

(No Model.)

L. M. FITCH.
WAGON SPRING.

No. 577,163.

Patented Feb. 16, 1897.

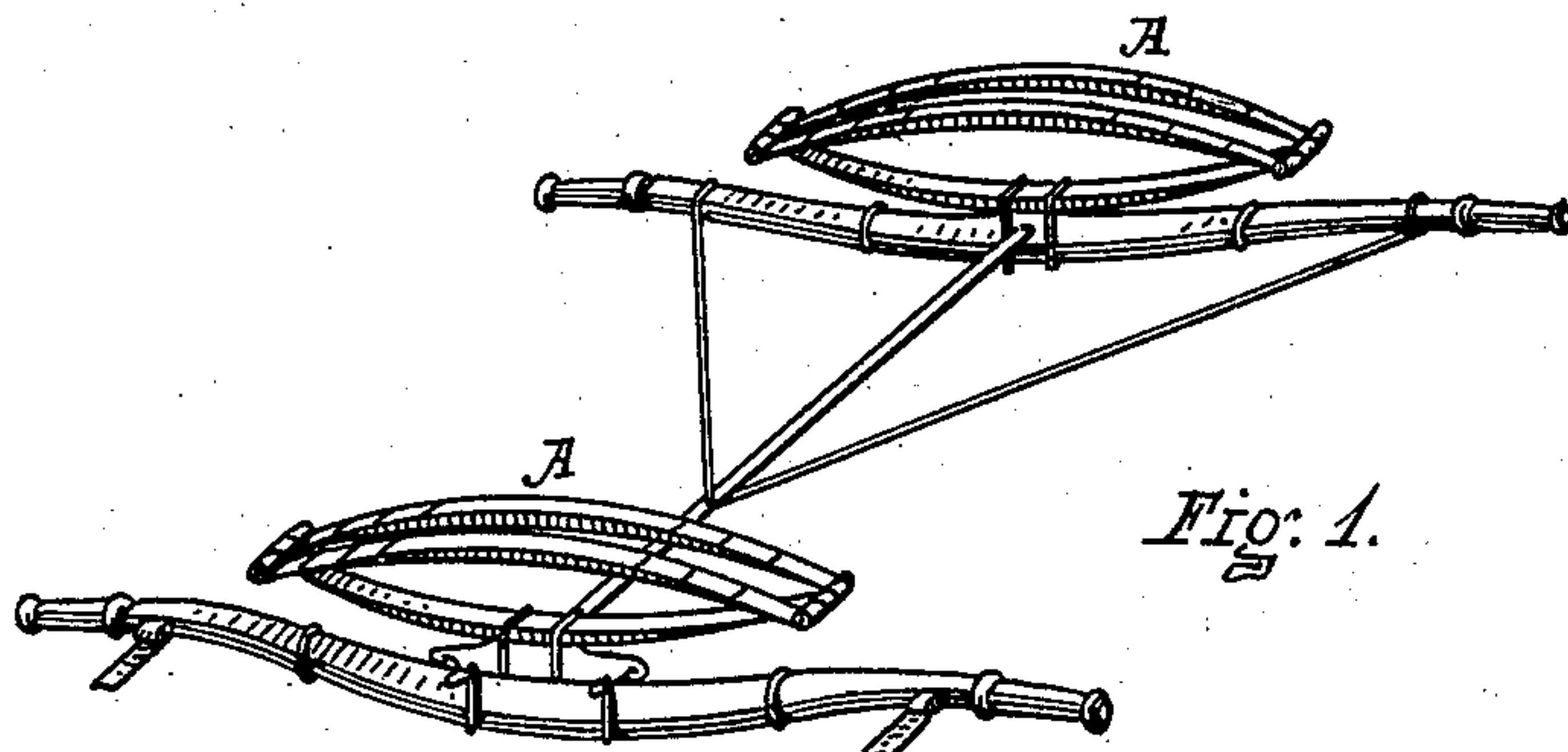


Fig. 1.

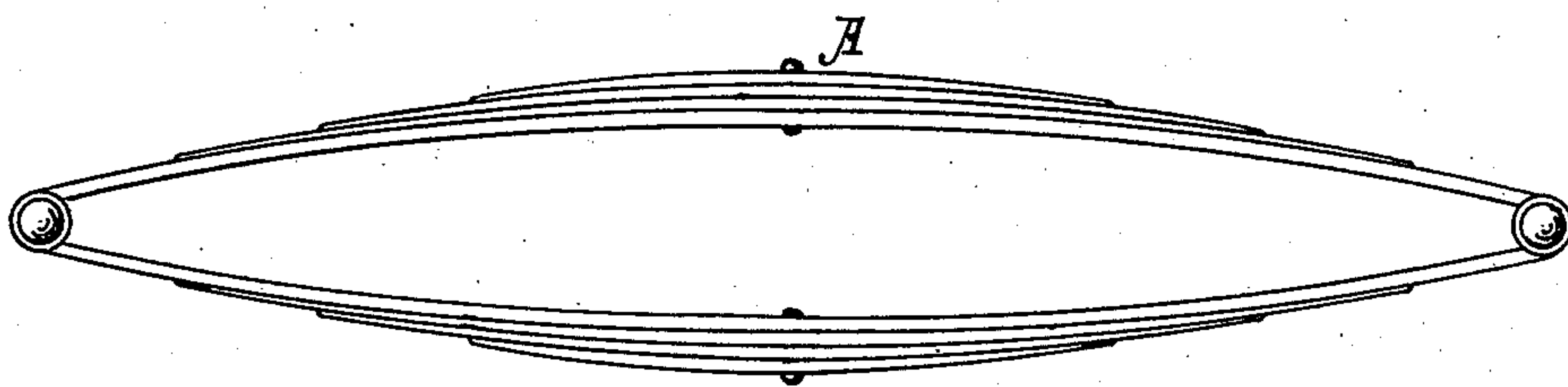


Fig. 2.



Fig. 3.

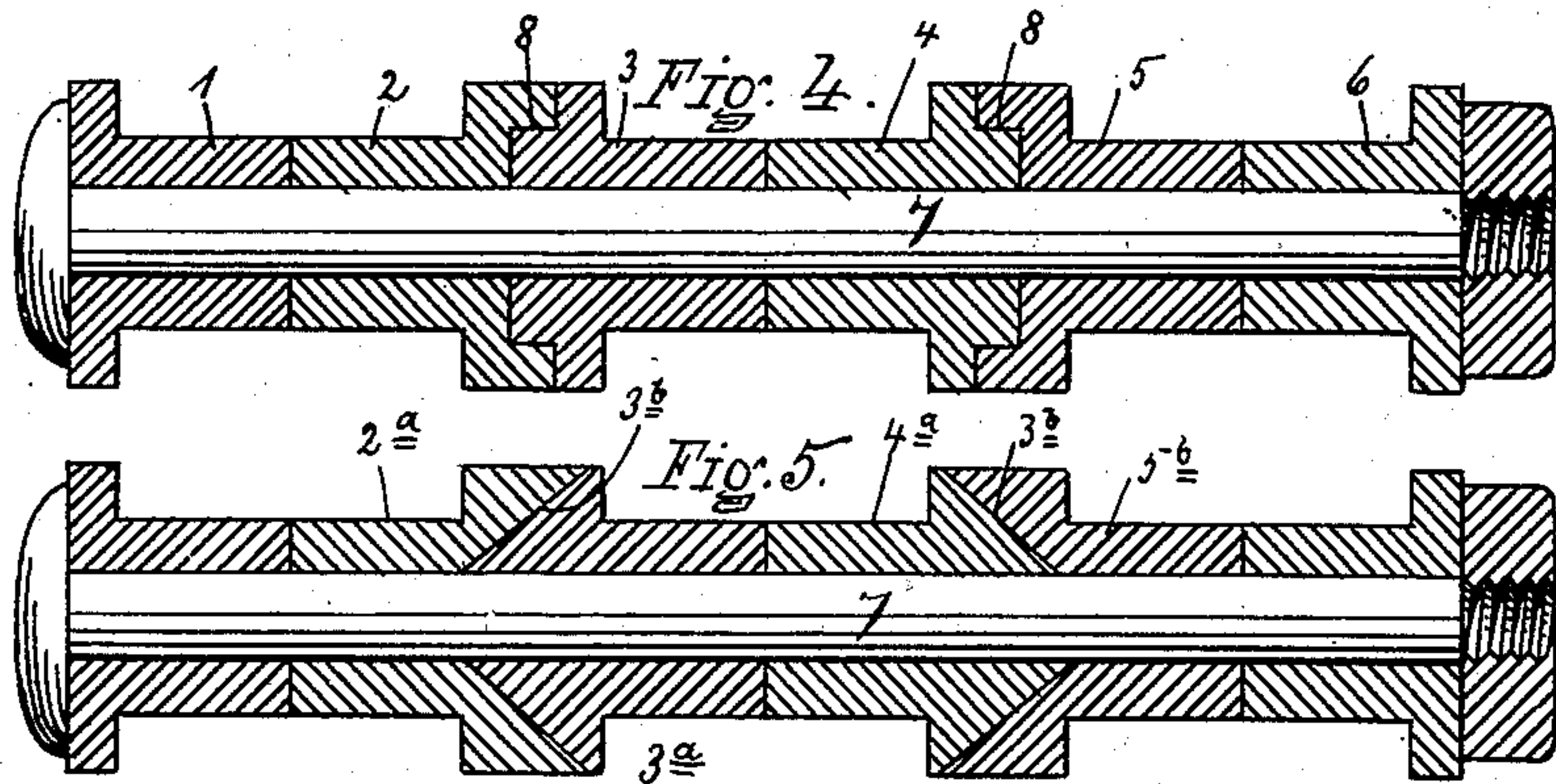


Fig. 4.

Fig. 5.

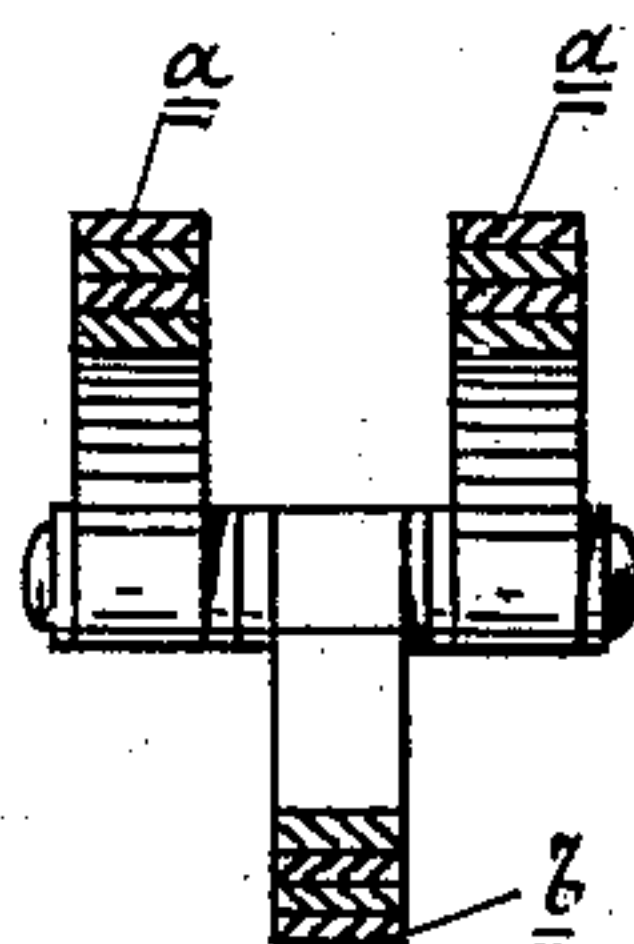


Fig. 6.

WITNESSES.
Rich. A. George.
R. S. Reynolds

INVENTOR.
LAUREN M. FITCH.
By Hily, Robinson & Love
ATTORNEYS.

UNITED STATES PATENT OFFICE.

LAUREN M. FITCH, OF ROME, NEW YORK.

WAGON-SPRING.

SPECIFICATION forming part of Letters Patent No. 577,163, dated February 16, 1897.

Application filed July 11, 1896. Serial No. 598,857. (No model.)

To all whom it may concern:

Be it known that I, LAUREN M. FITCH, of Rome, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Wagon-Springs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

My invention relates particularly to the construction of wagon-springs.

In the drawings, Figure 1 shows a perspective view of a wagon running-gear having springs of my improved construction. Fig. 2 shows a side elevation of the spring. Fig. 3 shows a plan view of the spring. Fig. 4 shows in enlarged details, partially in section, the interlocking sleeves or bushings which secure the parts of the spring together in connection with the bolt employed. Fig. 5 shows in the same manner as Fig. 4 a modified form of construction. Fig. 6 shows a cross-section of the spring.

Referring to the reference letters and numbers in a more particular description of the device, A indicates the spring of my improved construction. The spring consists of two upper sections *a a* and a lower section *b*. For uniting these sections I employ a series of bushings 1, 2, 3, 4, 5, and 6, which are received in the eye in the ends of the spring-sections and are secured together by a bolt 7. The bushings or sleeves 1 2 and 5 6, respectively, are received within the eyes formed on the ends of the upper sections *a a* of the spring, while the bushings 3 4 are received in the eye on the end of the lower section *b* of the spring. The bushings 2 3 and 4 5 are so recessed and fitted into each other as to have a shoulder 8, so that when the bolt 7 draws the sleeves together the shoulders 8 will assist

the bolt 7 in properly holding the ends of the several sections of the spring in proper relative positions and without undue strain or wear on the bolt. Indeed the bolt 7 may be somewhat smaller than the opening through the series of bushings, so that it would receive no sidewise strain at all, the bushings 2 and 3 and 4 and 5 receiving all the wear and strain as between the upper and lower sections of the spring.

In the modified form of construction shown in Fig. 5 the bushing 3^a is provided with a conical head 3^b, which is received in a conical recess in the head end of the bushing 2^a, whereby an inclined shoulder is formed, as between these parts, and whereby the same result; that is, the relieving of the bolt from sidewise pressure, is wholly or partially accomplished.

The parts 4^a and 5^b are similarly formed to parts 2^a and 3^a.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a three-part elliptical spring having eyes at respective ends of interlocking bushings between the parts, and a bolt, substantially as set forth.

2. The combination with a three-part elliptical spring having eyes at their respective ends adapted to register with each other, of the interlocking bushings 2 and 3, 4 and 5, and a bolt, substantially as set forth.

3. The combination with an elliptical spring having two upwardly-bowing parts, and an intermediate downwardly-bowing part each having eyes at their respective ends, of bushings received in the eyes and interlocking between the intermediate and outside spring parts, and a bolt, substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

LAUREN M. FITCH.

Witnesses:

EUGENE GILBERT,
JOHN HERBST.