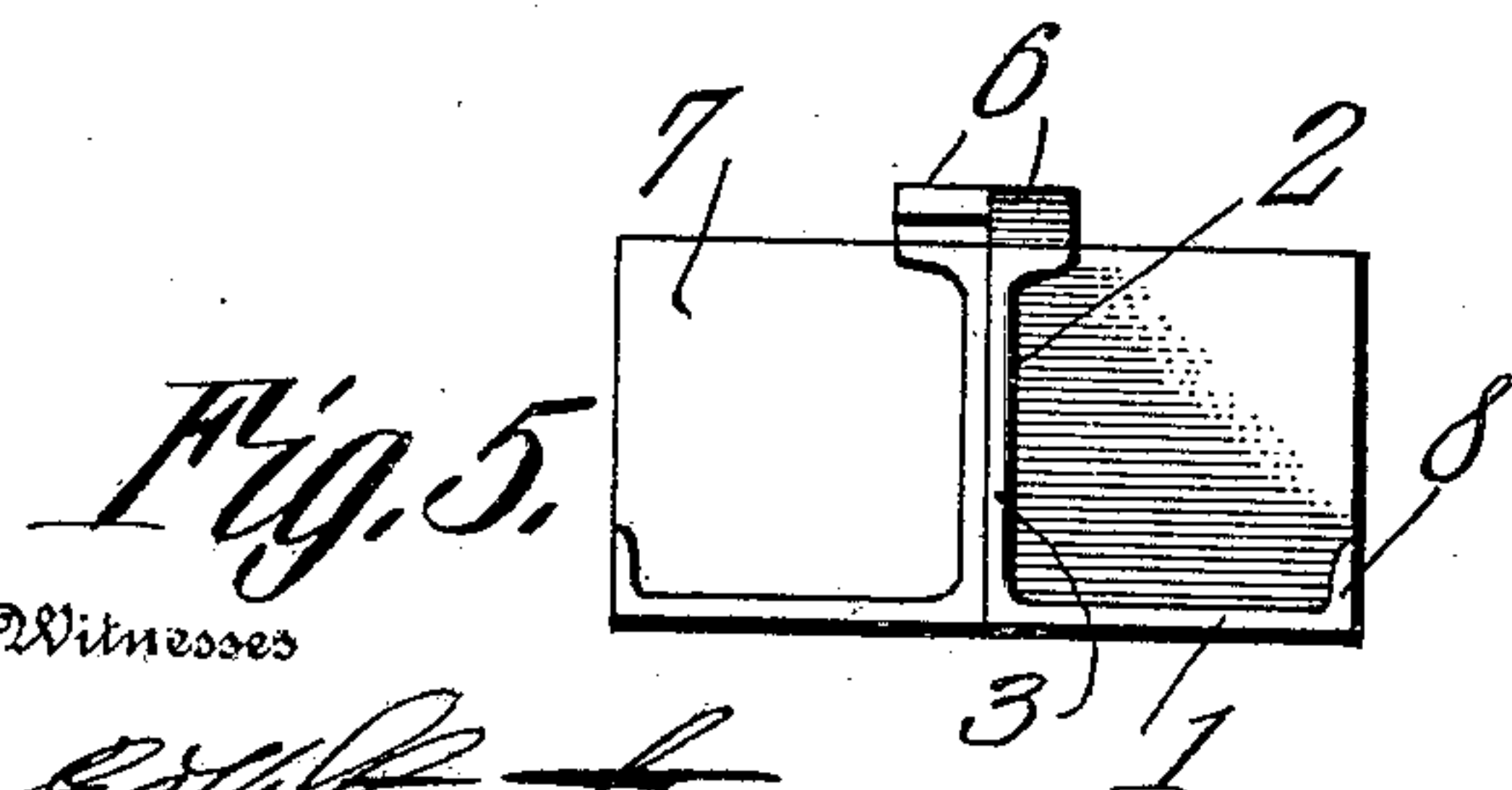
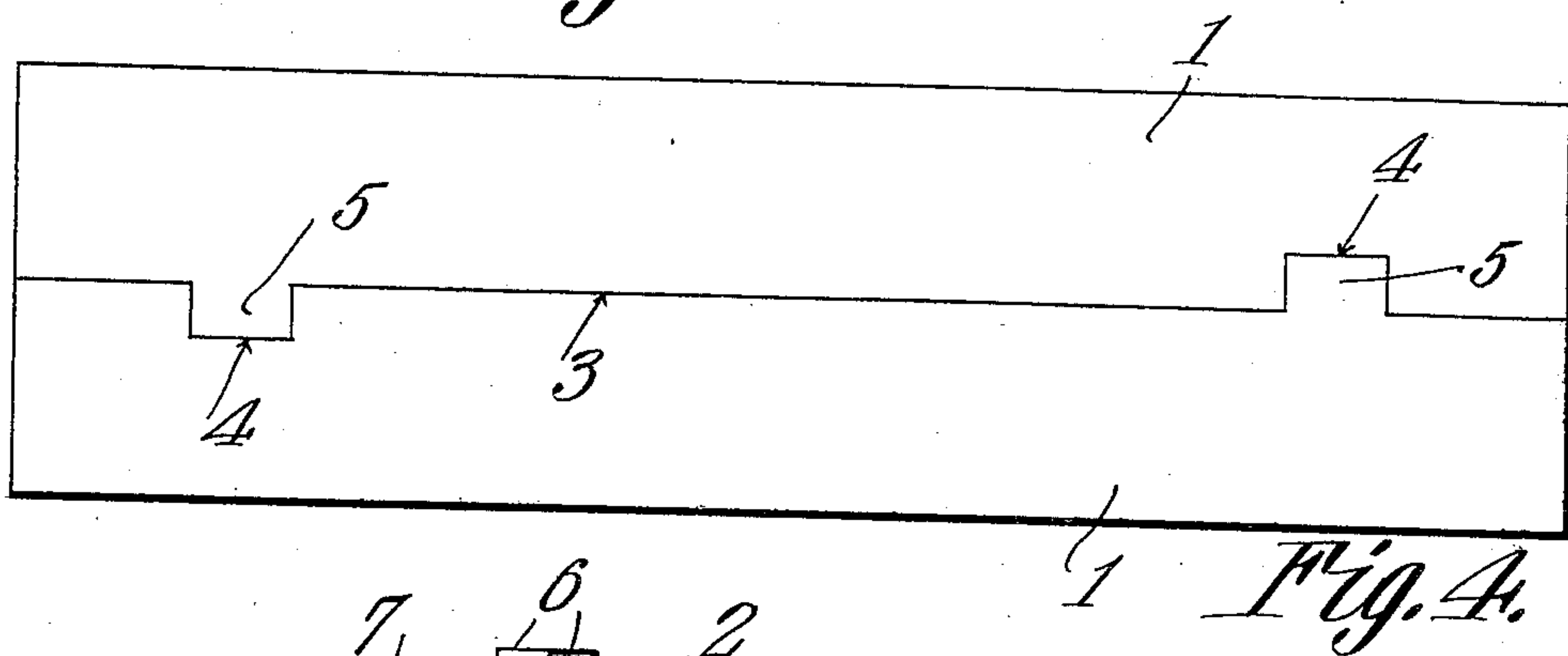
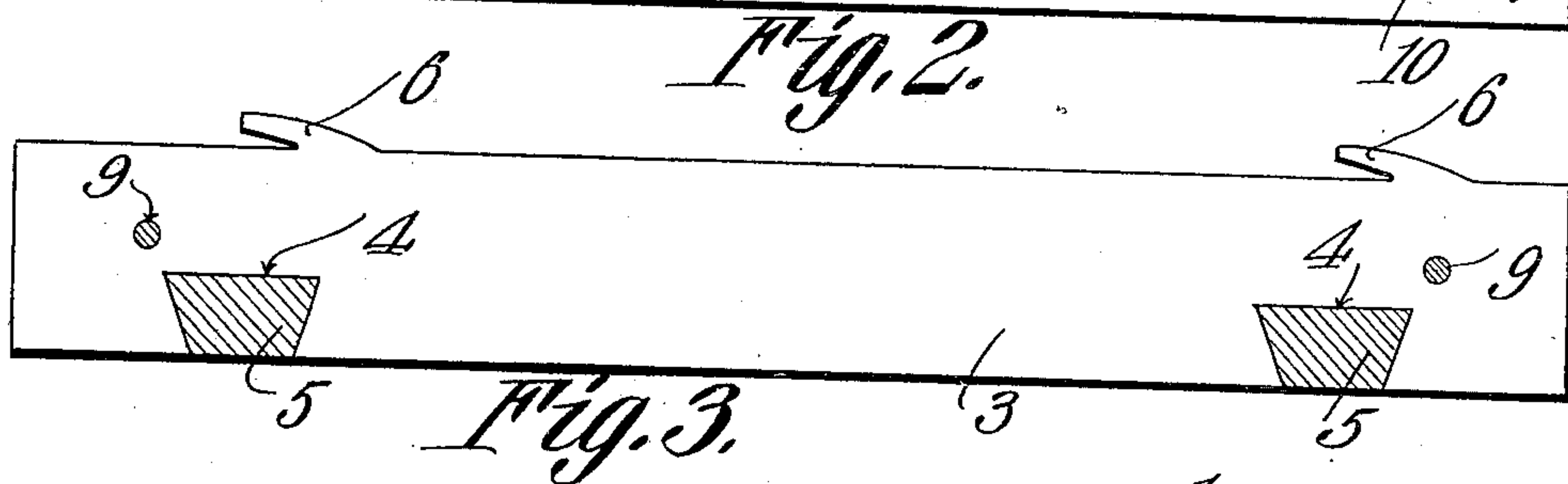
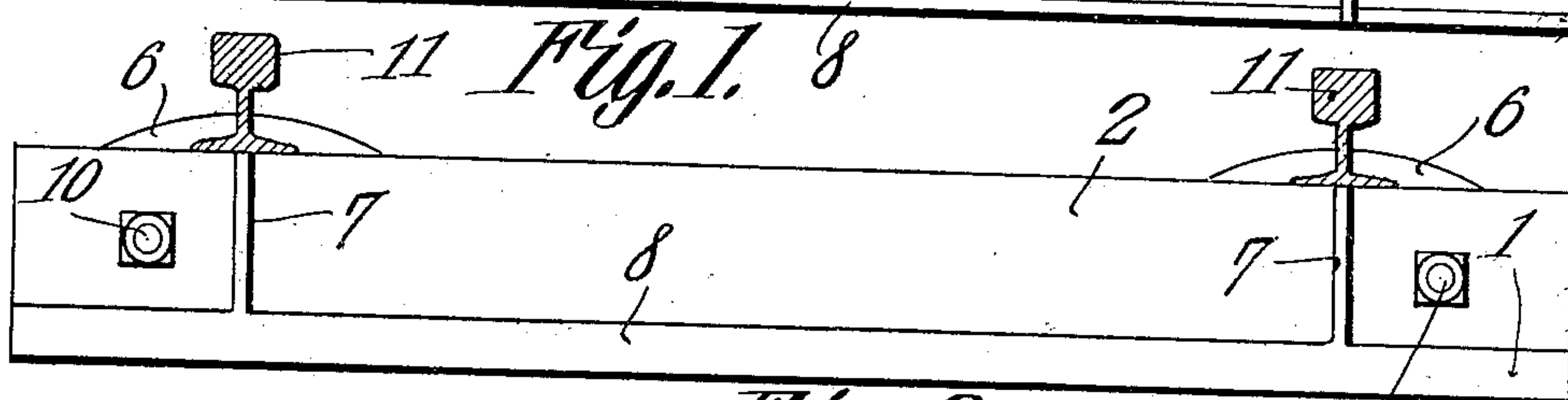
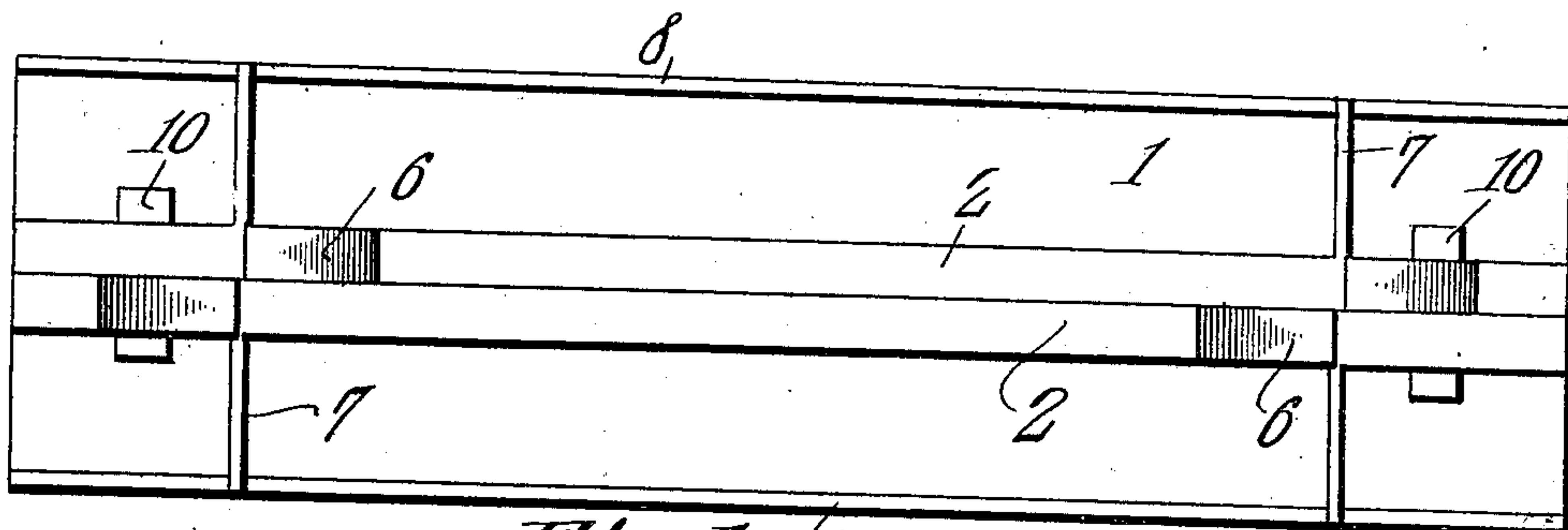


F. D. RATHBONE.
RAILROAD TIE.
APPLICATION FILED NOV. 16, 1908.

921,735.

Patented May 18, 1909.



Witnesses
E. J. Lawton
Mason B. Lawton.

Inventor
Frank D. Rathbone.
By *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

FRANK D. RATHBONE, OF CHATFIELD, MINNESOTA, ASSIGNOR OF ONE-HALF TO ABRAHAM L. OBER, OF CHATFIELD, MINNESOTA.

RAILROAD-TIE.

No. 921,735.

Specification of Letters Patent.

Patented May 18, 1909.

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To all whom it may concern:

Be it known that I, FRANK D. RATHBONE, a citizen of the United States, residing at Chatfield, in the county of Filmore and State of Minnesota, have invented a new and useful Railroad-Tie, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form, of a device of the above mentioned class, which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of a tie of novel and improved form, of novel means for holding the component parts of the tie together and restricting their movement, of novel means for retaining the rail upon the tie, other and further objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that divers changes in the form, proportions, size, and minor details of construction may be made, without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings, Figure 1 shows my invention in top plan; Fig. 2 is a side elevation; Fig. 3 is a vertical longitudinal section passed between the members 2 of Fig. 1; Fig. 4 is a bottom plan; Fig. 5 is an end elevation.

In carrying out my invention, I provide two similar L-shaped sections each comprising a base member 1 and, integral therewith and disposed at right angles thereto a flange 2. The remote edges of the base members 1 are upturned to form lips 8 and the upper faces of the flanges carry oppositely disposed rail braces 6.

Each of the sections which go to make up my invention is provided with a straight inner face 3 having in its lower edge and spaced from the ends thereof an upwardly extending, laterally flaring aperture 4. Each of these straight inner faces 3 is provided with an outwardly projecting lug 5 arranged

to register closely in the aperture 4 of the other section. I further provide brace-plates 7 integral with the base member 1 and the flange 2, disposed substantially normal thereto, and co-terminate therewith. The sections may be clamped together in any suitable manner. Preferably, however, as shown, apertures 9 are provided in the flange 2, spaced from the ends of the said flange, and arranged to receive bolts 10 whereby the straight inner faces 3 may be drawn into close contact.

The method of assembling my device is as follows: The sections which go to make up my invention, are introduced beneath the rails from opposite sides. These sections are then pushed toward each other until the rail braces 6 engage the web of the rail 11. The relation between the rail braces 6 and the apertures 4 and the lugs 5 is such that, when the rail-braces 6 are in contact with a rail of standard make the lugs 5 will be alined with the apertures 4. The sections are then shoved laterally to bring the lugs 5 into registration with the apertures 4 and the bolts 10 are then passed through the holes 9 clamping the two sections firmly together. By causing the apertures 4 to flare upward and by making the lugs 5 of corresponding shape, I prevent the sections from moving vertically upon each other and destroying the surfacing of the track. In their preferred form the apertures 4 are terminated below the upper edge of the straight inner faces 3 and the lugs 5 when introduced into these apertures 4, each serve to uphold the other section. It will be seen that when the sections are thus assembled, it will be impossible for the rails to spread or the gage of the track to be altered. The brace plates 7 serve to engage the ballast upon which the tie is mounted to prevent the tie from sliding endwise in the ballast. Likewise, the lip 8 serves to prevent the ballast from being shaken off of the base member 1 and away from the flange member 2.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:

1. A railroad tie comprising similar sections having straight inner faces, each face having in its lower edge an upwardly extending dove tail notch; projecting from the inner face of each section, a lug arranged to register closely in the notch of the other sec-

tion; oppositely disposed, overhanging rail-braces integral with the upper faces of the sections; means for clamping the sections transversely.

5 2. A railroad tie comprising two similar sections having straight inner faces, each face having in its lower edge, an upwardly extending recess; oppositely disposed, overhanging rail-braces integral with the upper
10 faces of the sections and arranged to engage the base of a rail; projecting from the inner face of each section, a lug arranged to register closely in the recess of the other section and positioned to be in alinement with the
15 recess when the braces are in contact with the base of a rail; means for clamping the sections transversely.

3. A railroad tie comprising two similar

sections having straight inner faces, each face having in its lower edge an upwardly
20 extending recess terminating below the upper face of the section; projecting from the inner face of each section, a lug arranged to register closely in the recess of the other
25 section: oppositely disposed, overhanging rail-braces integral with the upper faces of the sections; means for clamping the sections transversely.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature
30 in the presence of two witnesses.

FRANK D. RATHBONE.

Witnesses:

I. E. OBER,

KNUTE OLSON.