

B. M. BECKWITH

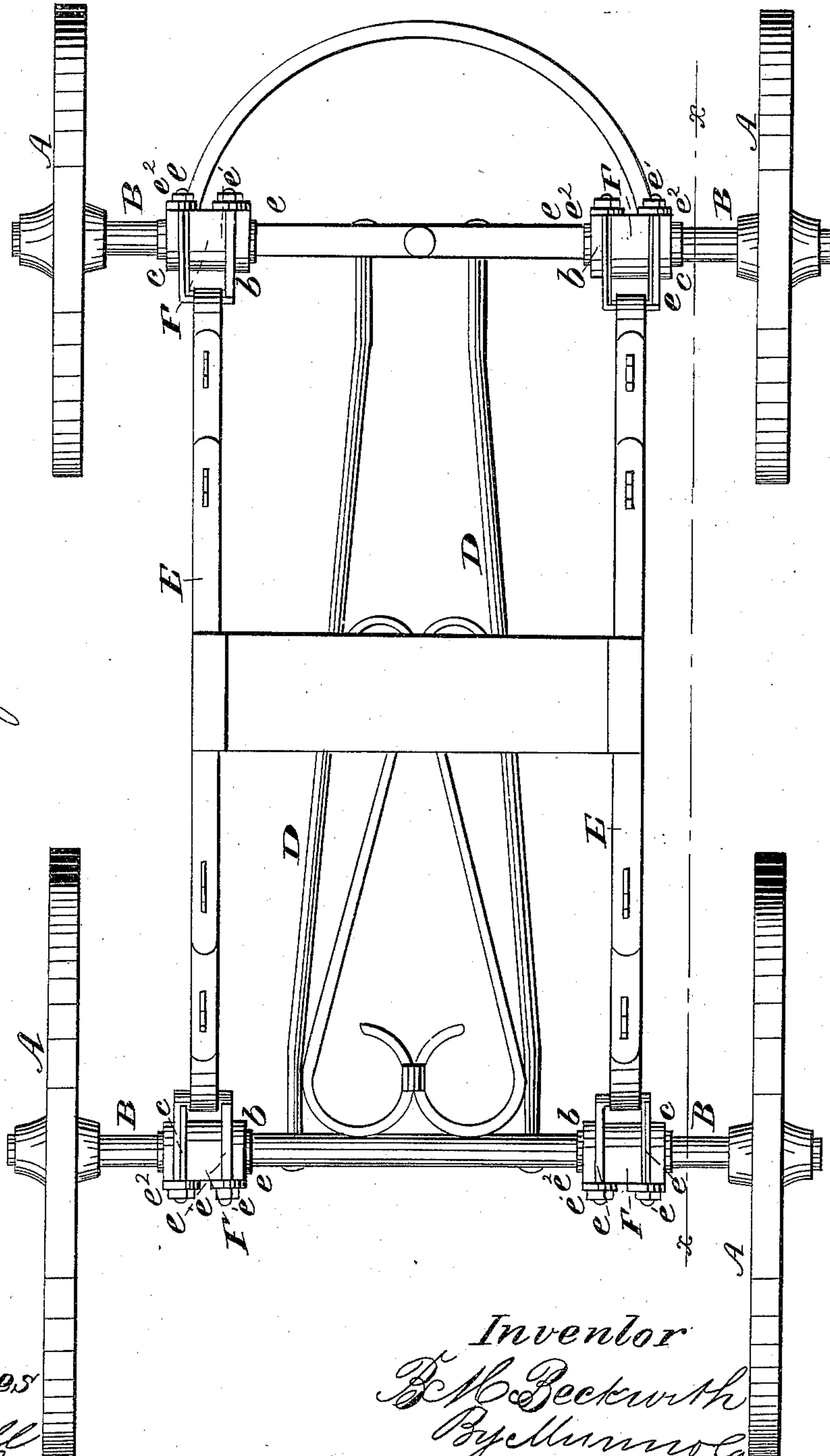
2 Sheets—Sheet 1.

Carriage-Spring.

No. 55,985.

Patented July 3, 1866.

Fig. 1.



Witnesses
W. F. Hall
Alex. A. C. Hancock

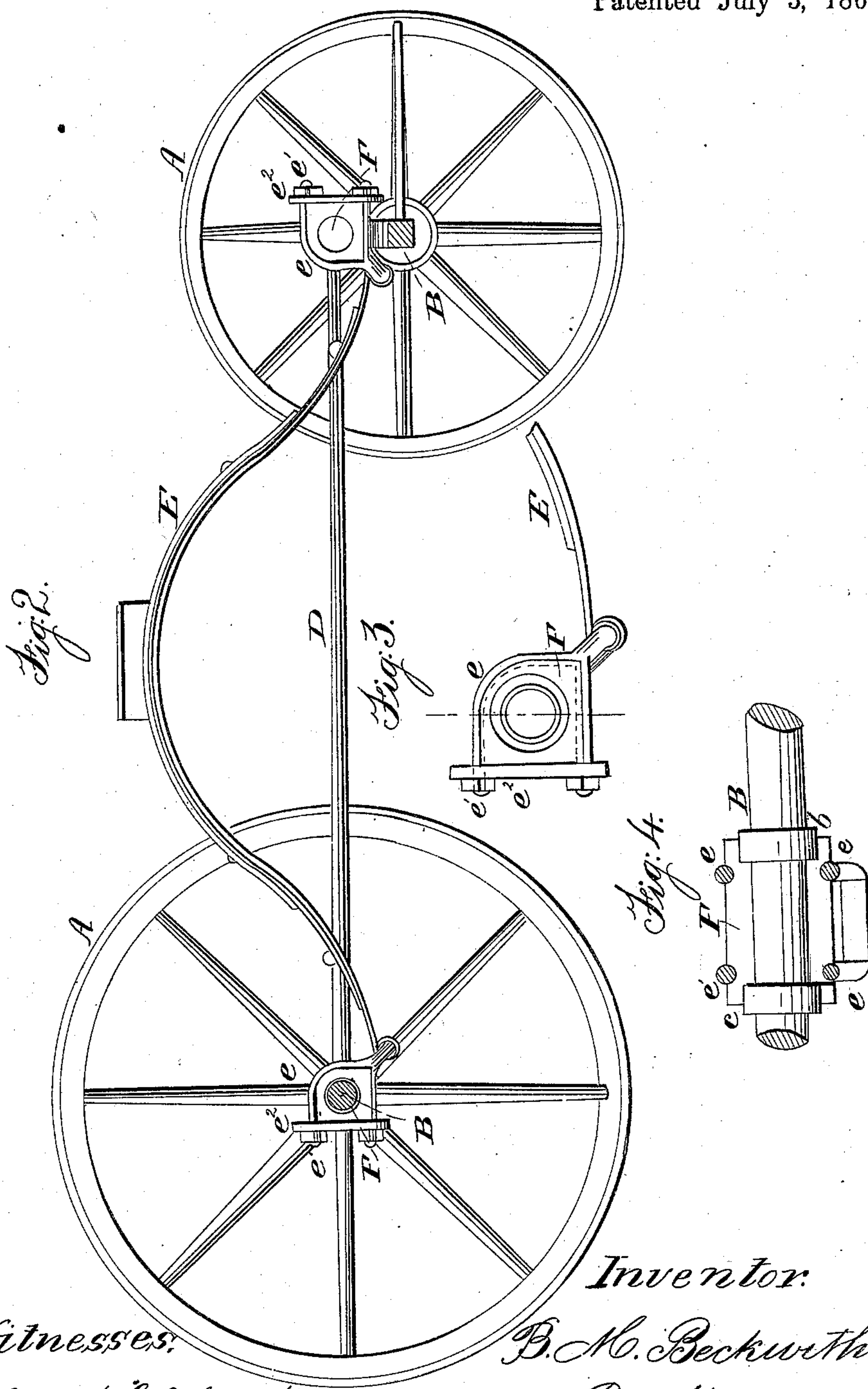
Inventor
B. M. Beckwith
By *Wm. W. C. Byrum*
Attorneys

B. M. BECKWITH.

Carriage-Spring.

No. 55,985.

Patented July 3, 1866.



Witnesses:
 Alex. A. C. Klauck
 W. F. Hall

Inventor:
 B. M. Beckwith
 By *Munn & Co.*
 Attorneys

UNITED STATES PATENT OFFICE.

B. M. BECKWITH, OF PLATTSBURG, NEW YORK.

IMPROVEMENT IN CARRIAGE-SPRINGS.

Specification forming part of Letters Patent No. 55,985, dated July 3, 1866.

To all whom it may concern:

Be it known that I, B. M. BECKWITH, of Plattsburg, in the county of Clinton and State of New York, have invented a new and Improved Mode of Attaching Buggy-Springs; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, reference being had to the accompanying drawings, which is made a part of this specification, and in which—

Figure 1 is a plan of a buggy embodying my improvement. Fig. 2 is a longitudinal section of the same, the line *x x*, Fig. 1, indicating the plane of section. Fig. 3 represents, in detail, one of the rotary boxes to which the spring is attached, this figure embracing a section and side elevation of the box.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to provide means to increase the efficiency of buggy-springs, and prevent them from exerting the twisting or wrenching action which is due to rigid connections between the extremities of the springs and their points of support.

The invention consists in attaching the springs to boxes, which are applied to the bolster and hind axle, and are capable of rotating thereon, so as to permit the extremities of the springs to play back and forth, or rather oscillate partly around their points of attachment, when the springs are deflected by the load or burden.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe the same in detail, in connection with the accompanying drawings.

A A may represent the wheels, B B the axles, C the bolster, and D the reach, of a buggy, which may be of customary construction. E E are the springs, which may also be of the ordinary construction. The springs have hitherto been fastened so that their extremities always remain immovable or stationary relatively to the axle, the effect of the same being to give the springs a constant tendency to twist and wrench the axle and bolster, and, of course, the strain consequent thereupon devolves upon the reach, and has a more or less injurious effect upon the buggy as a whole.

I attach the extremity of each spring E to

a box, F, which is fixed loosely upon the hind axle or bolster and adapted to rotate thereon.

Each box F may be made in two parts, so as to enable it to be applied between the shoulders *b b c c*, which retain the boxes in their place upon the hind axle and bolster.

When the two parts of the box have been applied in their appropriate position they are secured together by metallic bands *e* and nuts *e'*, or similar appliances, and these bands are formed and applied in connection with the loop *e*².

The attachment of the springs may be effected by their hooked ends engaged over the loops *e*².

Each box F is, of course, cylindrical on the interior, to make it snugly fit and rotate about the axle or bolster, and at each side of its central bearing the box is countersunk to receive the shoulders *b c* and exclude dust, &c. The effect of this mode of attaching the springs has been already explained.

It is manifest that when the springs are bent under their superincumbent weight their ends will vibrate about the axle and bolster, the strain or tension upon these supports being applied in the direction of a straight line drawn from the center to the points of attachment of the springs. Hence no twisting or undue strain can occur when the buggy-springs are applied according to my invention.

I do not limit myself to the particular form of box herein described and represented, as the same may be varied to suit the taste or the necessities of the occasion. It is only essential, in order to carry out my invention, that the boxes be so constructed and applied as to rotate upon the axle and bolster, retain positions on the same, and admit of the attachment of the springs.

Having thus described my invention, the following is what I claim as new and desire to secure by Letters Patent:

The boxes F, applied to the hind axle and bolster of a buggy, to admit of the attachment of the springs and permit their extremities to vibrate about the points of support, substantially as and for the objects specified.

B. M. BECKWITH.

Witnesses:

ALEXR. A. C. KLAUCKE,
W. F. HALL.