

(No Model.)

S. D. LANCE.

VEHICLE SPRING.

No. 294,242.

Patented Feb. 26, 1884.

Fig. 1.

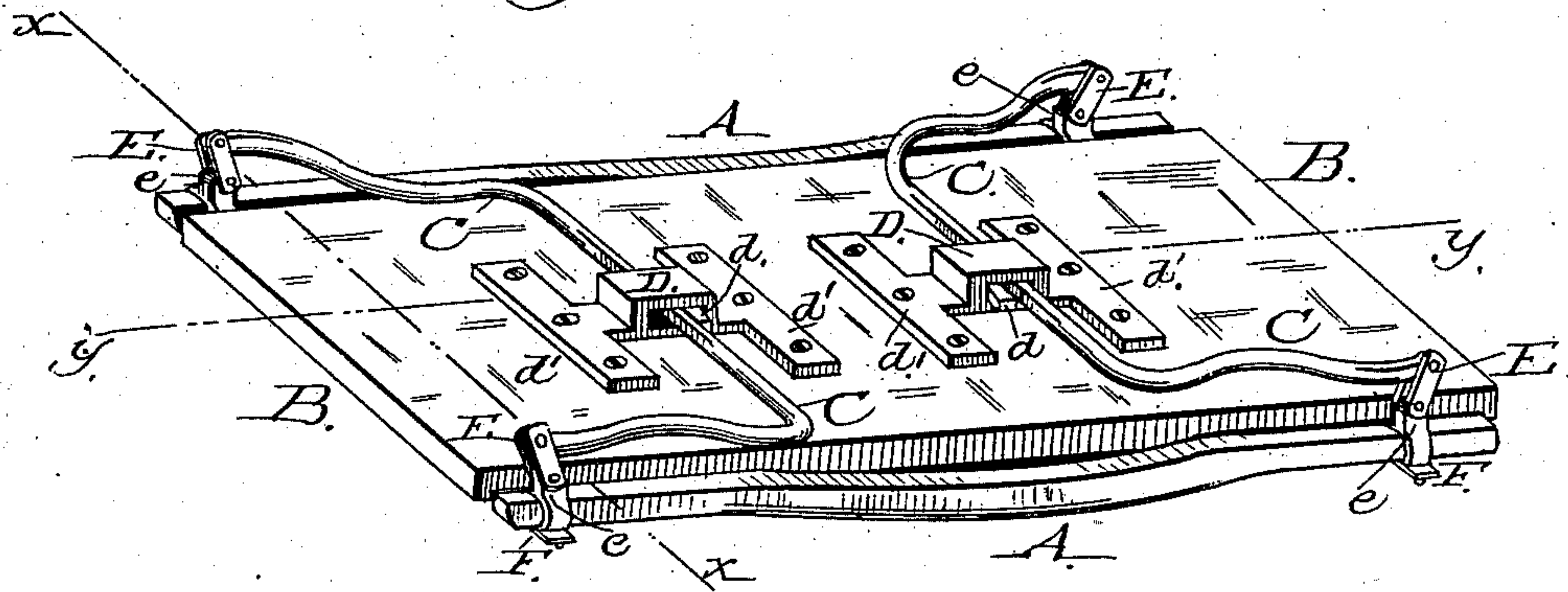


Fig. 2.

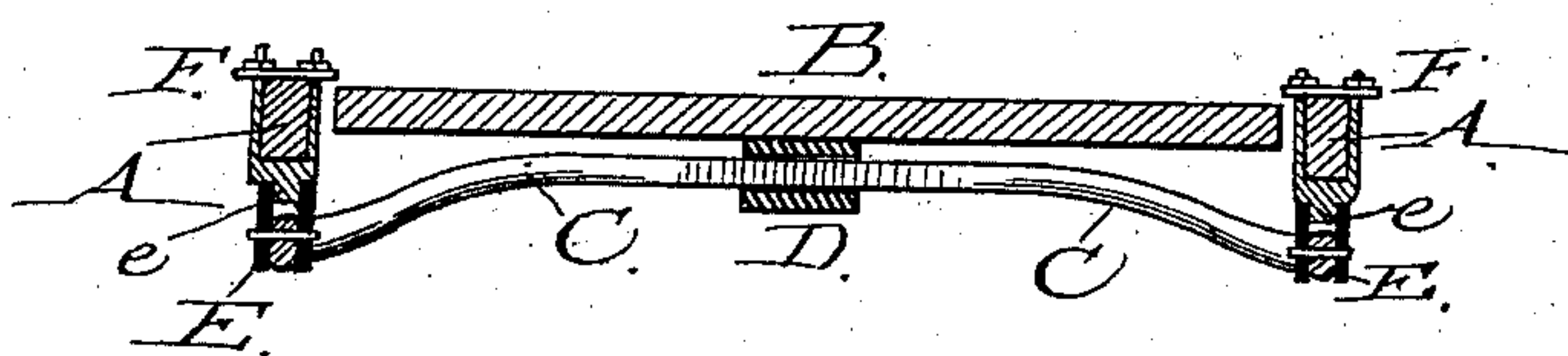


Fig. 3.

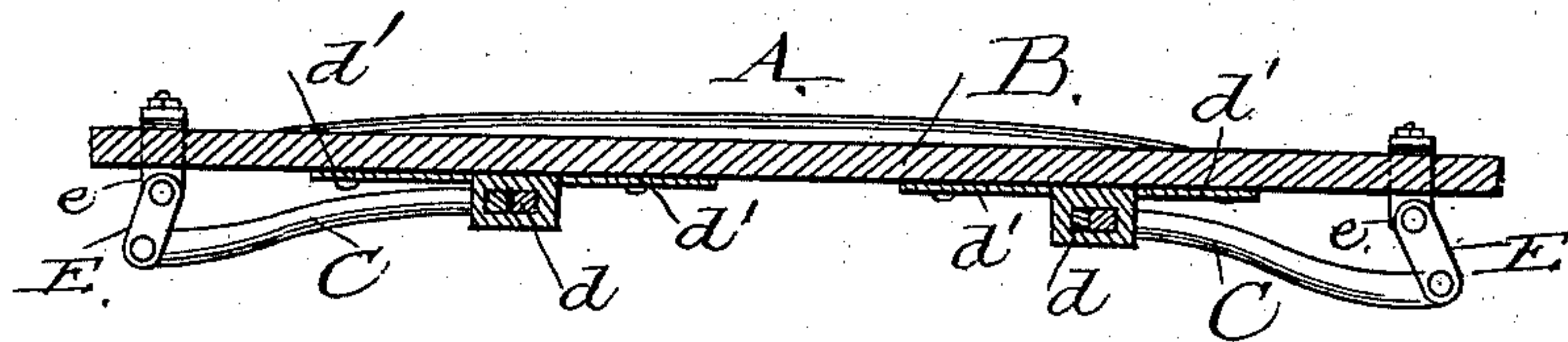
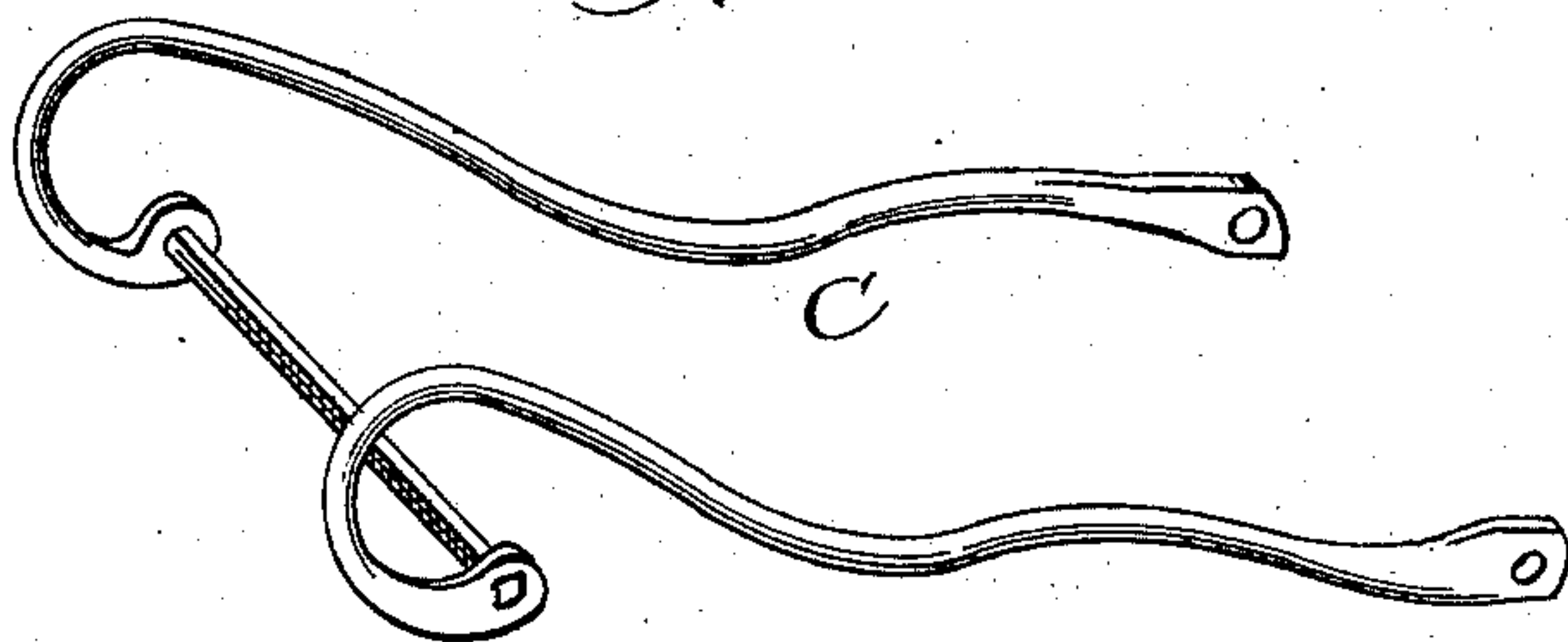


Fig. 4.



Attest;

Stetter Fowler
L. B. Applewhite,

Inventor;

Shields D. Lance
per Atty.

A. H. Evans & Co

UNITED STATES PATENT OFFICE.

SHIELDS D. LANCE, OF COLUMBUS, OHIO.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 294,242, dated February 26, 1884.

Application filed September 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, SHIELDS D. LANCE, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Vehicle-Springs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

10 Figure 1 is a perspective view of the under side of a vehicle-body with my improved springs attached. Fig. 2 is a transverse section of same on the line *x x*. Fig. 3 is a horizontal section of same on the line *y y*. Fig. 4
15 shows a modification of the spring.

My invention relates more particularly to springs for side-bar vehicles; and it consists of the combination and arrangement of devices hereinafter explained and claimed.

20 In order to enable others to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A represents the side bars; B, the under side of the bottom of a vehicle-body, and C the springs, bent as shown in
25 Fig. 1, and which may be made of a single piece of metal. The central portion of these springs where they pass through the plates D is made square, to fit vertically in the rectangular slots formed in each plate, and in which
30 each spring is tightly secured by the key *d*, as shown in Fig. 3. The plates D are prefer-

ably made with the T-shaped projections *d'*, in order to secure the greater surface to resist the pressure of the springs. The ends of the springs are loosely attached by the shackles E to the eyes *e*, which are rigidly secured below the side bars, A, by means of the clips F, as shown in Fig. 2. 35

It is evident that while the torsion-springs thus made and applied will give a pleasant and easy motion to the body of the vehicle there will be no tendency to spread the side bars, which is one of the essential objects of my present invention. 40

It is evident that instead of the springs C being made of a single piece of metal, as shown in Fig. 1, the side pieces may be made separately and connected by a cross-bar, as shown in Fig. 4, without departing from the spirit of
45 my invention. 50

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

In a side-bar vehicle, the bars A, provided with the clips F, eyes *e*, and shackles E, in combination with the springs C and plates D, all constructed to operate substantially as and for the purpose set forth. 55

SHIELDS D. LANCE.

Witnesses:

CARL F. KOTTKE,
GEO. S. ARTZ.