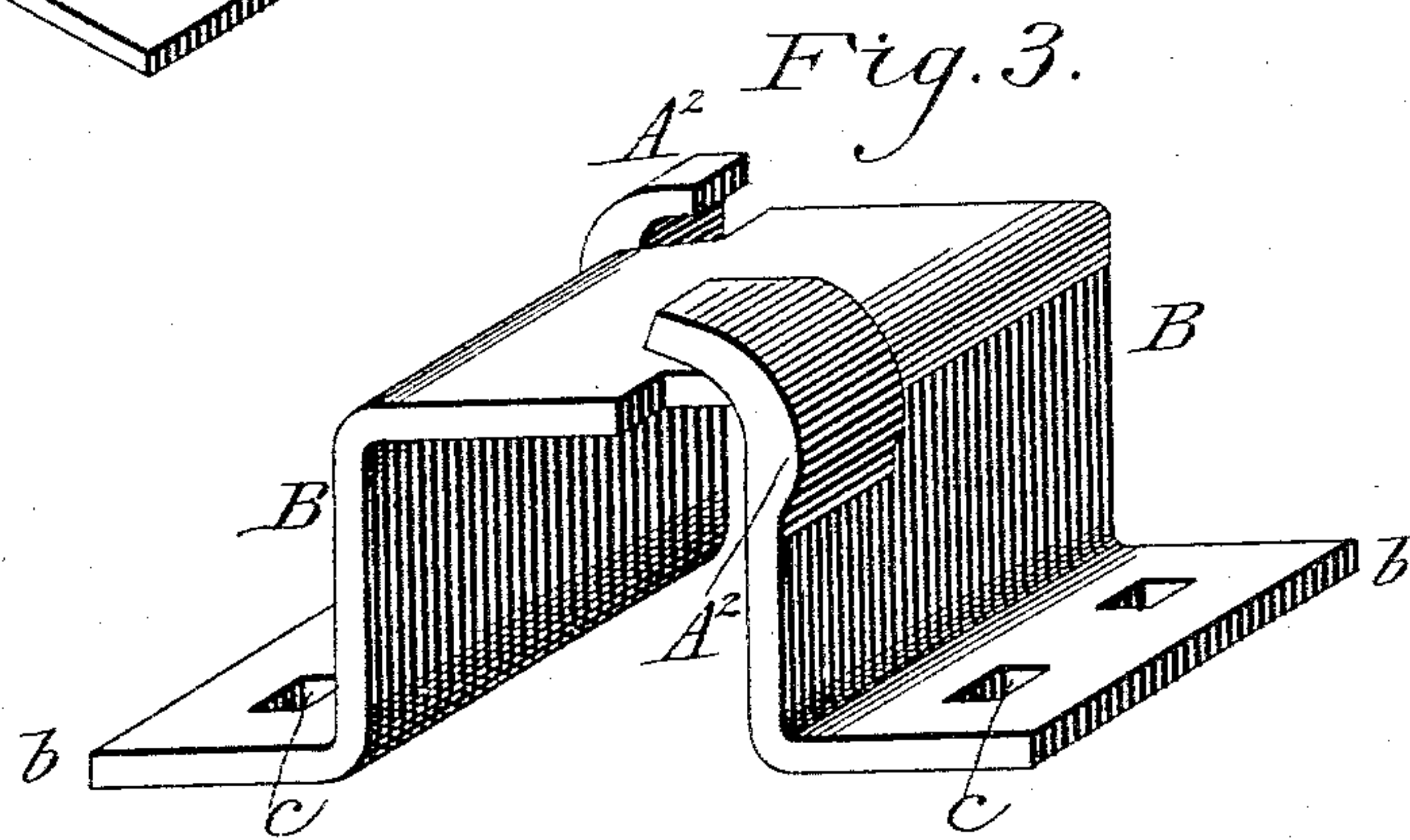
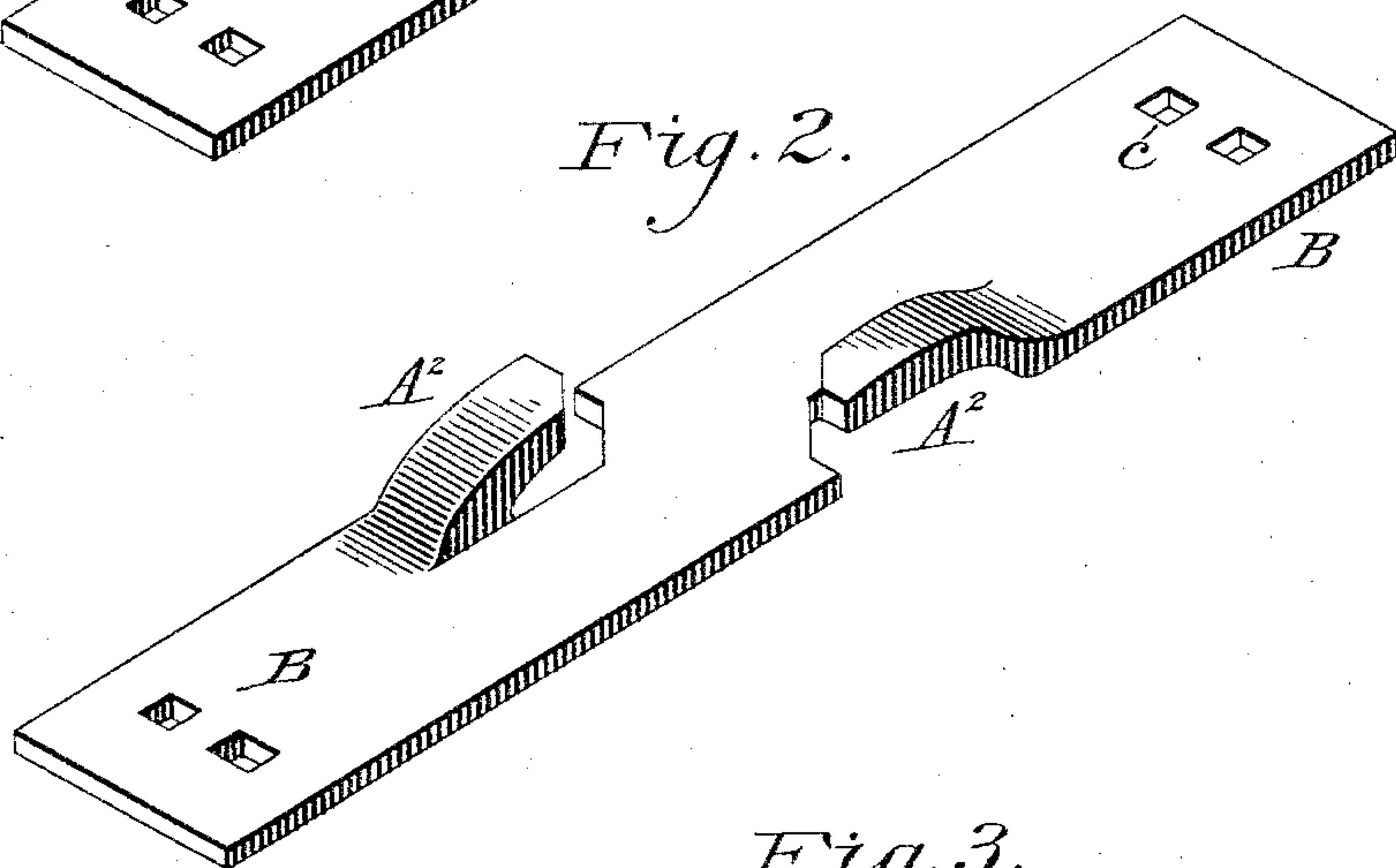
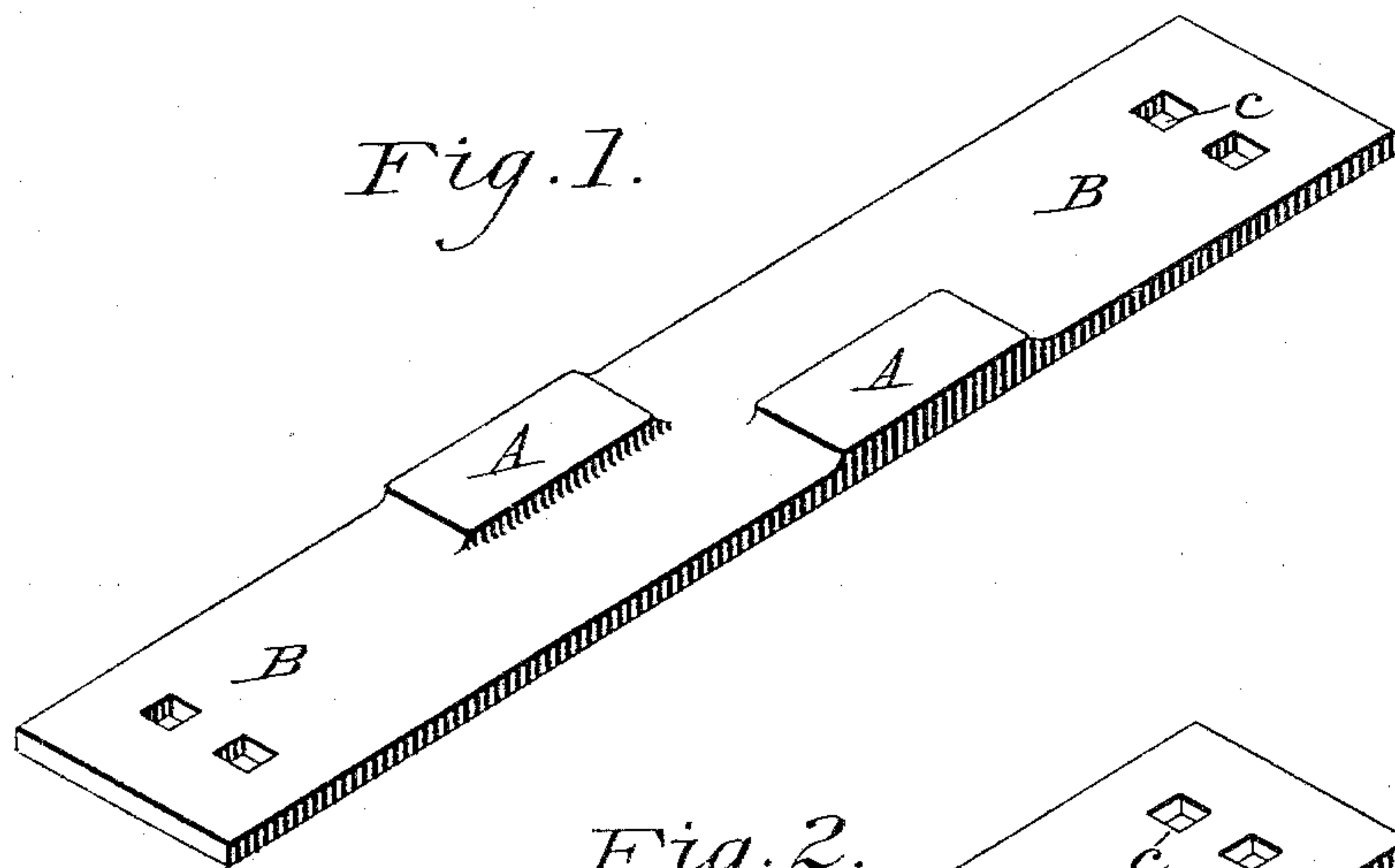


(No Model.)

A. V. DU PONT.  
RAIL CHAIR OR TIE PLATE.

No. 369,279.

Patented Aug. 30, 1887.



Witnesses:

Frank Gray  
Francis P. Reilly

Inventor.

A. V. du Pont  
by P. R. Voorhees  
Atty.

# UNITED STATES PATENT OFFICE.

ALFRED V. DU PONT, OF LOUISVILLE, KENTUCKY, ASSIGNOR TO THE  
JOHNSON STEEL STREET RAIL COMPANY, OF KENTUCKY.

## RAIL-CHAIR OR TIE-PLATE.

SPECIFICATION forming part of Letters Patent No. 369,279, dated August 30, 1887.

Application filed March 11, 1887. Serial No. 230,571. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED V. DU PONT, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and  
5 useful Rail-Chair or Tie-Plate for Street-Rail-road Rails, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is to make a  
10 strong, cheap, and light chair or tie-plate, the metal for which can be rolled in a rolling-mill into flat bars, thickened at suitable points for lugs, and then sheared to desired lengths for the necessary blanks, said blanks then only re-  
15 quiring the thickened lugs to be struck up for tie-plates and the metal bent to a box shape for any desired height of such plate or chair.

The invention consists of the form of structure hereinafter described and claimed.

20 In the accompanying drawings, Figure 1 shows a blank of the special form required with the necessary spike-holes punched in its ends. Fig. 2 shows a tie-plate formed from one of said blanks by having clamping-lugs  
25 for clamping the lower flanges of the rails struck up from the thickened parts or blank lugs of the metal shown in Fig. 1. Fig. 3 shows a chair of box shape bent from a tie-plate of suitable length to a suitable height for clamp-  
30 ing the rails at a desired level.

In said figures the several parts are indicated by letters as follows: In Fig. 1, A A indicate the protrusions or blank lugs thickened  
35 up from the rest of the metal, B B, constituting the whole blank. In Fig. 2, A<sup>2</sup> A<sup>2</sup> indicate

the lugs struck up from the protrusions or blank lugs A A in Fig. 1, thus forming, with the rest of the metal B B, a tie-plate, which in Fig. 3 is shown bent into box shape, with bot-  
40 tom flanges, b b, and holes c c, for spiking the chair to the cross-ties or sleepers of the track.

These said tie-plates and chairs may be conveniently made by rolling down the metal (iron or steel) in a rolling-mill until a bar of  
45 suitable length and thickness is formed, when, by forming recesses or pockets in the last pass of the rolls at such points as it may be desired to form the blank lugs A A, said lugs will be  
50 formed, diagonally placed or "staggered" on opposite sides, at proper intervals on said bars. Said bars can then be sheared as they come  
55 from the rolls, or at any convenient time, between each couple or series of blank lugs, when each piece of bar so cut will be a whole blank ready to be converted, as hereinbefore ex-  
60 plained, into either a tie-plate or chair, as may be desired. I do not confine myself, however, to the sole method of rolling said articles.

Having thus fully described my said rail-chair or tie-plate, as of my invention I claim—  
60

As a new article of manufacture, a rail-chair or tie-plate substantially of the form described, and of uniform thickness of metal, except at  
65 points on top diagonally opposite, at which points clamping-lugs of thicker metal are formed, as and for the purposes set forth.

A. V. DU PONT.

Witnesses:

JENNIE TURNER,  
P. R. VOORHEES.