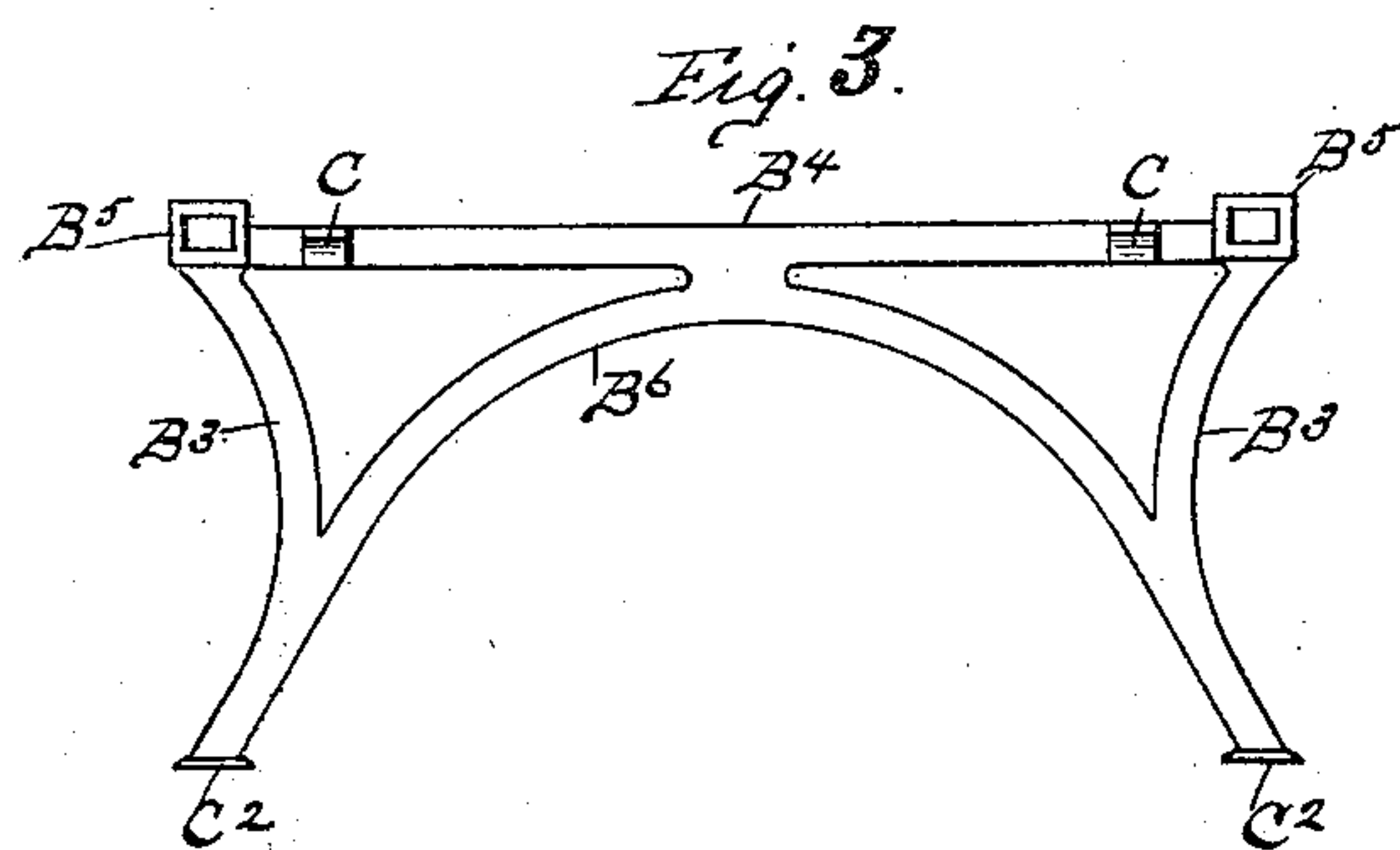
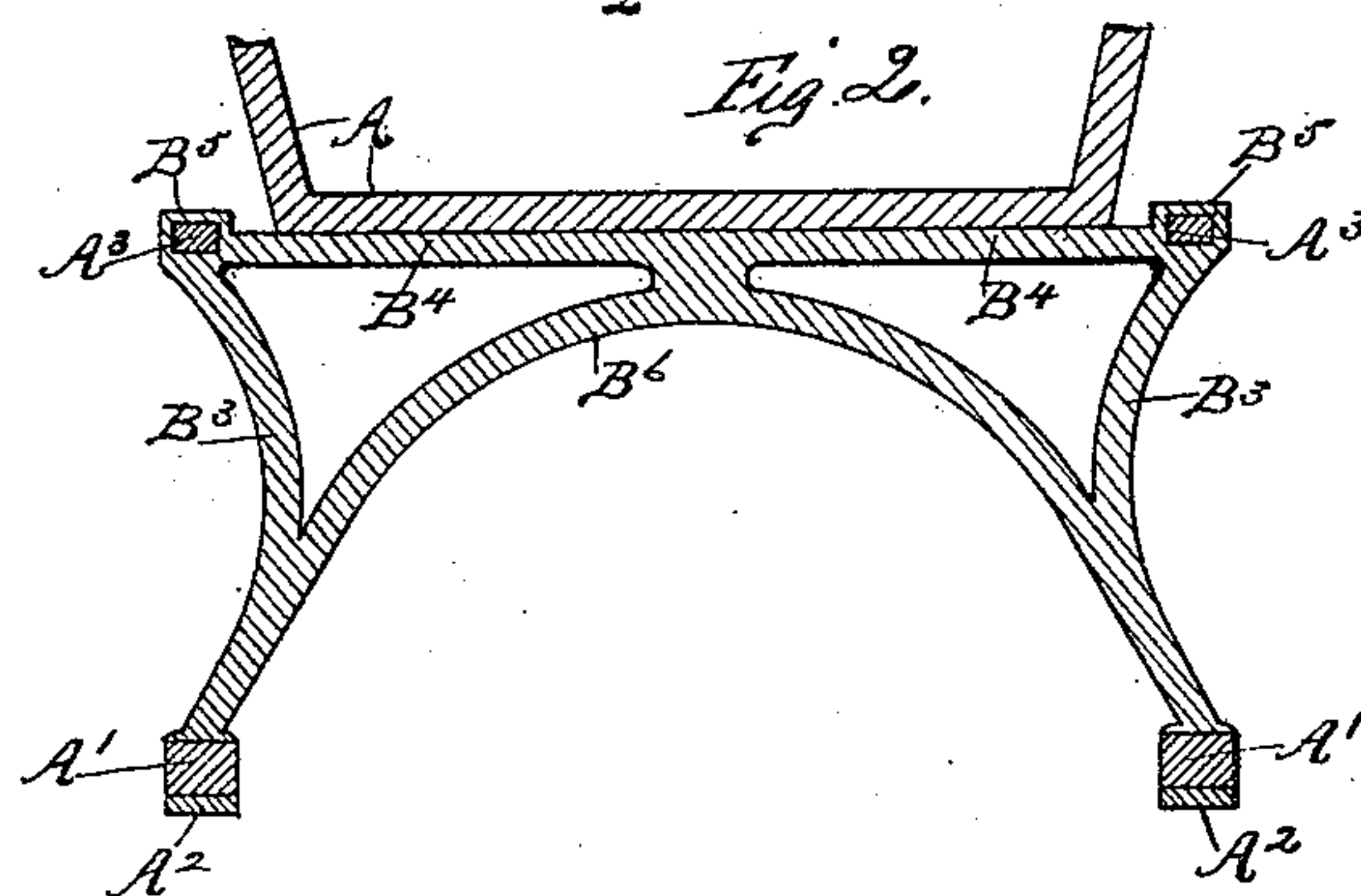
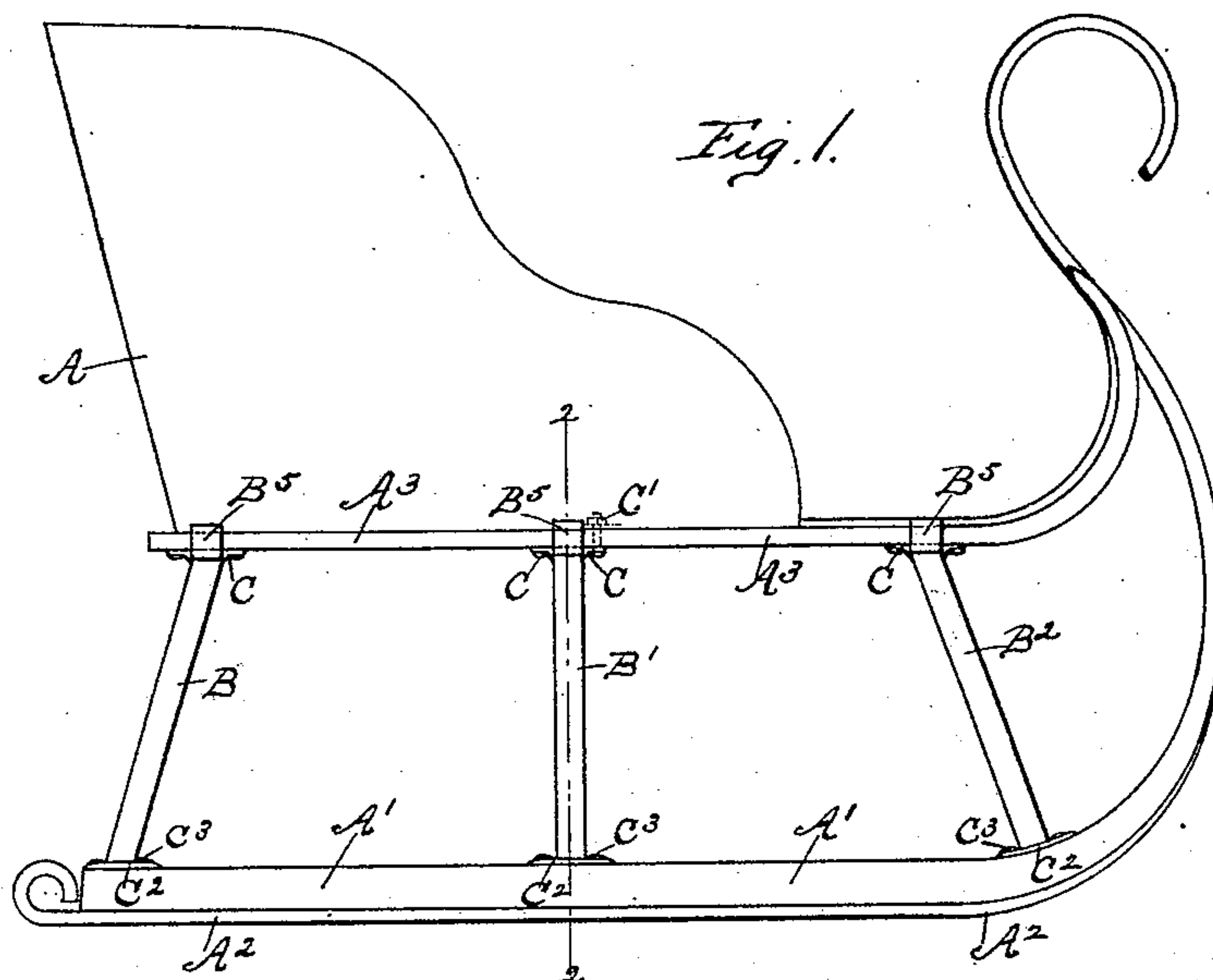


(No Model.)

J. P. SMITH.  
SLEIGH BRACE.

No. 459,336.

Patented Sept. 8, 1891.



Witnesses:  
Frank C. Curtis  
John T. Booth

Inventor:  
James P. Smith  
by *Geo. Amos*  
Atty.

# UNITED STATES PATENT OFFICE.

JAMES P. SMITH, OF AMSTERDAM, NEW YORK.

## SLEIGH-BRACE.

SPECIFICATION forming part of Letters Patent No. 459,336, dated September 8, 1891.

Application filed April 10, 1891. Serial No. 388,379. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES P. SMITH, a citizen of the United States, residing at Amsterdam, county of Montgomery, and State of New York, have invented certain new and useful Improvements in Sleigh-Braces, of which the following is a specification.

My invention relates to certain improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a view in side elevation of a sleigh provided with my improved braces. Fig. 2 is a vertical section of same with the upper part broken away, taken on the broken line 22 in Fig. 1. Fig. 3 is a front elevation of my improved brace detached.

The body part A of the sleigh is supported upon runners A', having shoes A<sup>2</sup>, by three of my improved braces B, B', and B<sup>2</sup>. Each of the braces is made of an integral casting, preferably of iron, made malleable, and comprises the curved knees B<sup>3</sup>, the bench B<sup>4</sup>, the fender-sockets B<sup>5</sup>, and strengthening-braces B<sup>6</sup>. The fender-sockets are adapted to receive and support the usual fender-rails A<sup>3</sup>. The benches support the body part of the sleigh in the usual manner, as shown in Fig. 2, being provided with laterally-projecting lugs C, by which the body part can be secured to the benches, as by bolts or screws passing through the lugs and bottom of the body part, as indicated by dotted lines C'. The lower ends of the knee parts are also provided with the attaching-lugs C<sup>2</sup>, through which the braces can be secured to the runners by bolts or screws C<sup>3</sup>.

Any desired number of the braces may be employed in the construction of a sleigh. In large sleighs I prefer three, as shown, the middle one B' being adapted to stand in a vertical position, while the end braces are formed to incline toward each other, the upper part of the forward brace inclining backward and the rear brace B<sup>2</sup> inclining forward, as shown in Fig. 1. In small sleighs or hand-sleds the middle brace B' may be dispensed with. I am thus able to quickly and cheaply cast in one piece the knees, bench, and fender-sock-ets of a sleigh, which enables me to dispense with many separate pieces and their connections which were liable to work loose and render the sleigh unstable.

By constructing the parts named in one integral piece and connecting the knees and bench by an arched brace B<sup>6</sup>, as shown, I am able to cheaply produce a strong and durable combination of the essential parts of a sleigh in one piece or casting, which I term a "sleigh-brace," and which can be conveniently manufactured and sold to the trade as a separate and independent article of manufacture for the use of sleigh-makers.

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

As a new article of manufacture, a sleigh-brace comprising in a single integral casting a pair of curved knees, each provided near its upper end with a rail-socket, a bench connecting the upper ends of the knees, an arched brace connecting the middle parts of the knees with the middle part of the bench, and attaching-lugs for securing the brace to other parts of a sleigh, substantially as described.

In testimony whereof I have hereunto set my hand this 28th day of March, 1891.

JAMES P. SMITH.

Witnesses.

ROBERT J. LINDSAY,  
ADAM NEFF.