(No Model.)

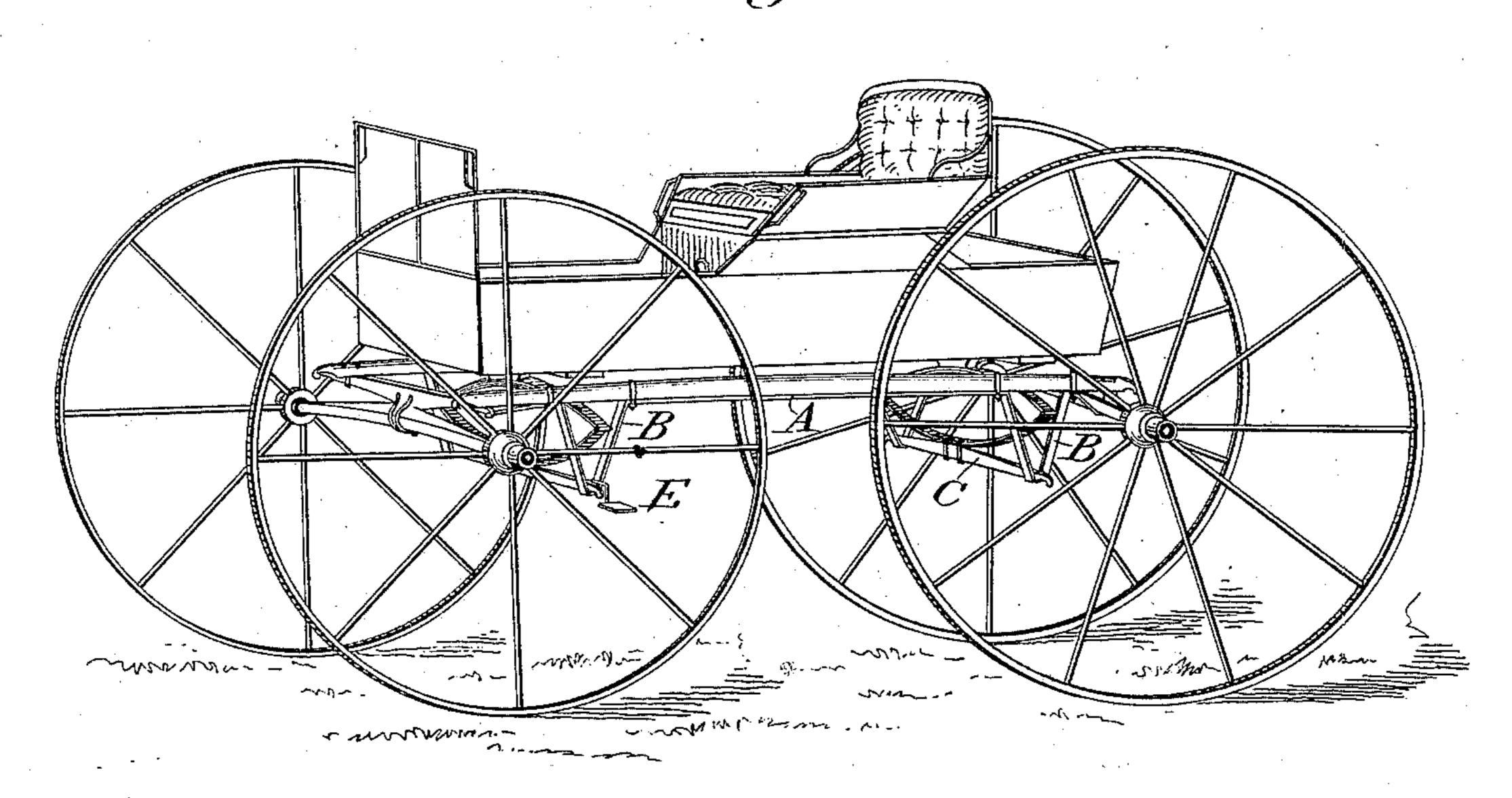
## E. & B. H. ZIEGLER.

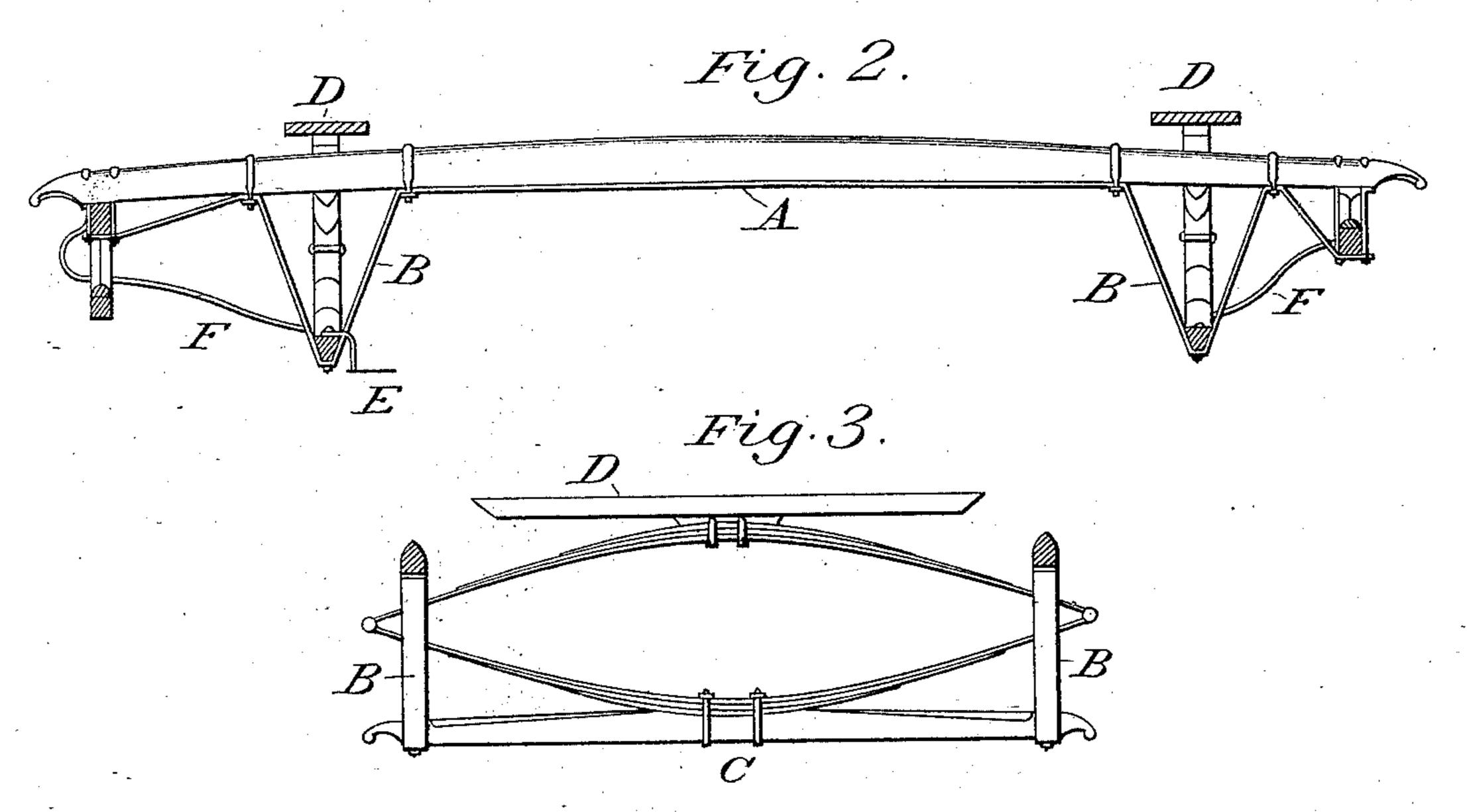
BUGGY GEARING.

No. 283,843.

Patented Aug. 28, 1883.

Fig. I





Witnesses: Standaus Classestanon Inventors.

Benjamin Hallman Giegler.

## United States Patent Office.

ENOCH ZIEGLER AND BENJAMIN HALLMAN ZIEGLER, OF BERLIN, ONTARIO, CANADA.

## BUGGY-GEARING.

SPECIFICATION forming part of Letters Patent No. 283,843, dated August 28, 1883.

Application filed October 17, 1882. (No model.)

To all whom it may concern:

Beit known that we, Enoch Ziegler and Benjamin H. Ziegler, of the town of Berlin, in the county of Waterloo, in the Province of Ontario and Dominion of Canada, (subjects of the Queen of Great Britain,) have invented certain new and useful Improvements in Buggy-Gearing, of which the following is a specification.

Our invention relates to the mode of hanging elliptic springs to side bars in such manner as to make the buggy more substantial, cheaper, and easier riding than the ordinary elliptic-spring buggy, the springs being hung as fully set forth in specification.

Figure 1 is a perspective view of the entire buggy. Fig. 2 is a vertical section of the side bars and hangers thereof. Fig. 3 is a cross-section vertical view of Fig. 2.

Similar letters refer to similar parts throughout the several views.

Letters A, as shown on drawings, are the side bars of the buggy, to the bottom of which are attached, by means of clips, continuous iron or other metal bars, which latter drop at a certain distance from each end of side bars, forming the hangers B, wherein the ends of the spring-bars C rest, and are firmly secured by means of bolts, and the continuous iron or other metal bars also form at each end of side bars braces by which the side bars are firmly secured to the back axle and head-block in front of

buggy. The elliptic springs are attached to the spring-bars C by means of clips or bolts, and to which clips or bolts are attached the 35 braces F, running to the back and front axles, for the purpose of keeping the springs and axles in a perpendicular position.

To the front spring-bars, C, and bolts securing them to the hangers B are also attached 40 the steps E, and to the top of the elliptic springs are clipped or bolted the spring-bars D, to which the body of the buggy is secured by means of bolts.

We are aware that prior to our invention 45 elliptic springs have been hung to side bars in buggies; but

What we claim as our invention, and desire to secure by Letters Patent of the United States, is—

The combination, in a buggy-gearing, of side bars, head-block, axles, spring-bars, elliptic springs, and the continuous metal bars A, secured to the side bars, forming hangers B and braces at each end of side bars, braces F 55 between springs and axles, and steps E, substantially as set forth.

ENOCH ZIEGLER. BENJAMIN HALLMAN ZIEGLER.

Witnesses:

J. E. STANTON, H. MILLER ANDREWS.