

(No Model.)

A. F. SHULER.
SIDE BAR VEHICLE.

No. 259,595.

Patented June 13, 1882.

Fig. 1.

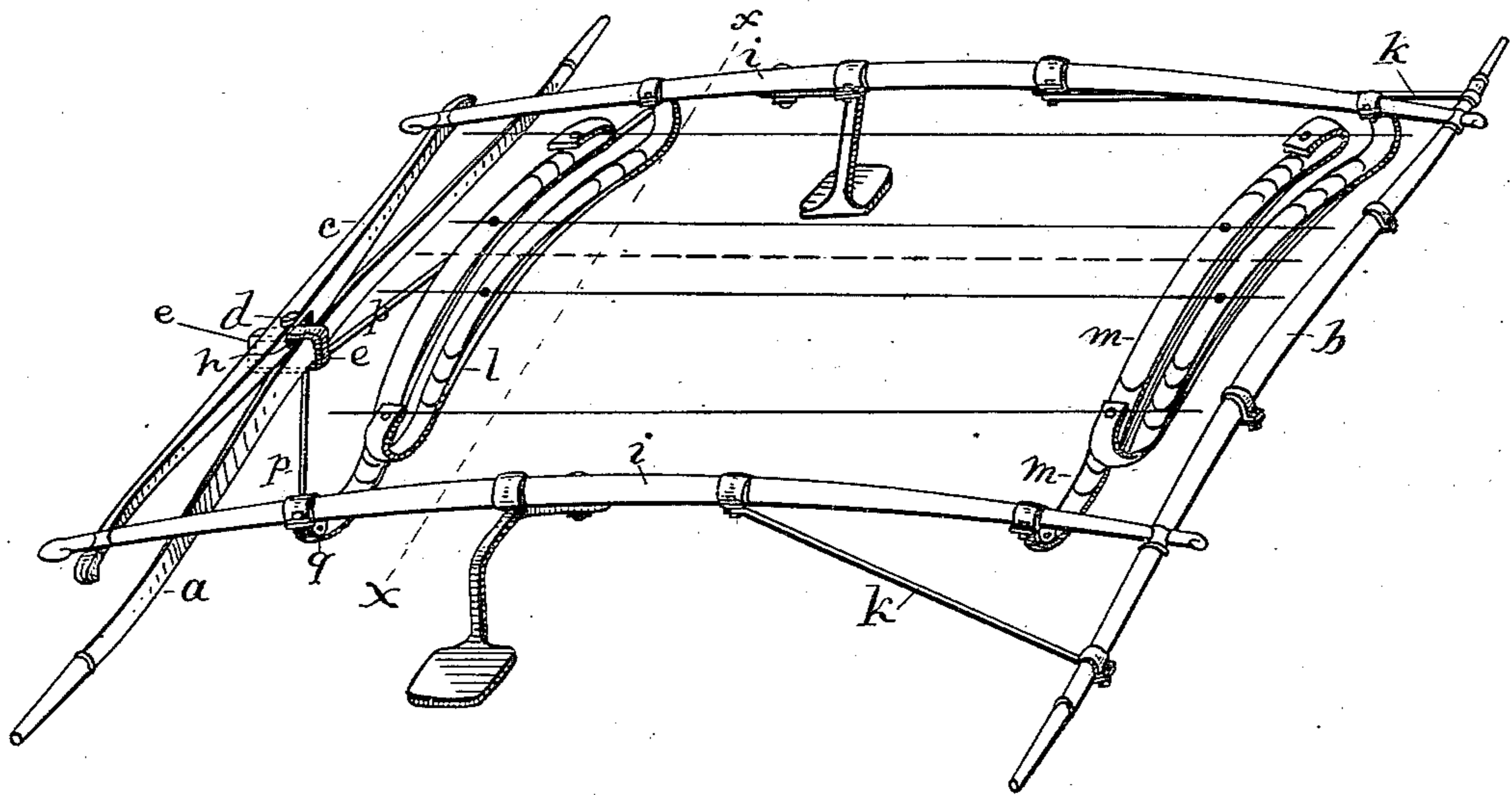


Fig. 2.

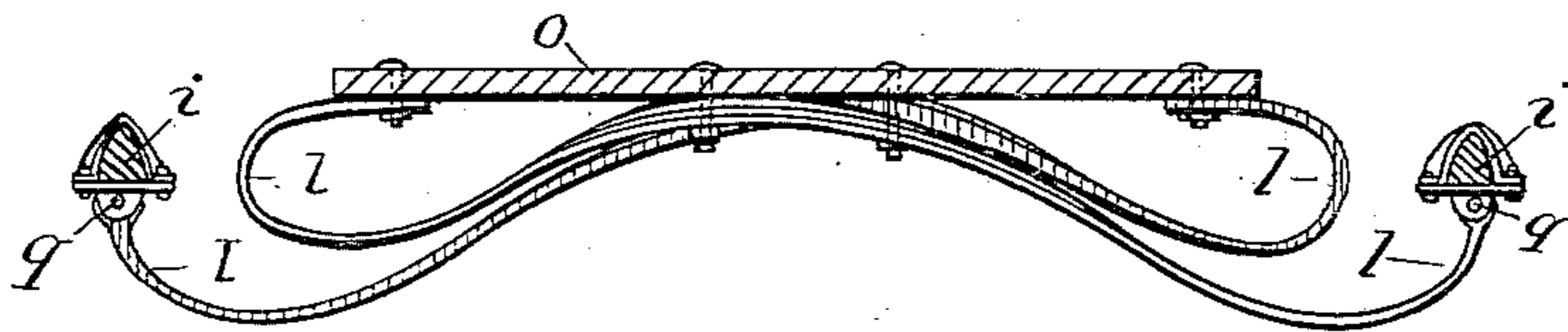
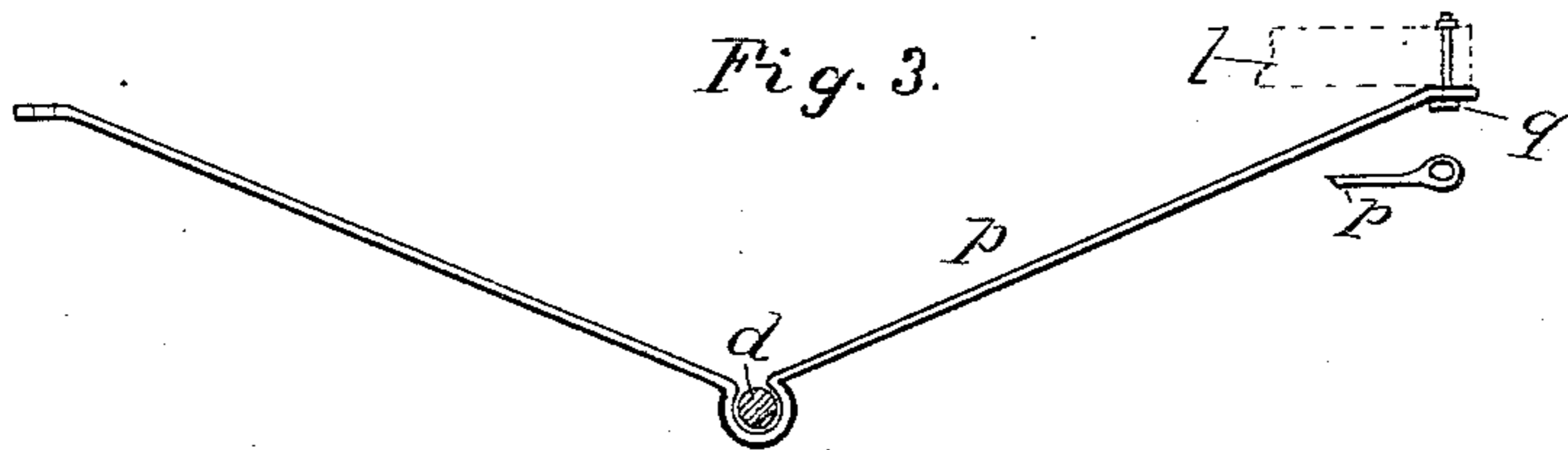


Fig. 3.



WITNESSES:

Thos. Houghton.
John Kemon

INVENTOR:

A. F. Shuler
BY *Wm. H. L.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ANDREW F. SHULER, OF ARCANUM, OHIO.

SIDE-BAR VEHICLE.

SPECIFICATION forming part of Letters Patent No. 259,595, dated June 13, 1882.

Application filed March 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, ANDREW F. SHULER, of Arcanum, of Darke county, and State of Ohio, have invented a new and Improved Running-Gear and Springs of Side-Bar Buggies; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in
10 which—

Figure 1 is a perspective view of my invention; Fig. 2, a transverse section on line *x x*, Fig. 1; and Fig. 3 is a detail view.

My invention relates to improvements in the running-gear and springs of side-bar buggies; and it consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth.

In the accompanying drawings, *a* represents the front and *b* the rear axle of my improved buggy.

c represents the front cross-bar, pivoted to the front axle in the usual manner by a king-bolt, *d*, which passes through holes in the centers of the front cross-bar and front axle, and also through holes in the opposite parallel arms of the clevis *e*, the upper arm of the clevis being inserted in a slot, *h*, in the middle of the front cross-bar, *c*, and the lower arm of the clevis lying under the lower face of the front axle, *a*.

i i represent the side bars of my improved buggy, secured near the ends of the front cross-bar, *c*, at their forward ends, and attached to the rear axle, *b*, near their rear ends.

k k represent angular side braces, secured to the axle *b* near their outer ends, and having their opposite ends secured to the side bars, *i i*.

l l represent the front springs, each consisting of a flat spring, one end of which is secured to a side bar *i* near to its front end, and is thence curved downwardly and then upwardly to the under face of the bottom of the buggy-body *o*, to which it is secured. The spring *l* is thence bent downwardly and then curved upwardly, with its opposite end resting under the bottom of the buggy-body near its opposite side. The other front spring *l* is parallel, and lies near the spring just described,

and is secured to the opposite side bar *i* and the bottom of the buggy, and runs in an opposite direction, as shown in the drawings.

m m represent the hind springs, secured to the opposite side bars *i*, and precisely similar in construction and arrangement to the front springs, *l*, just described. The front and hind springs, *l m*, may be provided with any desired number of leaves.

p represents a brace-rod secured to the head of the bolt *q*, which secures the front spring, *l*, to one of the side bars *i*. The brace-rod *p* passes thence through the clevis *e*, around the king-bolt *d*, and thence to the opposite bolt, *q*, which secures the opposite spring *l* to the opposite side bar *i*.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the side bars, *i i*, of the front springs, *l l*, and rear springs, *m m*, having a spring of each pair secured at one end to one of the side bars, and thence curved downwardly and upwardly and secured to the bottom of the buggy-body, and having the other two springs of each pair secured to the opposite side bar *i* at their outer ends, and thence curved downwardly and upwardly and secured to the buggy-bottom, substantially as described, and for the purpose set forth.

2. The combination, with the front axle, *a*, front cross-bar, *c*, having slot *h*, king-bolt *d*, clevis *e*, side bars, *i*, and front springs, *l*, secured to the opposite side bars at one end and to the buggy-body, of the brace-rod *p*, secured at its ends to the side bars, and passing through the clevis and around the king-bolt, substantially as described, and for the purpose set forth.

3. The combination of the front and rear axles, *a b*, slotted front cross-bar, *c*, king-bolt *d*, clevis *e*, side bars, *i*, brace-rod *p*, front and rear springs, *l l* and *m m*, constructed and arranged as shown, and brace-rods *k k*, substantially as described, and for the purpose set forth.

ANDREW F. SHULER.

Witnesses:

JOSEPH ROUTSON,
D. ROBESON.