

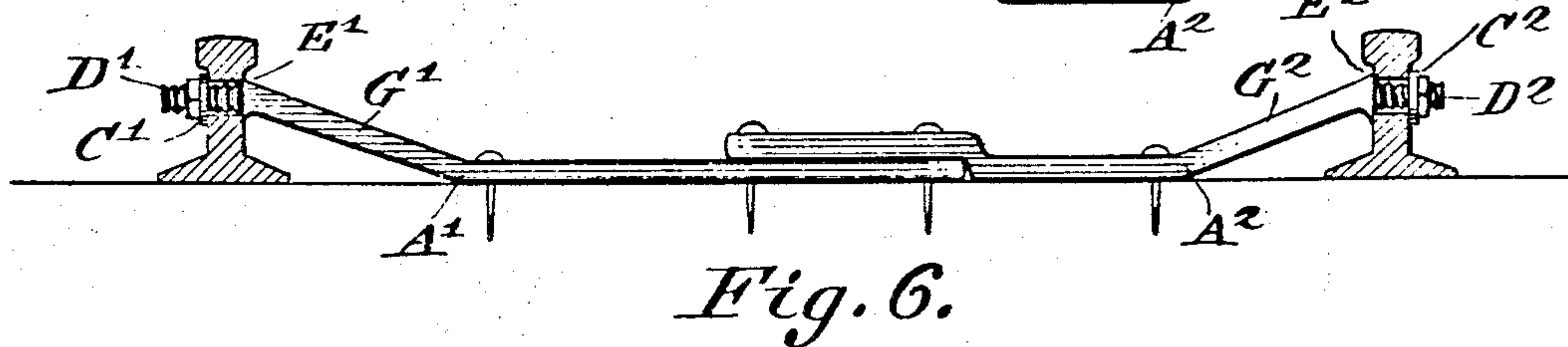
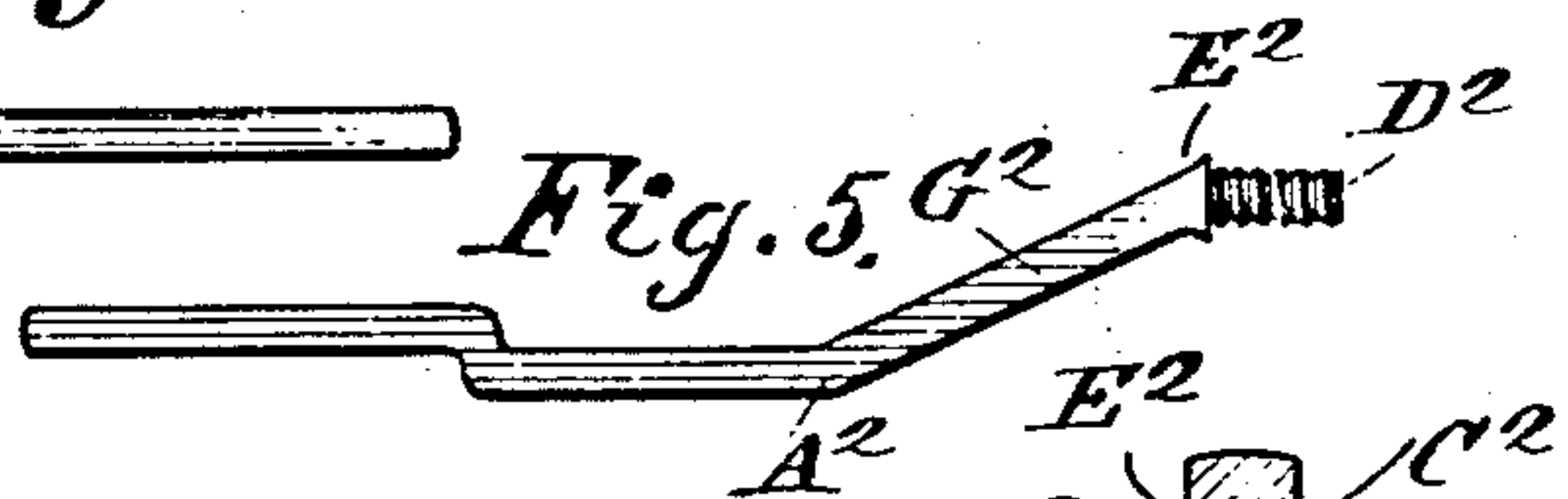
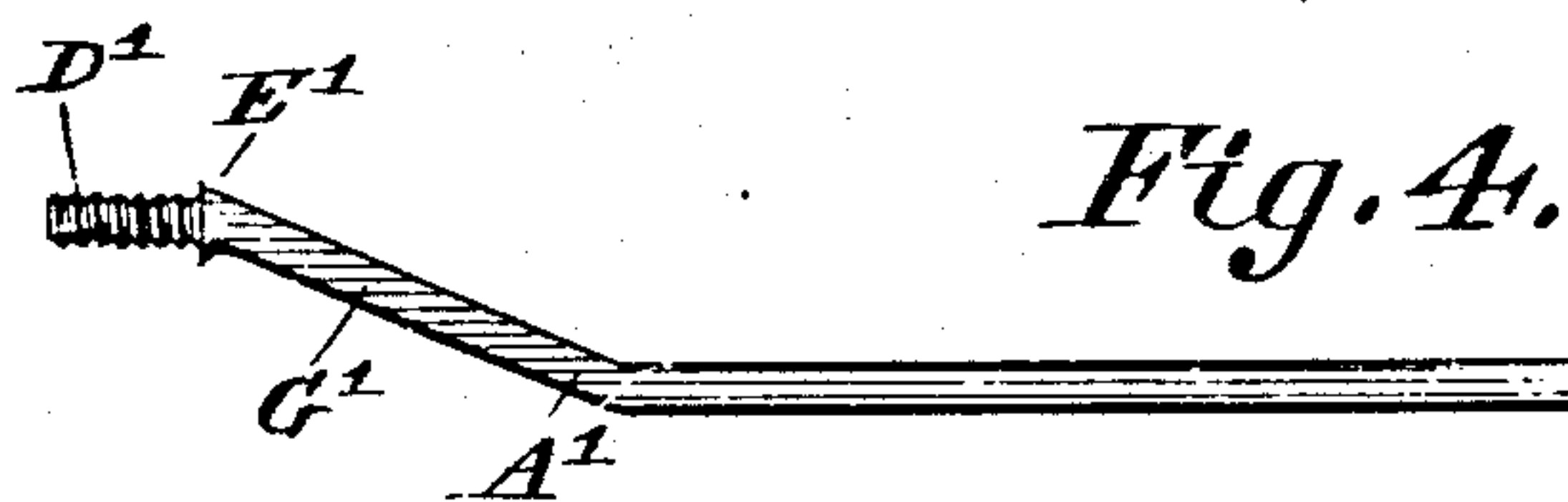
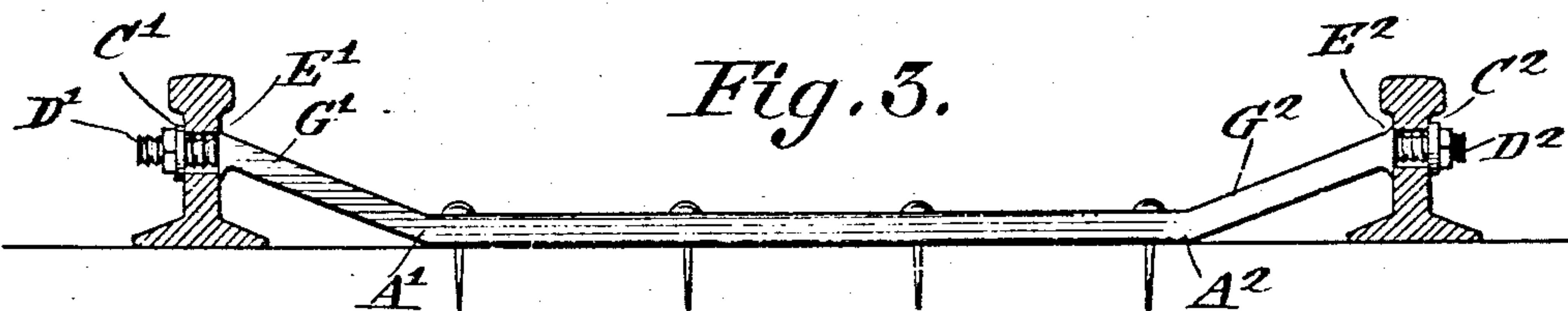
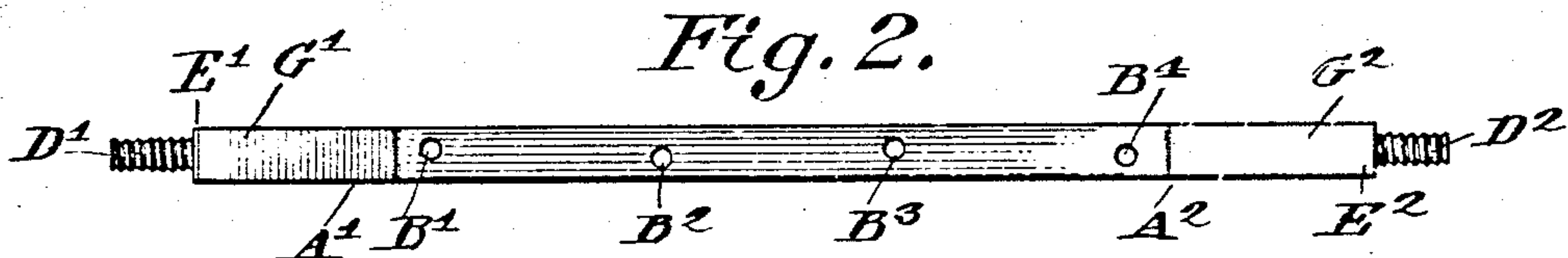
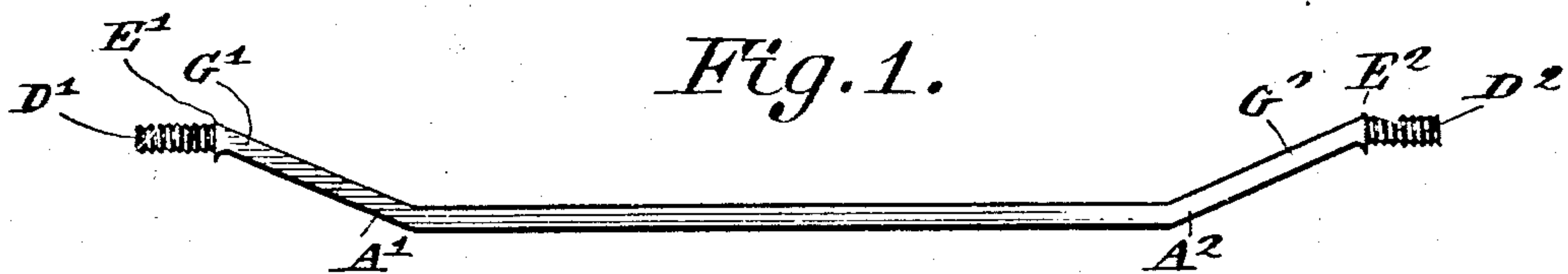
No. 881,198.

PATENTED MAR. 10, 1908.

J. OLDENDORF.

RAIL BRACE.

APPLICATION FILED MAY 10, 1907.



Witnesses:
J. H. Stailwood
Frank J. Suroge

Inventor:
John Oldendorf
by Henry M. Lunnin
Attorney.

UNITED STATES PATENT OFFICE.

JOHN OLDENDORF, OF ELIZABETH, NEW JERSEY.

RAIL-BRACE.

No. 881,198.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed May 10, 1907. Serial No. 372,949.

To all whom it may concern:

Be it known that I, JOHN OLDENDORF, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented a new and useful Rail-Brace, of which the following is a specification.

My invention relates to improvements in means for securing the position of railroad rails upon the ties or sleepers and the objects of my improvement are to provide an appliance simple, and inexpensive of both manufacture and application, of maximum applicability and of maximum efficiency in the purpose described. I attain these objects by the creation of the appliance illustrated in the accompanying drawing, in which:

Figure 1 is a longitudinal view of the single unit form. Fig. 2 is a plan of the same. Fig. 3 is a cross section of the rails and longitudinal view of the brace, showing same in position in the rails. Fig. 4 is a longitudinal view of one part of the divided form. Fig. 5 is a longitudinal view of the other part of the same. Fig. 6 is a cross section of the rails and longitudinal view of the divided form of the brace, showing same in position in the rails.

Like letters refer to like parts throughout the several views.

The appliance consists of a bar of metal, preferably rectangular, and somewhat wider than thick and of suitable length. This bar may be divided for convenience as hereinafter shown.

Two obtuse angles, both in the same direction, are bent into the bar, one near either end, as at A^1 and A^2 , so that the bar assumes a relative form similar to three adjacent sides of a hexagon. Suitable holes are passed through the center reach of the bar as at B^1 , B^2 , B^3 and B^4 , for the reception of spikes or bolts in fastening said bar to the sleeper. At either extreme end of the bar, a suitable means of attachment to the rails is provided, such as bending such extreme ends back into parallel planes, with the center reach of the bar, reducing their diameter and threading them for the reception of a suitable nut (C^1 and C^2), as at D^1 and D^2 , after passing through the rail. A shoulder would

be thus formed, as E^1 and E^2 . The bar may also be divided, near the middle, as shown in Figs. 4 and 5. Thus, where it is desired or is practicable to brace only one rail, a half bar may be used, while the other half may be added later, if desired, by affixing the bent part shown by Fig. 5 as in Fig. 6.

In application, the brace is let fall, crosswise of the track, its center reach resting upon the sleeper and its extreme ends engaging the rails near the top thereof, preferably just under the shoulder of the rail. It may be sprung into position and the ends fastened to the rails and the center reach fastened down upon the sleeper. The result is that with respect to the bracing of each rail, we have a triangle composed of the horizontal sleeper for a base, the vertical rail for a side and the inclined portion, G^1 or G^2 , of the brace for a hypotenuse, the latter firmly anchored to the sleeper by its unification with the horizontal or center reach of the brace which is fastened to the sleeper. As the hypotenuse extends outwardly from the center of the track and upwardly to the vertex of the triangle, and as the strain caused by the pressure of the flange upon the rail is centrifugal and practically at the said vertex of our triangle, such strain is met by the tenacity of our brace and the danger of the laying over outwardly or so called "spreading" of the rails is minimized.

What I claim as my invention and desire to protect by Letters Patent is:

1. A rail brace composed of a continuous bar of metal, normally attached to the inside of one rail, near the top thereof, extending thence, at an acute angle with the vertical plane of the rail, downward to the sleeper and extending along a portion of the center thereof, and affixed thereto, and again ascending from said sleeper to and engaging the opposite rail at a point near its top, all substantially as set forth and for the purpose hereinbefore described.

2. A rail brace consisting of a continuous bar of metal bent in three planes, each at an obtuse angle with the other, its center reach engaging and fastened to the sleeper and its extremities fastened to the rails at or near the tops thereof, all substantially as set forth and for the purposes hereinbefore described.

3. In a rail brace, the combination with
the rail and sleeper, of a bar of metal engag-
ing and fastened to the surface of the sleeper
between the rails and extending along the
5 said sleeper to a point near the rail and being
there bent in an obtuse angle upwardly, ex-
tending to or through the vertical wall of the

rail at a point near its top and fastened there-
to, all substantially as set forth and for the
uses and purposes hereinbefore set forth.

JOHN OLDENDORF.

Witnesses:

W. H. RYAN,

W. EDMON CLUM.