

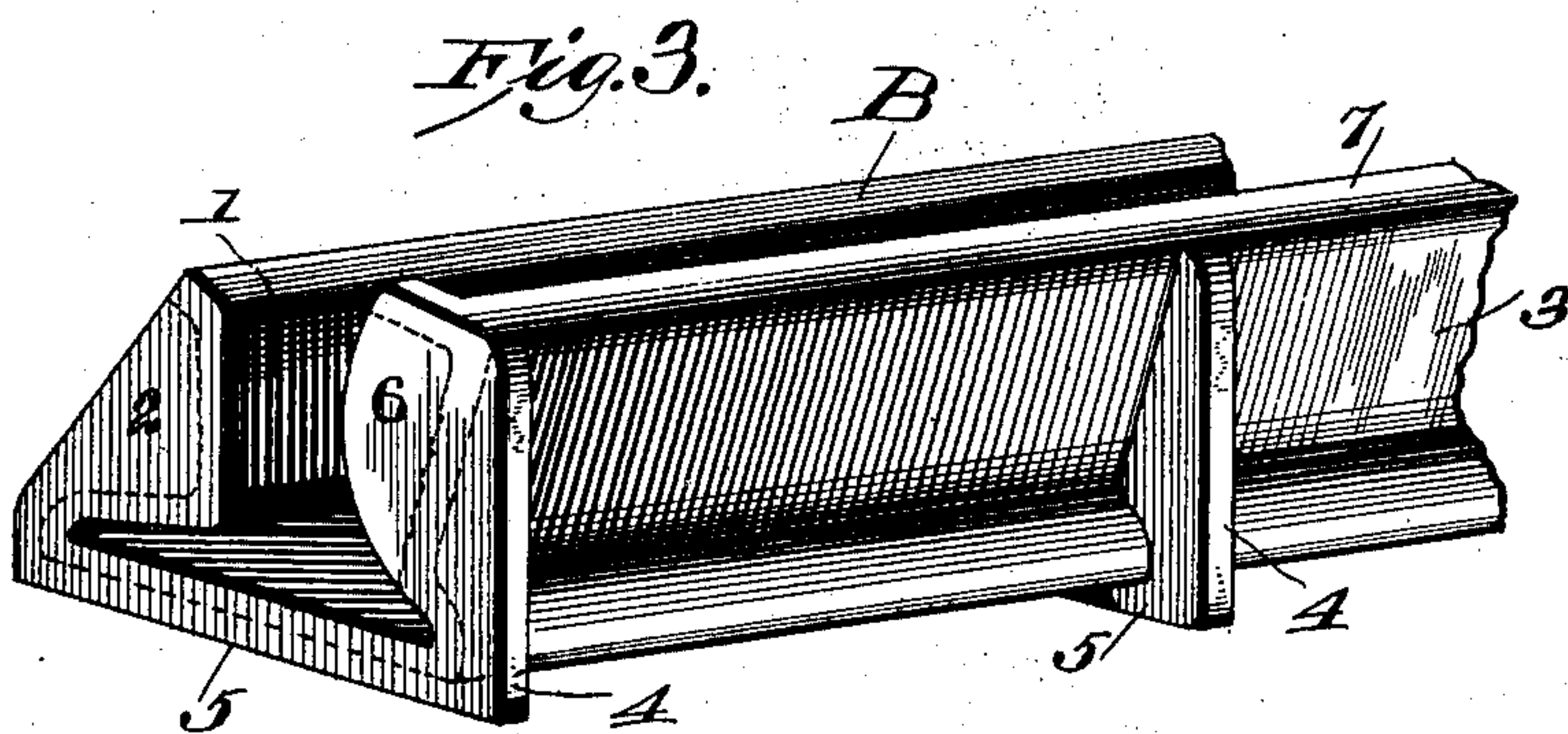
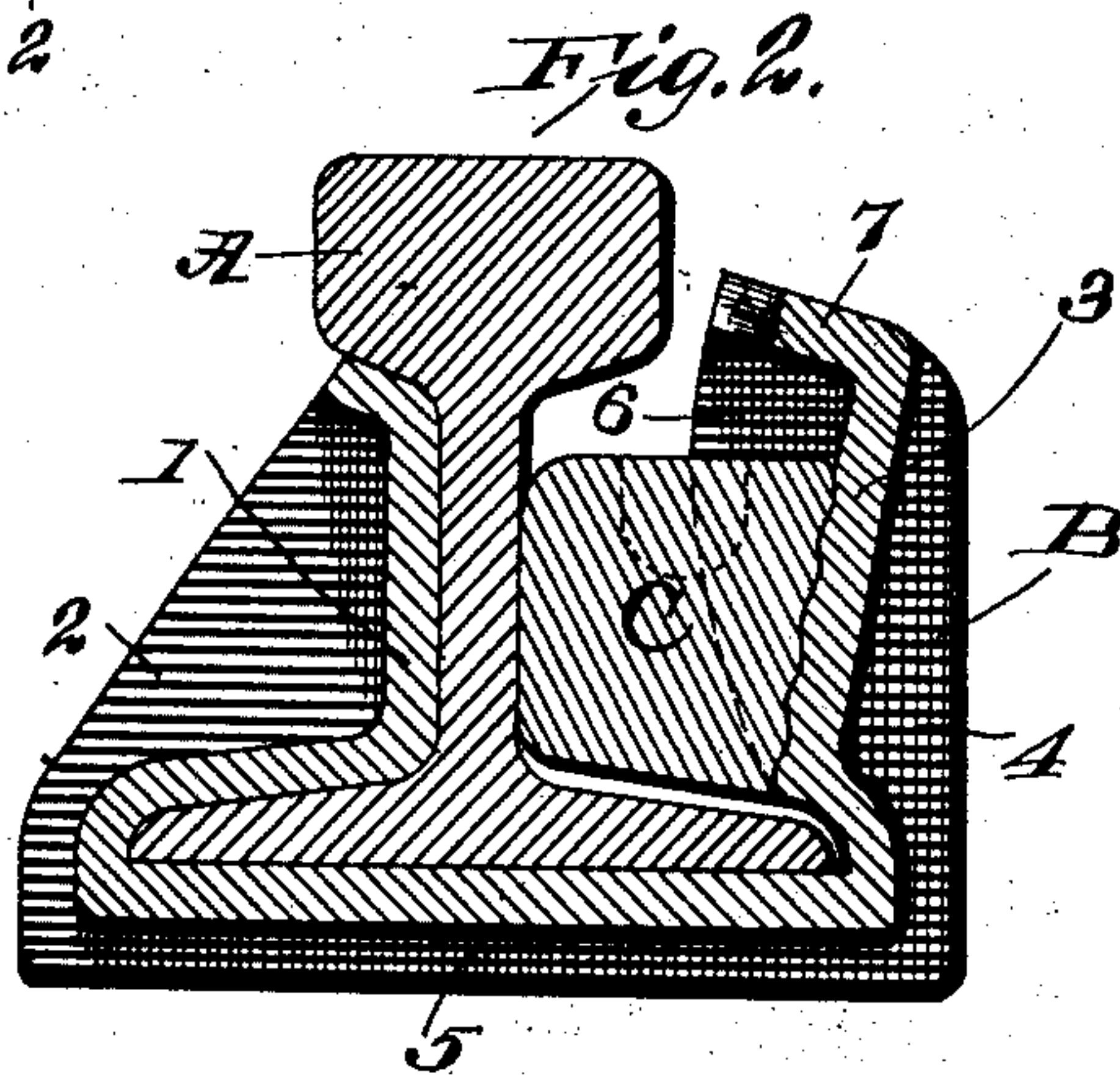
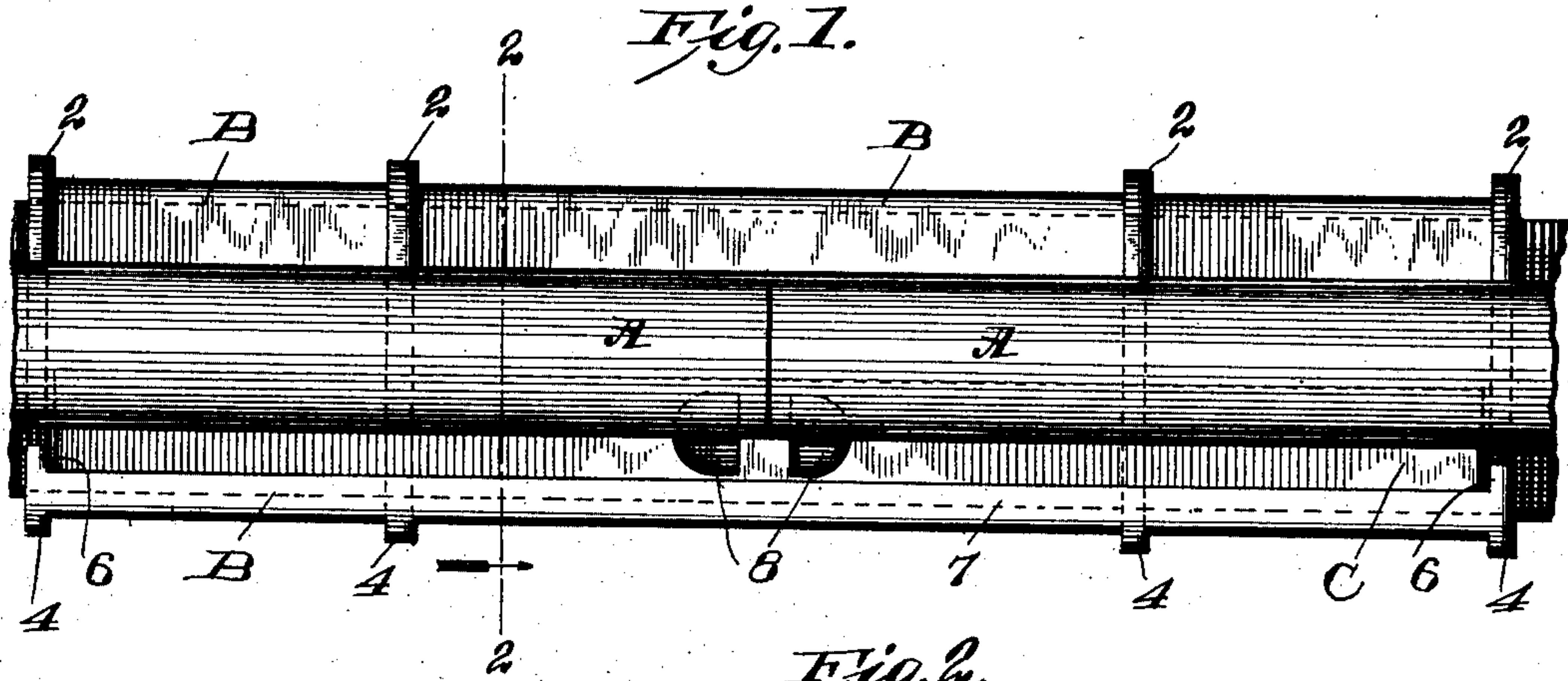
No. 827,111.

PATENTED JULY 31, 1906.

W. D. McCURDY.

RAIL JOINT.

APPLICATION FILED NOV. 15, 1905.



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WILLIAM DAVID McCURDY, OF DENNISON, OHIO.

RAIL-JOINT.

No. 827,111.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM DAVID McCURDY, a citizen of the United States, residing at Dennison, in the county of Tuscarawas and State of Ohio, have made certain new and useful Improvements in Rail-Joints, of which the following is a specification.

My improved railroad-rail joint is formed by means of a metal coupling or connecting-piece applied to the meeting ends of the rails and which is effective without the aid of bolts or spikes, while providing a firm or rigid support for the rail ends. The coupling comprises a form of chair adapted to receive the meeting ends of the rails and a block, preferably of iron, which serves as a wedge for holding the coupling firmly engaged with the rails.

The details of construction are as herein-after described, and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved rail joint or coupling applied to the meeting ends of rails. Fig. 2 is a vertical cross-section on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of the coupling proper.

A A indicate the meeting ends of railroad-rails of the ordinary type, and B the metal coupling or connecting-piece applied thereto.

C is an iron block in wedge form, which is applied between the web of the rails and the inclined side of the coupling. The details of construction of the latter are as follows: It has a vertical side 1, which is flared at the top and bottom corresponding to the shape of the rails A, or, in other words, whereby it is adapted to fit against the web of the rail as well as the under side of the head and the top of the base-flange. For the sake of combining lightness and strength to a maximum degree vertical braces 2 are arranged at the ends of the coupling and also intermediately thereof, as shown in Fig. 1. The opposite side 3 of the coupling B is set off from the rail and inclined outwardly from the bottom upward. The inner side adjacent to the web of the rails is corrugated, as shown in Fig. 2. Vertical braces 4 are arranged on the outer side for supporting the part 3, and ribs 5 extend under the bottom of the coupling and

connect the opposite braces 2 and 4. At the ends of the inclined part 3 flanges 6 extend inward toward the body of the rails, as shown. The block C is preferably of iron, and its outer side is inclined corresponding to the inclination of the part 3 of the coupling, whereby the block has practically the form and function of a wedge. As shown best in Fig. 2, this wedge is forced down tightly between the webs of the rails and the inner corrugated side of the coupling, and thus holds the latter firmly engaged with the rail ends, so that it not only connects them and holds them in rigid alinement, but supports them as well under the weight of passing trains.

In order to apply my improved coupling and rail-joint, the wedge C is placed in the coupling or chair and the rail ends are inserted from opposite directions, they being slid into place until their ends meet, as shown in Fig. 1. It is obvious that in this operation the wedge C must be supported as high as practicable—that is to say, supported in contact with the upper horizontal flange 7 of the coupling—until the rails are in place, when it is allowed to drop and is forced downward by pressure or the blows of a hammer or sledge until it is firmly engaged, as indicated in Fig. 2.

When once in place, the corrugations of the coupling B prevent its sliding upward or becoming loosened.

For convenience in manipulating the wedge it is provided on the upper side with two cavities 8, (see Fig. 1,) which are separated by a narrow piece, and thus serve as finger-holds.

I preferably construct the coupling or rail-joint of cast metal, or it may be constructed of sheet or boiler plate.

What I claim is—

1. The combination, with the meeting ends of rails, of the coupling and fastening device comprising a metal coupling adapted for contact with one side of the rails, and having an opposite portion which is inclined outward and corrugated on the inner side and also provided with end flanges projecting inward, or toward the rails, and a wedge arranged between the corrugated side and

the adjacent webs of the rails, and held against endwise movement by the aforesaid flanges, substantially as described.

2. The improved coupling for railroad-
5 rails, comprising a casting constructed on one side for contact with the rails, and provided with braces, the opposite portion being inclined outward and corrugated on the

inner side and also provided with exterior braces and at the ends with inwardly-projecting flanges for holding a wedge in place in the manner described. 10

WILLIAM DAVID McCURDY.

Witnesses:

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