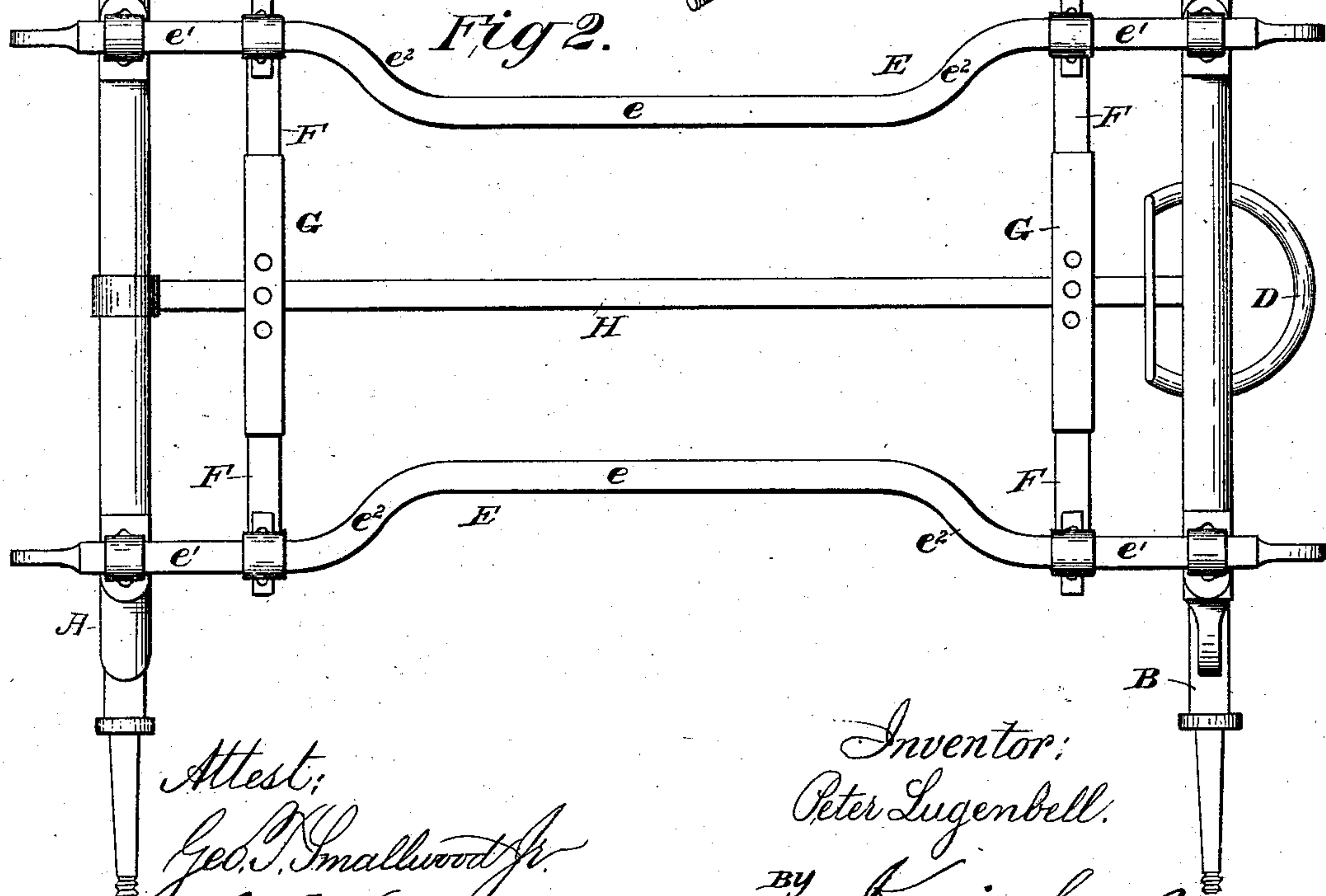
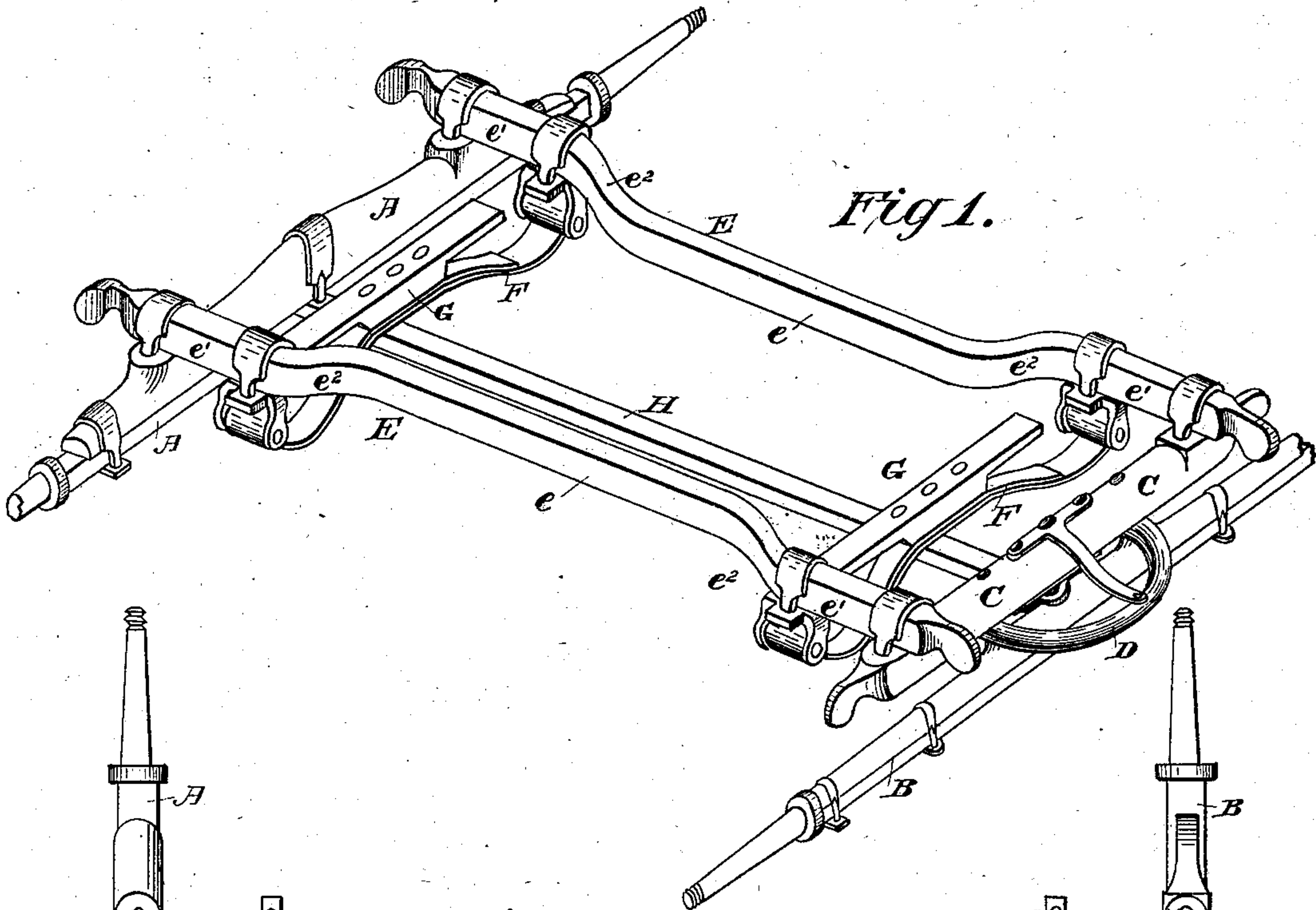


(Model.)

P. LUGENBELL.
SIDE BAR VEHICLE.

No. 259,880.

Patented June 20, 1882.



Attest:
Geo. P. Smallwood Jr.
L. M. Hopkins.

Inventor:
Peter Lugenberg.
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UNITED STATES PATENT OFFICE.

PETER LUGENBELL, OF GREENSBURG, INDIANA.

SIDE-BAR VEHICLE.

SPECIFICATION forming part of Letters Patent No. 259,880, dated June 20, 1882.

Application filed November 29, 1881. (Model.)

To all whom it may concern:

Be it known that I, PETER LUGENBELL, a citizen of the United States, residing at Greensburg, in the county of Decatur and State of Indiana, have invented a new and useful Improvement in Side-Bar Vehicles, of which the following is a specification.

The subject of my invention is a spring-vehicle constructed with in-bent side bars, as hereinafter described, in order to combine the advantages of long cross-springs with short couplings and facility of turning. The improvement also gives superior strength and durability, owing to the more perfect lateral and vertical bracing afforded; also lightness of weight, owing to the more effective disposition of the material.

In order that my invention may be fully understood it will be described with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a gear embodying the improvement, and Fig. 2 a plan of the same.

A represents the rear axle; B, the front axle; C, the bolster resting on the front axle by means of the fifth-wheel D or any usual or suitable substitute therefor to permit the turning of the axle beneath the bolster.

E E are my improved side bars, secured in customary manner at their respective ends to the rear axle, A, and bolster C, and formed with in-bent central portions, *e e*, between which and the end parts, *e'*, of the side bars are shoulders *e²*, preferably curved, as shown.

F F are cross-springs of semi-elliptic or other

usual or suitable form, to the central parts of which are bolted or clipped the usual cross-bars G G, for supporting the body. A central perch or reach is shown at H.

It will be observed that the extremities of the cross-springs F F are clipped to the end portions of the side bars, E E, so as to afford the greatest possible length to the said springs, resulting in the great and important practical advantages set forth at the outset.

The side bars may be either of metal or of steam-bent wood.

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

1. The side bars, E E, parallel with each other and with the body throughout their mid-length, at a greater distance apart than the width of the body, and bent outward at their ends to allow of the application of a longer cross-spring for the suspension of the body, as set forth.

2. In combination with parallel side bars, E E, having portions *e e* at their mid-length, parallel with the body and end portions, *e' e'*, bent outward, as shown, the cross-springs F F connecting corresponding out-bent portions of the side bars and supporting the body, as set forth.

In testimony of which invention I hereunto set my hand.

PETER LUGENBELL.

Attest:

DAN. M. HENRY,
JAS. P. LONG.