

(No Model.)

J. H. MORAN.

VEHICLE SPRING.

No. 277,770.

Patented May 15, 1883.

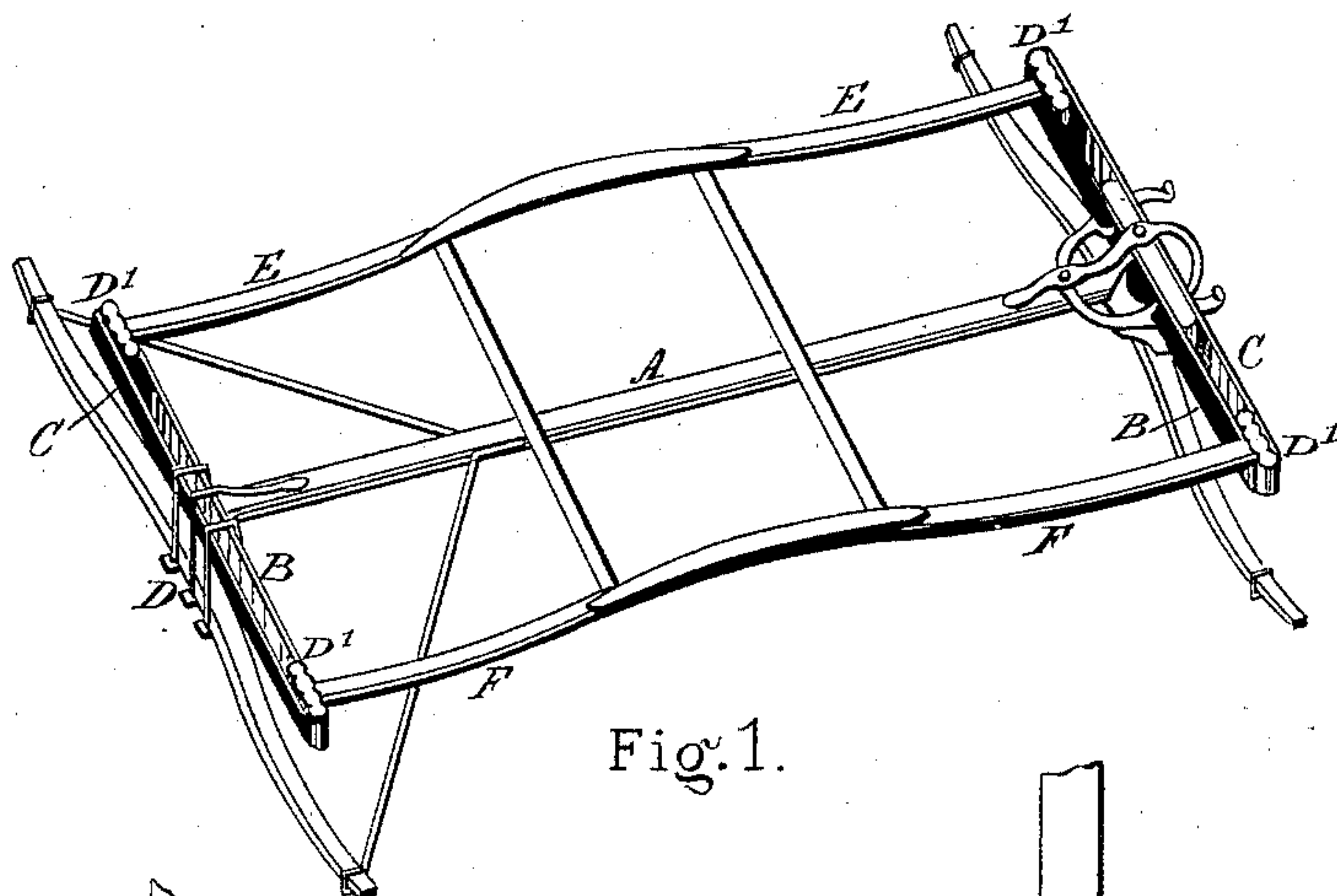


Fig. 1.

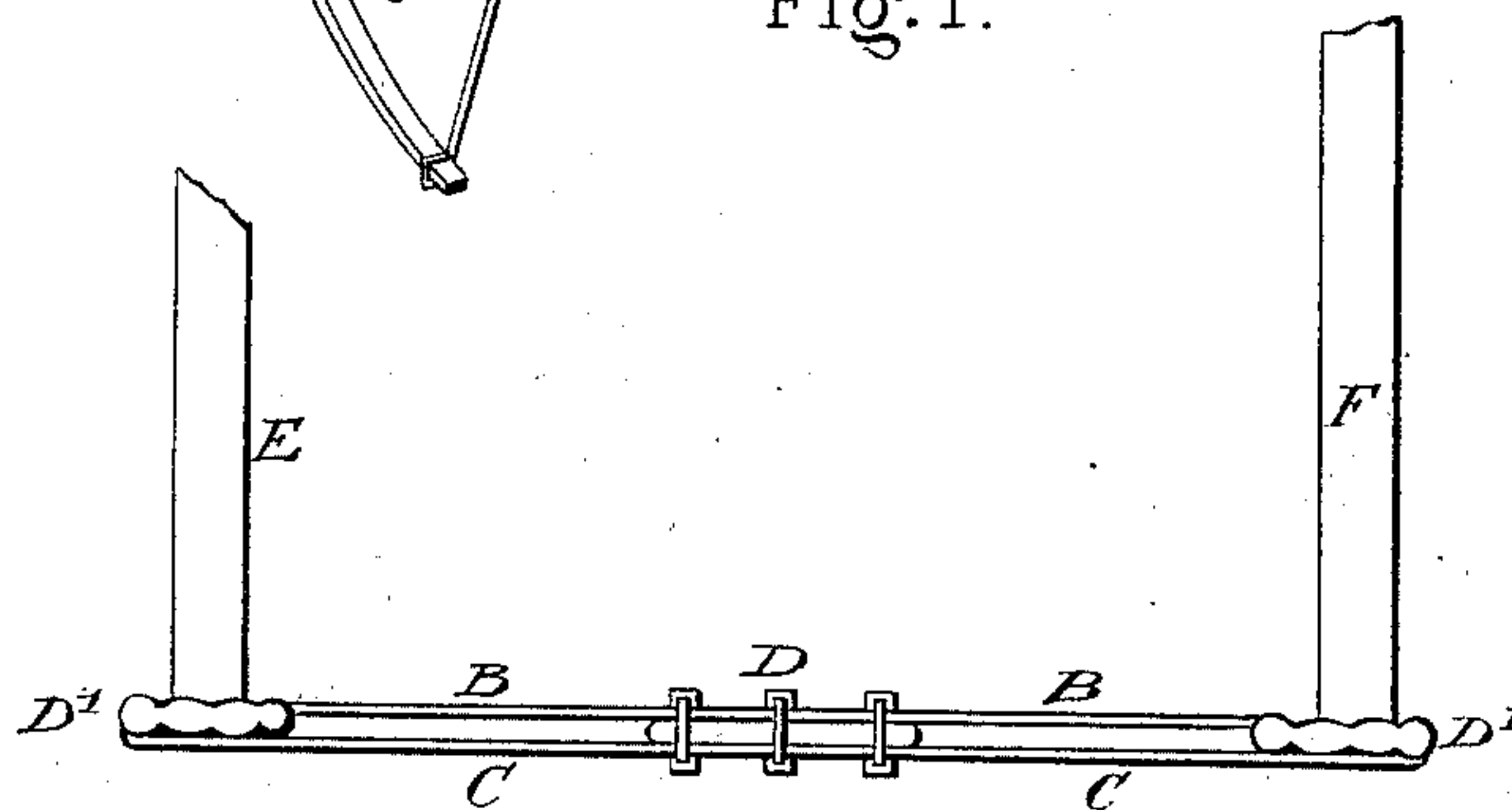


Fig. 2.

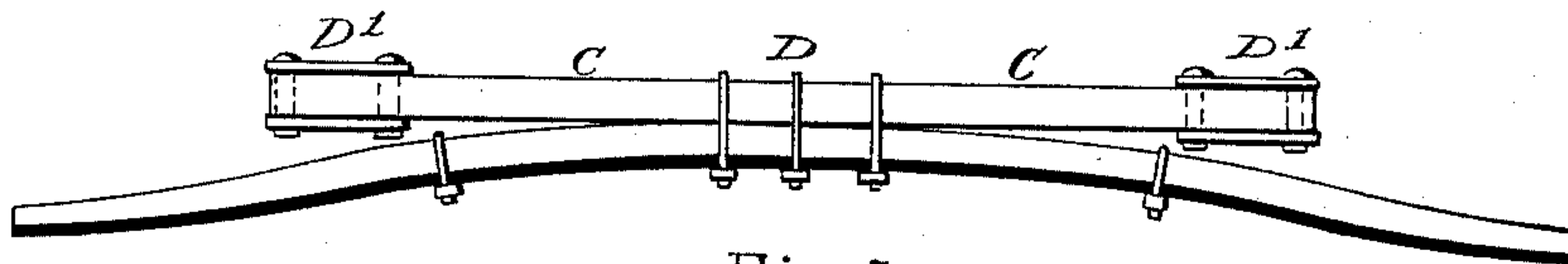


Fig. 3.

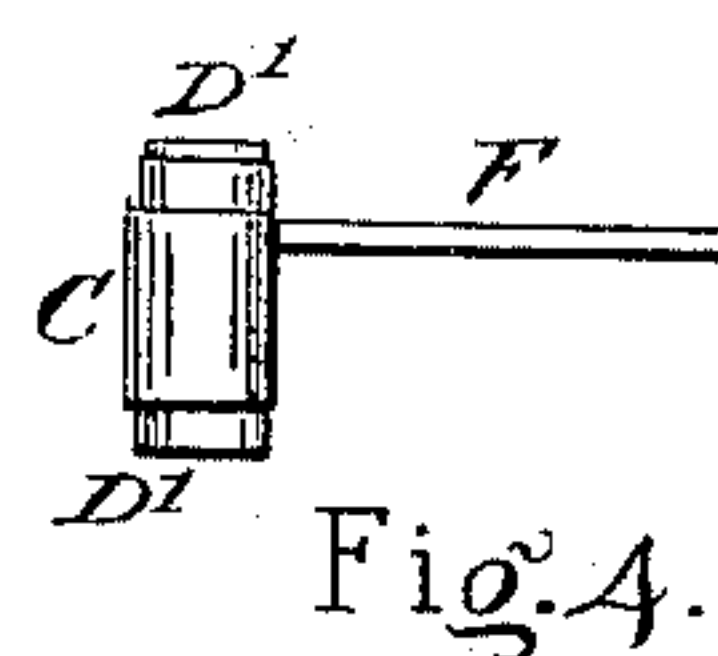


Fig. 4.

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JEREMIAH H. MORAN, OF LONDON, ONTARIO, CANADA.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 277,770, dated May 15, 1883.

Application filed April 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, JEREMIAH HENRY MORAN, a subject of the Queen of Great Britain, residing at London, in the county of Middlesex and Province of Ontario, Canada, have invented certain new and useful Improvements on Vehicle-Springs; and I do hereby declare that the following is a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a new mode of attaching the side springs of all kinds of vehicles; and it consists in supporting said side springs on horizontal and parallel straight springs, of unequal lengths, placed on edge a short distance apart and attached at right angles to the reach, so that a complete platform-spring is obtained through this combination of side springs and horizontal cross-springs on edge, all as will be hereafter fully described, as set forth in the claim hereto annexed.

In the accompanying drawings of my invention, Figure 1 is a perspective view. Fig. 2 is a plan view of part showing cross-springs on top. Fig. 3 is an end view, and Fig. 4 is a detail.

A is the reach, to which I attach in the ordinary manner a pair of horizontal and parallel straight springs, B C, of unequal lengths, placed on edge a short distance apart, as shown, and at right angles to the reach. The

general configuration of these springs is clearly shown in the drawings, their attachment to the reach being by clips or bolts D D, or their equivalents.

E F are the side springs, the ends of which are attached to the outer ends of the horizontal cross-springs B C, usually as shown—that is, resting between the ends of said horizontal springs and connected thereto by bolts D' D' dropping down through their ends. The side springs, being placed as described and carried on the horizontal springs B C, prevent all twisting and bearing down of the head-block and reaches, as the play of the springs B C is entirely horizontal, instead of twisting over or up and down. A lighter side spring than usual may be applied, and from the freedom of action a complete platform-spring is obtained.

I claim as my invention—

The horizontal and parallel straight vehicle-springs B C, of unequal lengths, placed on edge a short distance apart and at right angles to the reach A, and attached thereto and in combination therewith the side springs, E F, on which the body of the vehicle is supported, substantially as shown and described, and for the purpose set forth.

JEREMIAH HENRY MORAN. [L. S.]

Witnesses:

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