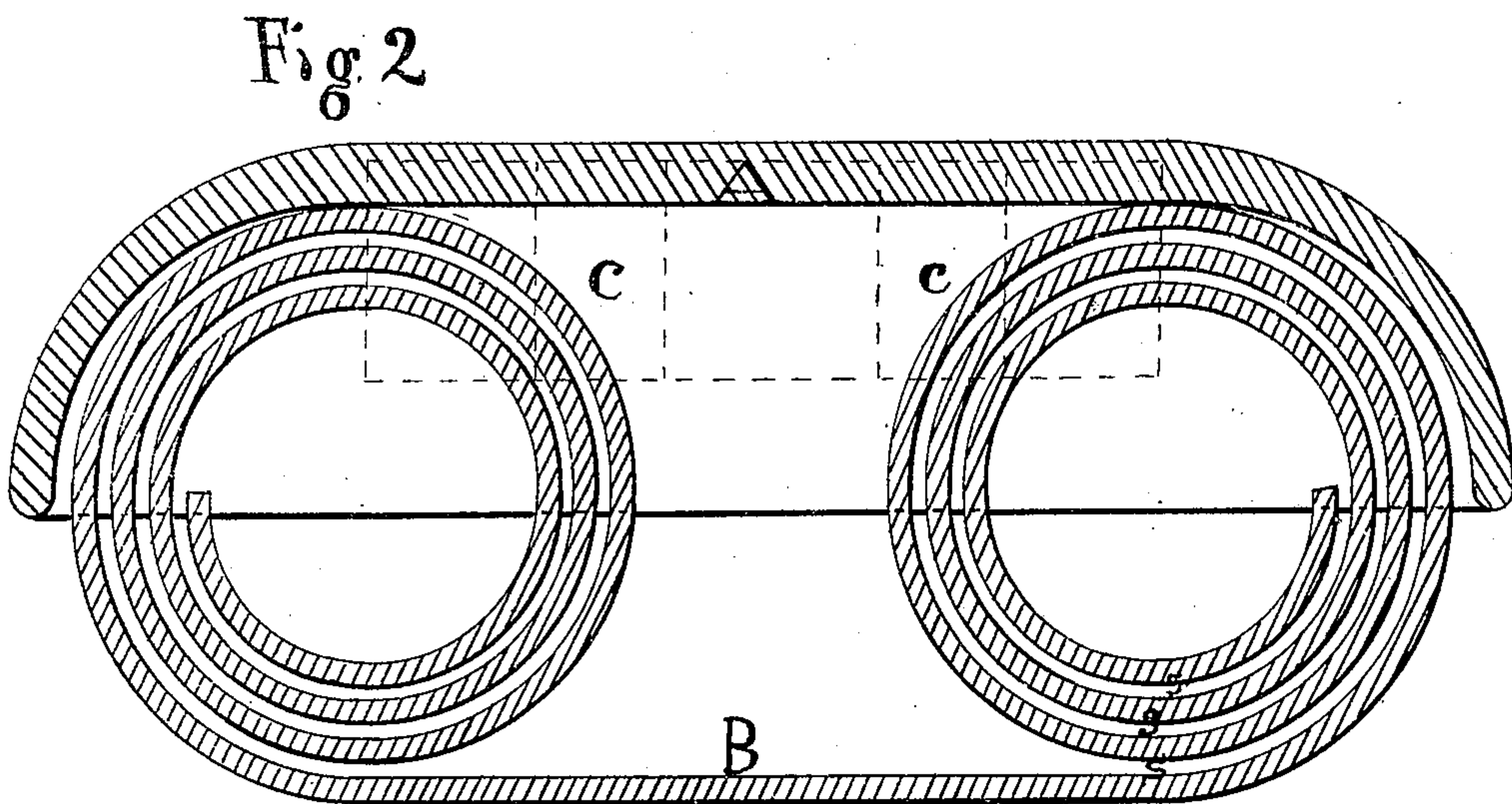
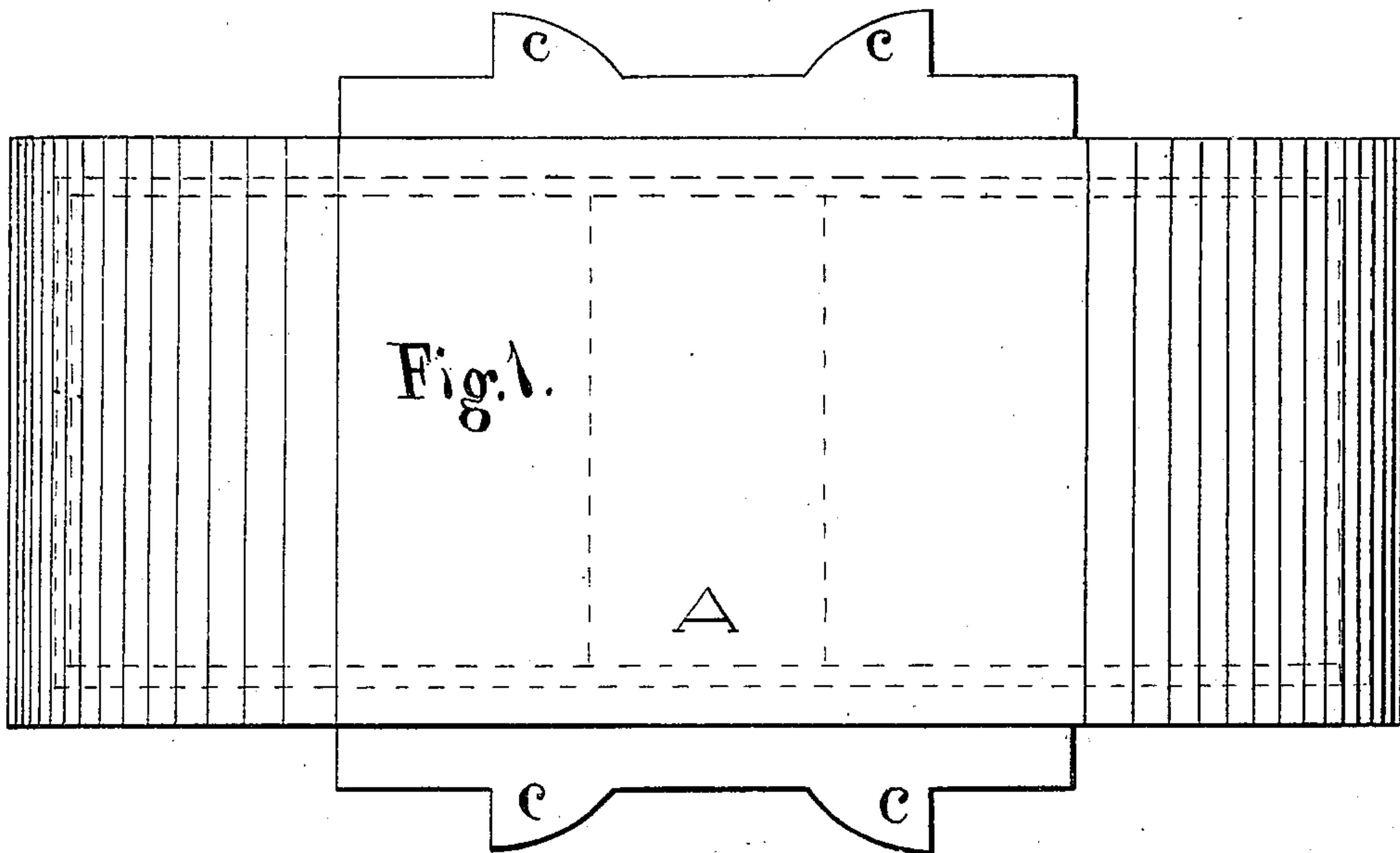


(No Model.)

A. STROH.  
CAR SPRING.

No. 270,349.

Patented Jan. 9, 1883.



Witnesses

*James Kiefer*  
*Ch. Mon Stroh*

Inventor

*Abraham Stroh*

# UNITED STATES PATENT OFFICE.

ABRAHAM STROH, OF MAUCH CHUNK, PENNSYLVANIA.

## CAR-SPRING.

SPECIFICATION forming part of Letters Patent No. 270,349, dated January 9, 1883.

Application filed July 27, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, ABRAHAM STROH, of the borough of Mauch Chunk, Carbon county, and State of Pennsylvania, have invented  
5 certain new and useful Improvements in Railroad-Car 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  
10 make and use the same, reference being had to the accompanying drawings, and to letters marked thereon, which form a part of this specification.

The object of my invention is to furnish a railroad-car spring that will be simple, durable, and  
15 cheap; and to this end my invention consists in increasing its durability by having a spring simply made from one piece of spring-steel B, rolled up at both ends, making a double spring  
20 of two rolls, each roll to be separate with springing distance between the fakes, as shown at s, Fig. 2. This I find from experience to be the strongest form for a spring. It is cheap, being made from one piece with two places of  
25 bearing, requiring only about one-half the weight of steel necessary when the bearing is single and made in any other form. It is simple because it is a bi-roll spring in one piece. It is convenient because it can be held in place

on the cars by the cast-iron hood A, having  
30 the necessary lugs c; also, because it can be removed and replaced by raising the car only about one-seventh the height usually required for others.

Figure 1 is a top view with hood on, showing lugs c, for holding the spring in place between the pedestals on the car. Fig. 2 is a vertical section of the spring and hood. 35

The drawings show my simple invention, and make it so plain that I believe it will be readily understood without any further explanation. 40

I am aware that prior to my invention the volute spring has been in use. I therefore do not claim the volute, and could not use it. The  
45 operation is positively contrary. In some cases I make one coil larger than the other, so that an empty car will rest only on one roll.

What I claim as my invention, and desire to secure by Letters Patent, is— 50

The combination of railroad-car spring B and hood-casing A, all substantially as set forth.

ABRAHAM STROH.

Witnesses:

JAMES KIEFER,  
C. ORION STROH.