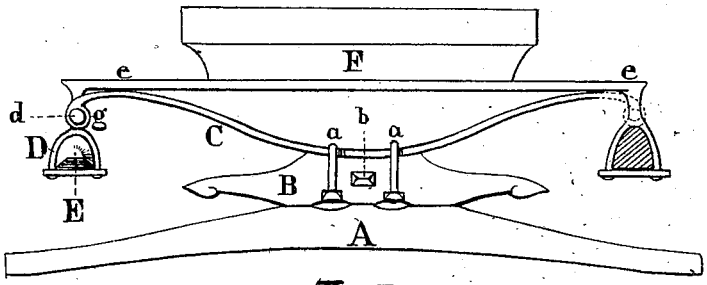

Fig. 1.

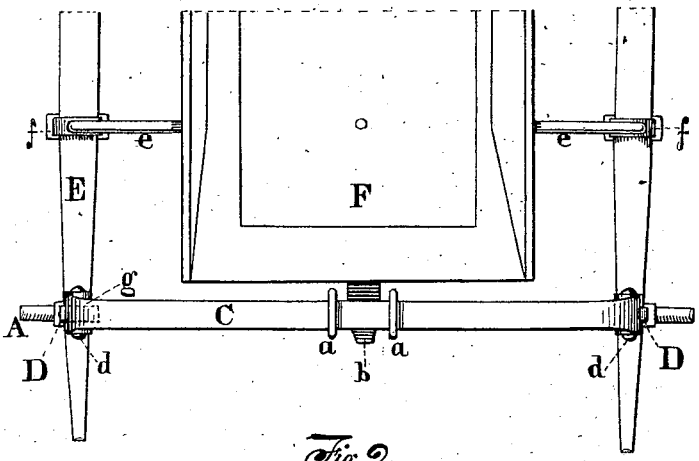

Fig. 2.

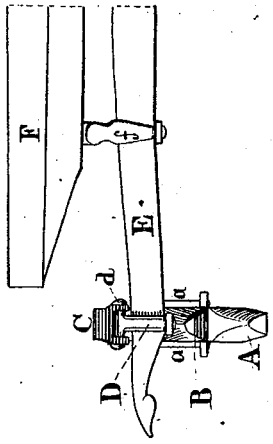

Fig. 3.

Witnesses
Harry C. Beach
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Inventor,
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UNITED STATES PATENT OFFICE.

MARTIN DONNELLY, OF PEORIA, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO HARRY E. BEACH, OF SAME PLACE.

IMPROVEMENT IN SIDE-BAR WAGONS.

Specification forming part of Letters Patent No. **163,853**, dated June 1, 1875; application filed February 24, 1875.

To all whom it may concern:

Be it known that I, MARTIN DONNELLY, of the city of Peoria, in the county of Peoria, in the State of Illinois, have invented an Improvement in Side-Spar Buggies; and do declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a side view; Fig. 2, a plan view; Fig. 3, end view of spring, clip, block, and bed-piece with spar suspended.

The object of this invention is to prevent the great wear and rack incident to the side spars of buggies, &c., when mounted in the usual manner.

I do this by turning down the ends or heads of the half-elliptic springs, as shown in Fig. 1, and hang each end of the respective side spars in a clip made pendent from the respective ends of the said spring. The weight of the body is upon said side spars, as is usual, and, by the means described, said spars are freed from the strain caused by the oscillation of the ends of the springs, moving, as they do, in the arc of a circle when attached to the springs in the ordinary manner—*i. e.*, by a clip, which binds the end of the spar rigidly to the top of the spring-head.

In the drawings, A represents the bed-piece; B, the head-block; *a a*, the clips, which bind down the spring to said head-block; C, the spring, styled half-elliptic, having the ends or heads bent downward to suspend the respective pendent clips D from instead of, as in the common mode, seating them upon the top of the springs; *d*, a horizontal pin or bolt, which sustains the spar-clip; D, the side-spar clip, of the usual stirrup shape, one at either end of a side spar, E, made pendent by an eye and bolt, *d*, from the head or end of the spring; E, the side spars, each of which sustain at their middle portion, as is usual, the clips *f* and irons *e*, which immediately sustain the buggy-body.

The advantages of this spring and clip are, that the ends of the spring are left free by removing the common rigid binding, which fastens the superimposed spar and clip to the upper side of its head or end, and suspending each end of the spars E in a pendent clip, D, pivoted to the spring-head. The twisting action of the vibrating ends of the spring upon the rigidly-connected side spars of the ordinary style is thus avoided, and the pivots *d* of the clips D leave the ends of the spring more free to move, thus obviating the torsion upon the side spars.

I do not claim the use of a link or double pivot as a connection between the ends of the iron bars which support the body of the buggy and the clips on the side spars, nor the placing of said bars below the spars; but I do connect both my bars and my spring ends with the side spars at the apex of the respective uniting-clips and above said spars by a single pin or pivot.

What I claim as my invention is—

1. The pivoted swinging side-spar clips D D, having an eye at its apex, and in combination with the supporting-spring C to sustain the ends of their respective side spars below the spring-heads, substantially as set forth.

2. The half-elliptic spring, having pendent ends *g g*, in combination with the fastening and pendent clip D, to avoid the torsion of the side spars, substantially as set forth.

3. The combination of the side spars E E and their clips D D below the spring-heads *g g*, the pivot-bolt *d*, and recurved spring-heads *g g*, substantially as described.

In testimony that I claim the foregoing improvement in side-spar buggies I have hereunto set my hand this 11th day of February, A. D. 1875.

MARTIN DONNELLY.

Witnesses:
HARRY E. BEACH,
JAMES M. MORSE.