

(No Model.)

L. BRAYTON.

TRACK FOR STREET RAILWAYS.

No. 296,668.

Patented Apr. 8, 1884.

Fig. 1 .

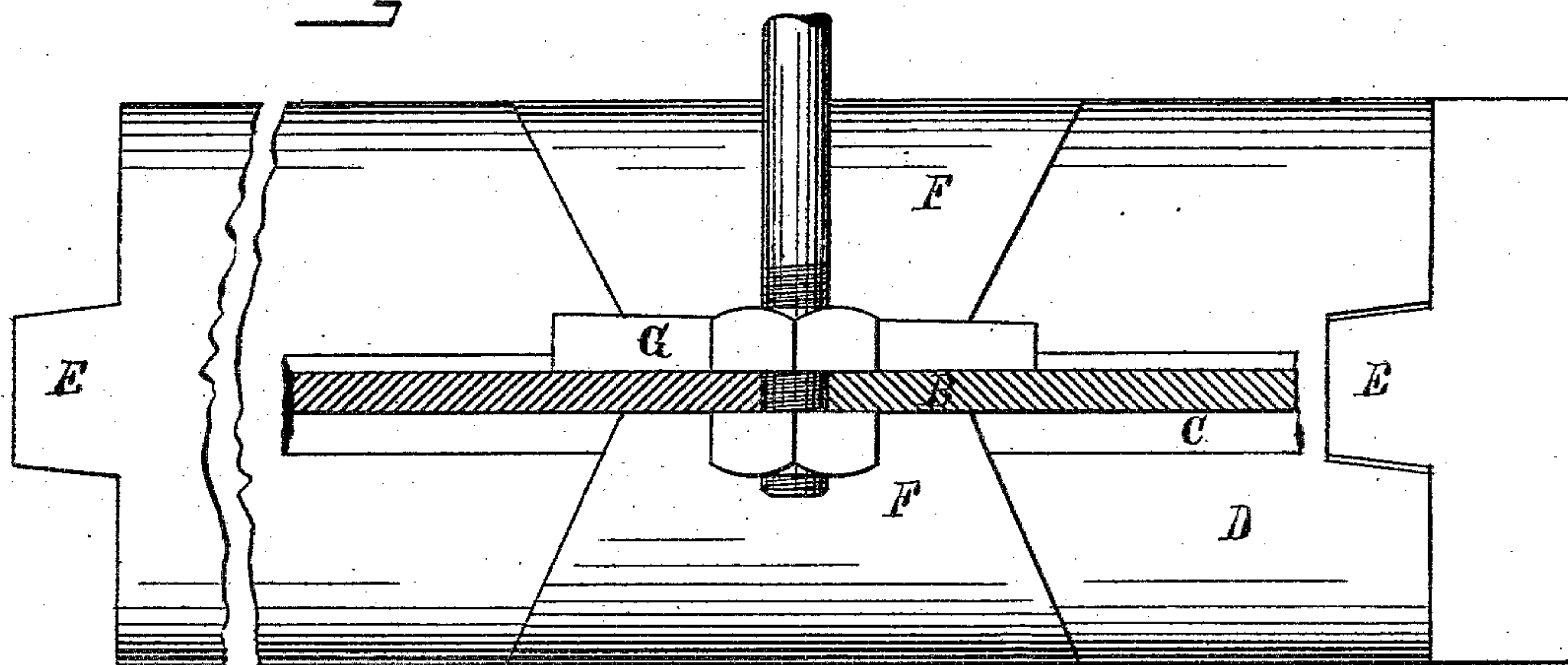


Fig. 2 .

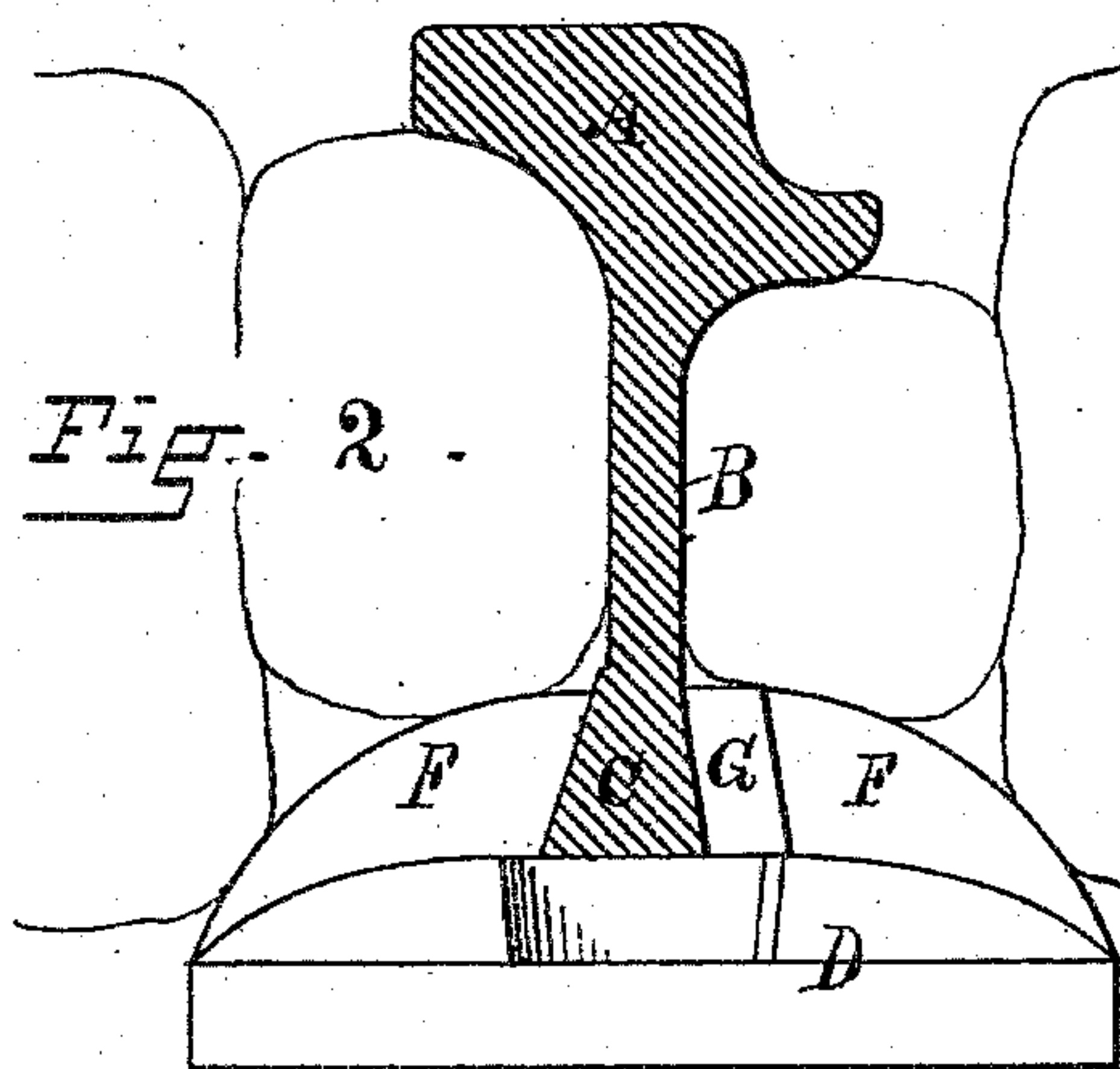


Fig. 3 .

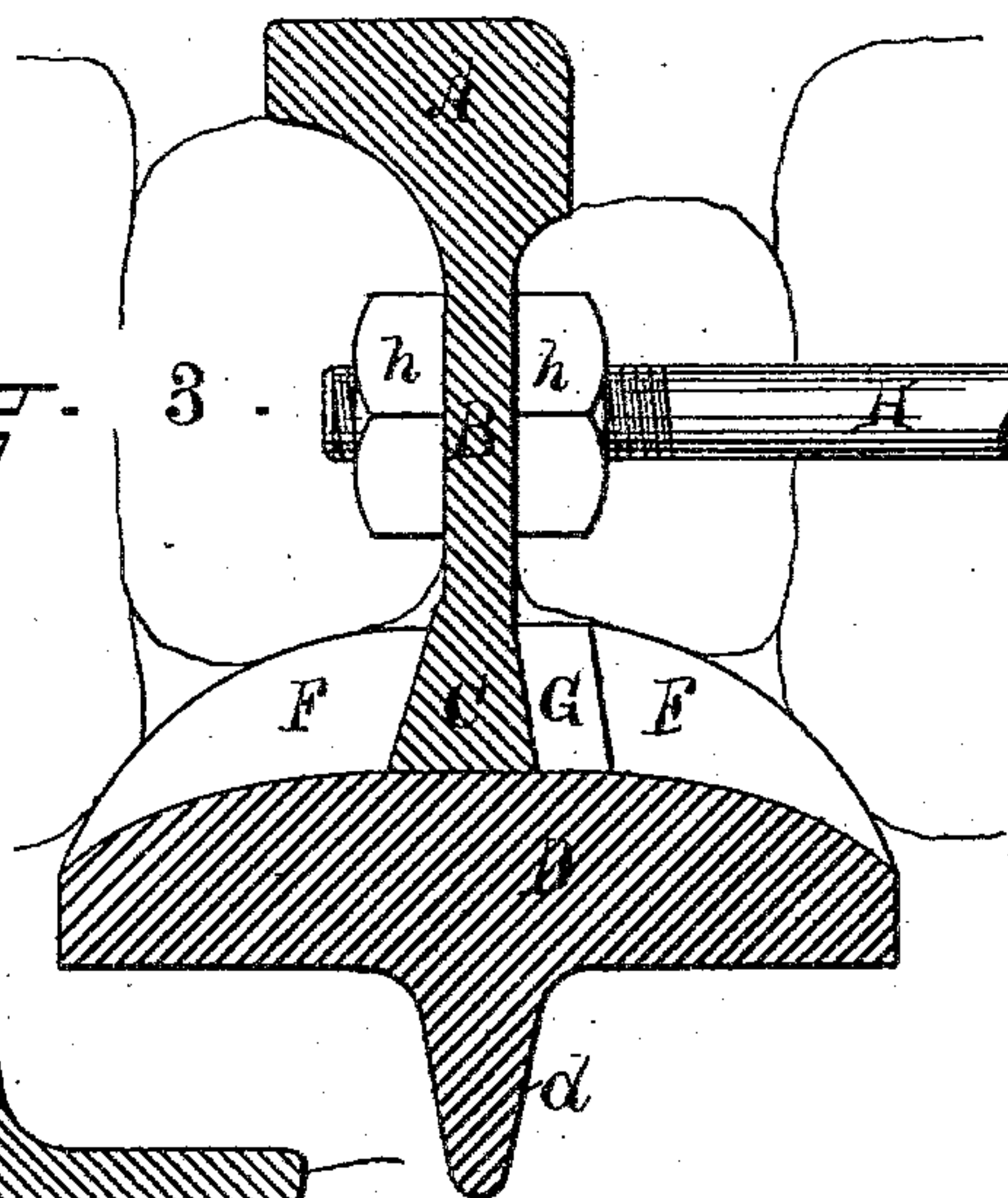
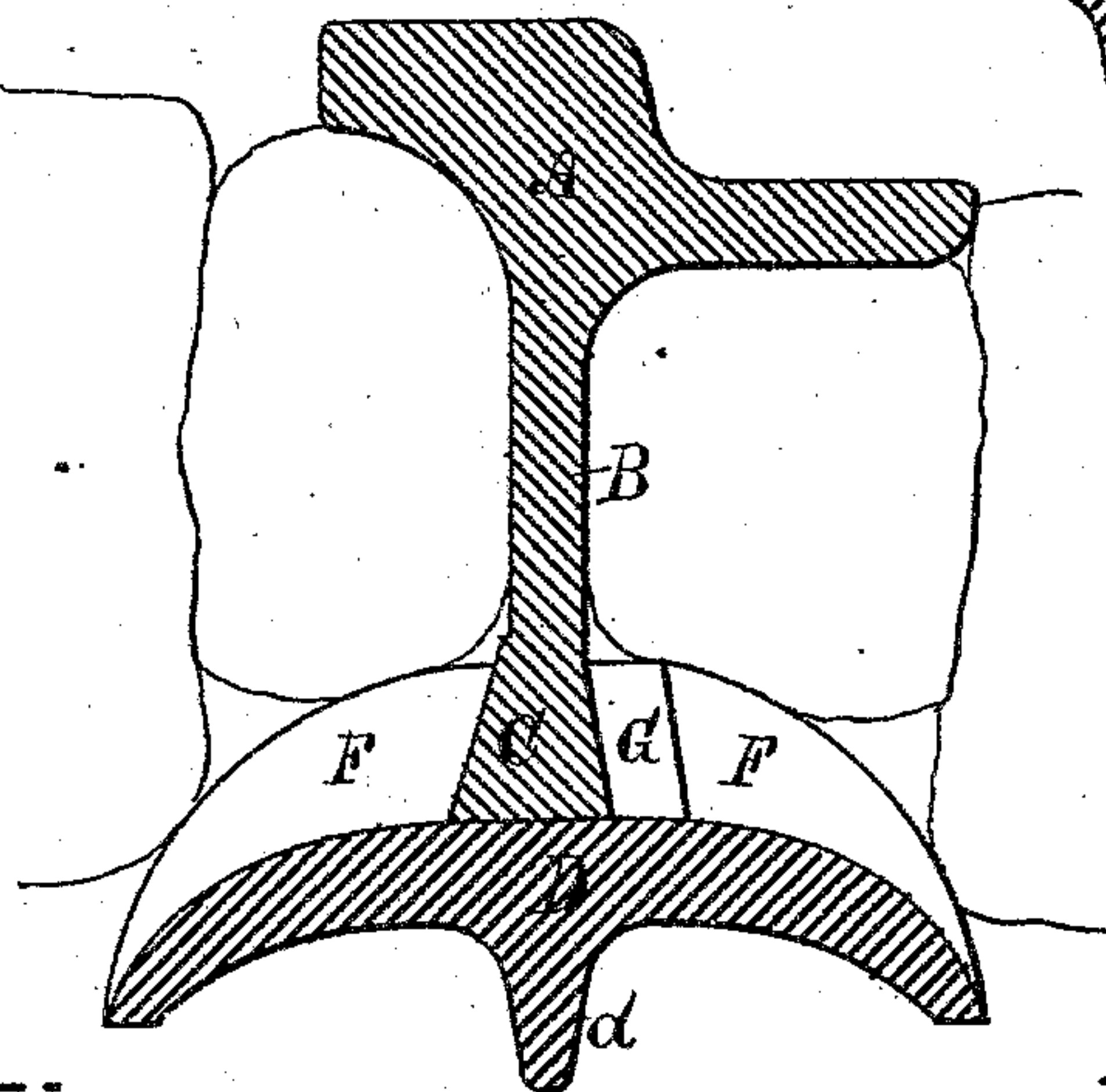


Fig. 4 .



WITNESSES:

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UNITED STATES PATENT OFFICE.

LODOWICK BRAYTON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF
ONE-HALF TO DANIEL F. LONGSTREET, OF SAME PLACE.

TRACK FOR STREET-RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 296,668, dated April 8, 1884.

Application filed September 3, 1883. (No model.)

To all whom it may concern:

Be it known that I, LODOWICK BRAYTON, of the city and county of Providence, State of Rhode Island, have invented a new and useful
5 Improvement in Tracks for Street-Railways; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

10 This invention has reference to an improvement in the construction and support for rails for tramways and street-railways; and it consists in the peculiar and novel construction of the rail proper, and in the construction and
15 arrangement of a continuous support for the same, as will be more fully set forth herein-after.

The object of this invention is to produce a rail peculiarly adapted to street-railways,
20 which shall have a continuous and firm support along its whole length, and will form a rigid, true, and inflexible road on which the cars can be run with the least possible resistance.

25 Figure 1 is a top view of the metal sill or support extending the length of the rail, and on which the rail proper rests, showing the rail in section. Fig. 2 is a sectional view, showing the rail secured to a sill, the bottom
30 of which is flat. Fig. 3 is a sectional view of the rail secured to a sill provided with a central rib. Fig. 4 is a sectional view of a modification of the rail and the sill.

In the drawings, A is the head of the rail.
35 This head may be of any desired form that will be best adapted to the peculiar services for which it is required, three different forms being shown in the drawings; but any other form may be used without changing the na-
40 ture of this invention.

B is the web of the rail.

C is the foot of the rail, made of dovetail section, wider at the bottom than at its junction with the web, for the purpose of giving a
45 broader bearing to the rail and allowing the same to be firmly secured to the sill.

D is the sill, constructed to give a continuous support to the rail the whole length of the rail, and arranged so that the joint of the rail
50 will be at or near the center of the sill, so as to break joints more effectually and secure the

advantages of a continuous rail. The ends of the sill are provided with interlocking splices, so that the ends will overlap and form as nearly as possible a continuous sill and continuous
55 support for the rail.

F F are lugs formed on the sill D at intervals of two or more feet. They are formed so as to fit the foot C of the rail and allow the same to be secured firmly by the wedge G.
60 These lugs are of the width shown in Fig. 1, at the places where the rails join only. At all other points they may be of less width, as they only serve the purpose of securing the rail firmly to the sill; but wherever the ends
65 of the rails joint or abut, the lugs F F are made of sufficient width to firmly secure the ends and retain them in proper alignment. I prefer to make the sill of cast-iron, and provide the same with the central rib, *d*, so as to retain
70 the material in tamping and prevent the shifting of the rail. The sill may also be cast in section, as shown in Fig. 4, by which material will be saved and the sill may be more firmly
75 bedded.

H is the connecting-rod extending from one rail to the other. It is provided at each end with the nuts *h h*, by which the rails are firmly held, and can be adjusted the proper distance
80 apart. These tie-rods are placed at proper intervals apart, so as to tie the rails and prevent the spreading of the same. By thus securing a solid and continuous bearing for the rail on a cast-metal sill and firmly securing the rail to the sill, a permanent way is secured
85 which is perfectly true and on which the cars run with the least resistance.

The sill may be firmly bedded in concrete of such depth as will place the support below the influence of frost and give a wide bearing
90 to sustain the load, and when the rails are worn new rails can be readily secured to the old sills, which, when properly bedded and made of sufficient strength, will last a long time, as cast metal is not readily affected when
95 placed under ground.

The lugs F F at the joints of the rails may be made to extend much higher on the rail than is shown in the drawings, so as to give a firmer support to the rail at the joint, or fish-
100 plates may be used at the joints, as is now the usual practice.

I have described and shown my improved railway-track as applied to street-railways; and my invention is principally intended to be used for that purpose. However, it is to be understood that I contemplate the use of my improvement in the construction of other than street-railways.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

10 1. The combination, with a rail having the head A, the web B, and the dovetail-shaped base C, of the cast-metal sill D, provided with the lugs F F, and the wedge-shaped key G, constructed to secure the rail to the sill and
15 secure a continuous bearing for the rail, as described.

2. A permanent way for street-railways, consisting of rails provided with suitable heads,

deep webs, and dovetail-shaped bases, substantially as described, secured to sills made of cast metal, and provided with lugs constructed to secure the rail at intervals by wedges, and support the same continuously, and tie-rods provided at each end with two nuts, as described.

25 3. The combination, with the continuous sill D, provided with the rib d, and the lugs F, of the rails having each the head A, web B, and dovetail-shaped base C, and the wedge-shaped keys G, substantially as and for the purposes set forth. 30

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Witnesses:

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