

LEWIS RIGHTER.

Spring for Vehicles.

No. 121,662.

Patented Dec. 5, 1871.

Fig. 1.

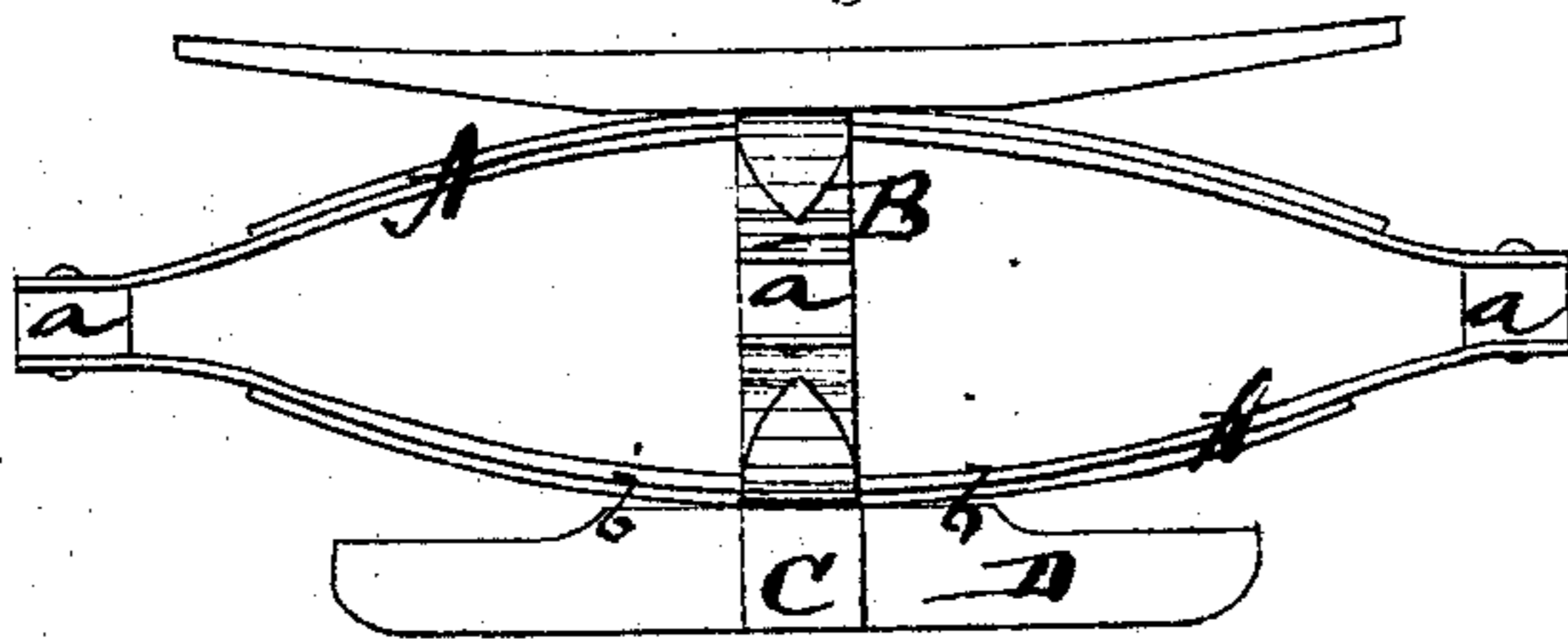


Fig. 3.

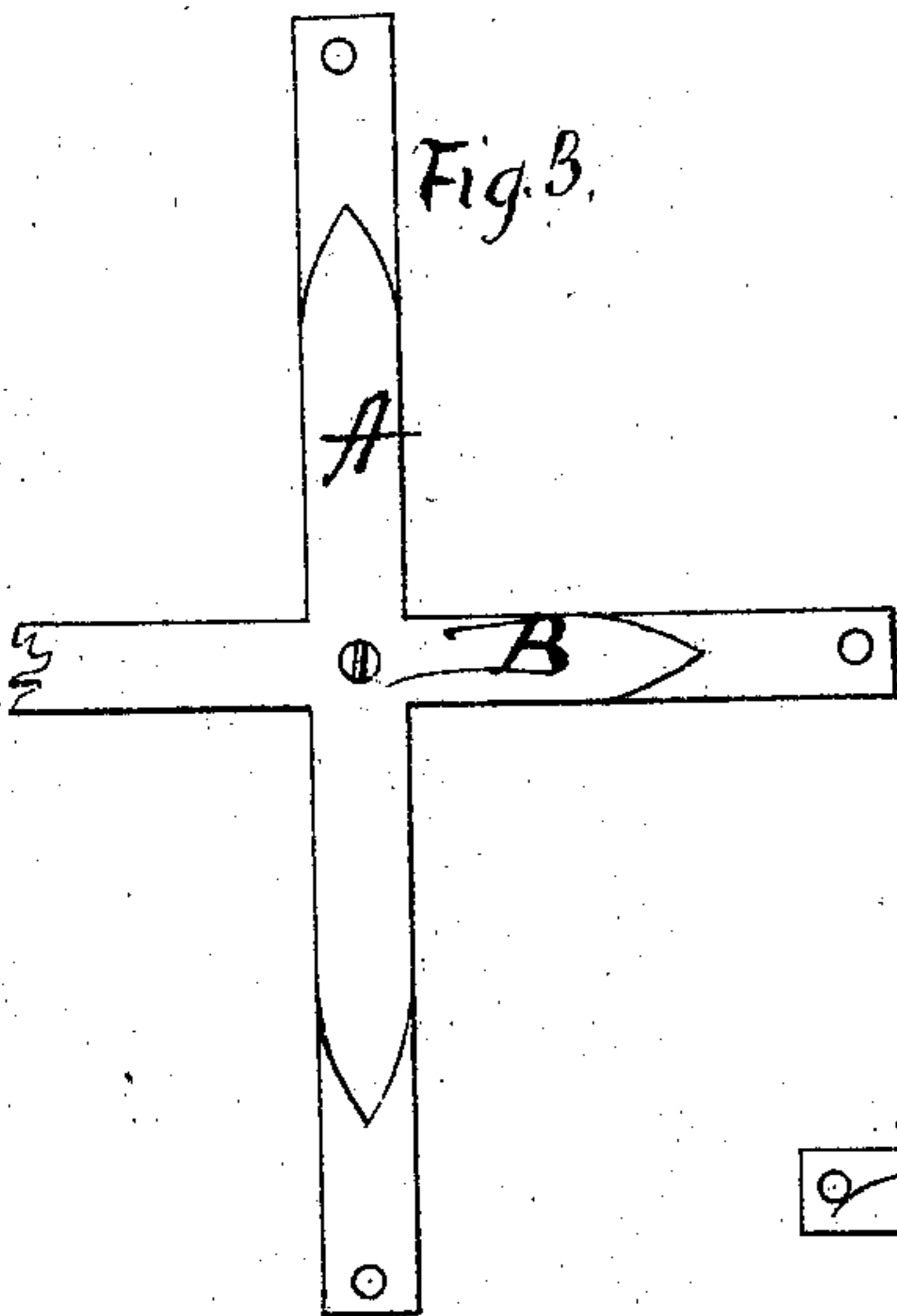
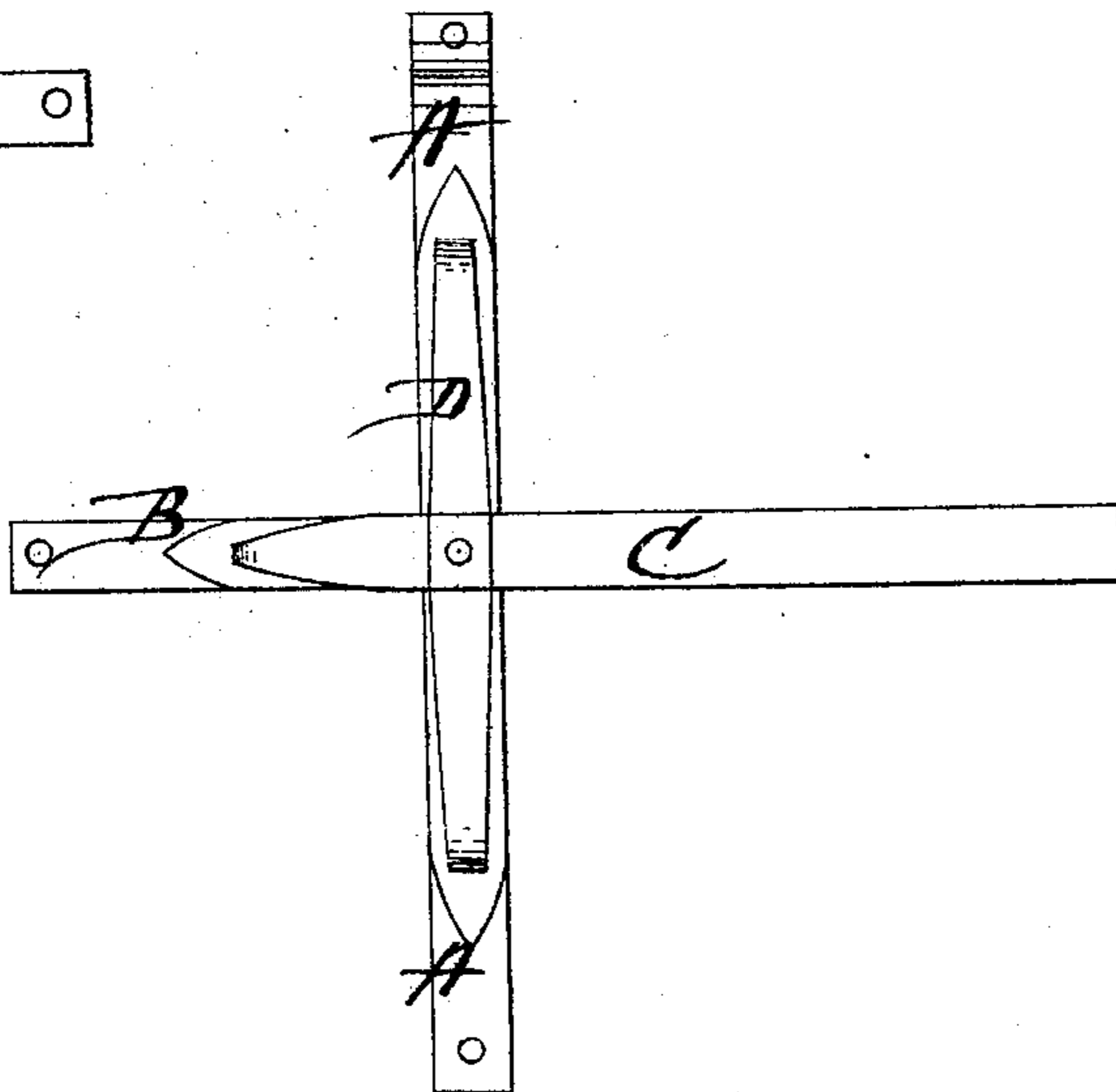


Fig. 2.



Witnesses.

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Inventor.

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per
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UNITED STATES PATENT OFFICE.

LEWIS RIGHTER, OF SALEM, OHIO.

IMPROVEMENT IN SPRINGS FOR VEHICLES.

Specification forming part of Letters Patent No. 121,662, dated December 5, 1871.

To all whom it may concern:

Be it known that I, LEWIS RIGHTER, of Salem, in the county of Columbiana and in the State of Ohio, have invented certain new and useful Improvements in Springs for Vehicles; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the construction of a spring for vehicles, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing which forms a part of this specification, and in which—

Figure 1 is a front view; Fig. 2, a bottom view; and Fig. 3, a plan view of my spring.

A represents the usual elliptic spring for vehicles, made of two or more leaves, as may be desired. To this elliptic spring I have added in the center a similar spring, B, which runs parallel with the reach C and at right angles with the spring A. The leaves of the springs A and B may each be made of one piece—that is, each leaf is in the shape of a cross—as shown in Fig. 3, and forms one leaf for both springs. Or the

two springs may be made separate, and connected together at right angles in the center by any suitable means. In this manner my invention may be applied to the ordinary elliptic spring. In either case it forms a substantial and self-bracing spring. Between the ends of the inner leaves of the two springs are inserted pieces *a a* of leather, rubber, or other suitable elastic material. The reach C is provided with a cross-bar, D, and the combined spring rests upon the cross formed between said reach and cross-bar. Both of said parts are, on their upper side, provided with shoulders *b b*, as shown in Fig. 1, to form bearings for the spring.

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

The combination of the springs A and B, crossing each other at right angles at their centers, and provided with the elastic blocks *a a* between each end of each spring, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of May, 1871.

LEWIS RIGHTER.

Witnesses:

R. H. GARRIGUES,
HARRY B. GARRIGUES.

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