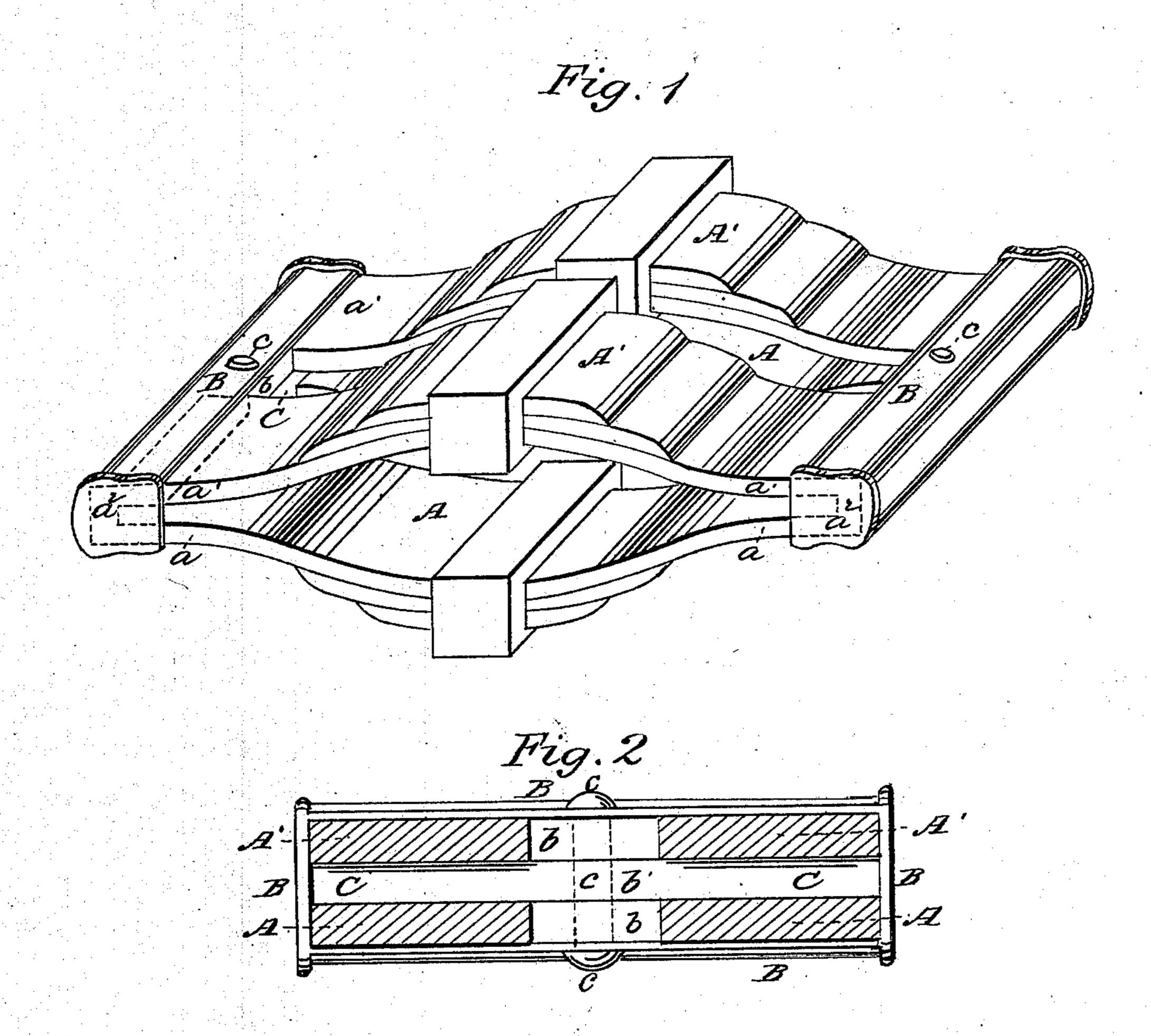
G. ELLIOT.

Car Spring.

No. 104,718.

Patented June 28, 1870.



Witnesses: William H. Kerthel Robert Burns.

Inventor: Sleinge Collist & Li Cettys Keichel & Co

## Anited States Patent Office.

## GEORGE ELLIOT, OF ST. LOUIS, MISSOURI.

Letters Patent No. 104,718, dated June 28, 1870.

## IMPROVEMENT IN END-FASTENER FOR CAR-SPRINGS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, GEORGE ELLIOT, of St. Louis, in the county of St. Louis and State of Missouri, have made a certain new and useful Improved End-Fastener for Car-Springs, &c.; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to an improved cap for connecting the end flanges of railroad-car springs, specially, although, generally, the same is applicable to all kinds of carriage, wagon, buggy-springs, &c.; and

The nature of this invention consists in the manner of housing or retaining the ends and end flanges securely in the cap.

To enable those herein skilled to make and use my said invention, I will now more fully describe the same, referring herein to the accompanying drawings.

Figure 1 is a perspective view of my improved endfastener connecting the ends of a car-spring; and Figure 2 represents a section of the fastener.

The springs A and A' pass one above the other in the usual way, the ends a and a' respectively lying in juxtaposition within one side compartment of the cap B.

As before stated, the form of spring is immaterial, with special reference to the joint and cap here presented, it being necessary only to have the ends a and  $a^1$  in the position generally as indicated, and that

one of the springs, usually the lower one, have upturned ends at  $a^2$ .

As two pairs of springs are usually employed, the cap B has two compartments corresponding hereto. Between these are the ribs b, leaving only a narrow slot, b', between them.

The ribs b act as side guides to the spring ends.

In order that the parts may not be disarranged, I use a "fastener"-strip, O, which will lie between each two springs, and pass from end to end of the cap B.

A rivet, c, through the ribbed top and bottom wall of the cap B holds the strip C, and, as the strip rests endwise against the upturned ends a<sup>2</sup>, this spring cannot withdraw, and opposite ends being thus joined, all parts are thus firmly secured.

The simplicity of form of the cap here used, and the simplicity of the joint made, are advantages which are assurances of great strength ond durability.

Having thus fully described my said invention,

What I claim, is—

The cap B, fastener C, and spring  $\Lambda$ , combined substantially as set forth.

In testimony of said invention I have hereunto set my hand, in presence of—

GEORGE ELLIOT.

Witnesses:

WILLIAM W. HERTHEL, ROBERT BURNS.