

No. 840,258.

PATENTED JAN. 1, 1907.

J. SCHENBECK.
SOUND DEADENING MEANS FOR RAILWAYS.
APPLICATION FILED APR. 30, 1906.

Fig. 1.

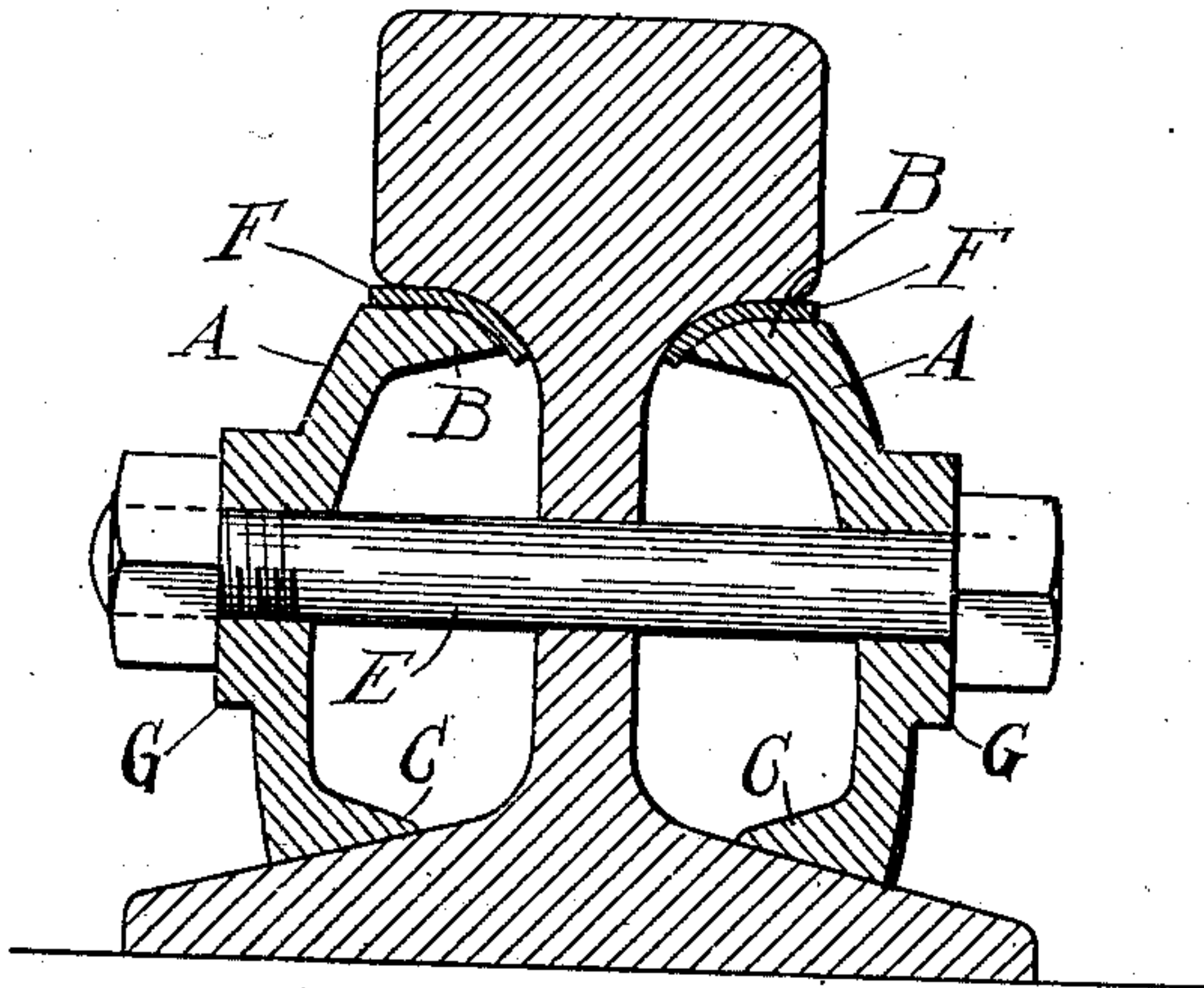


Fig. 2.

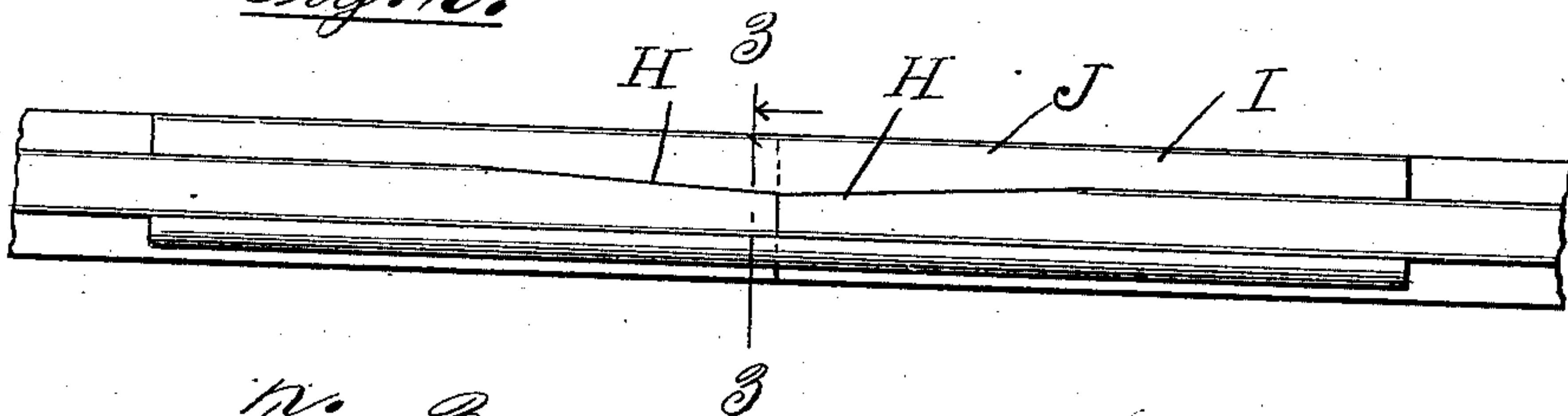
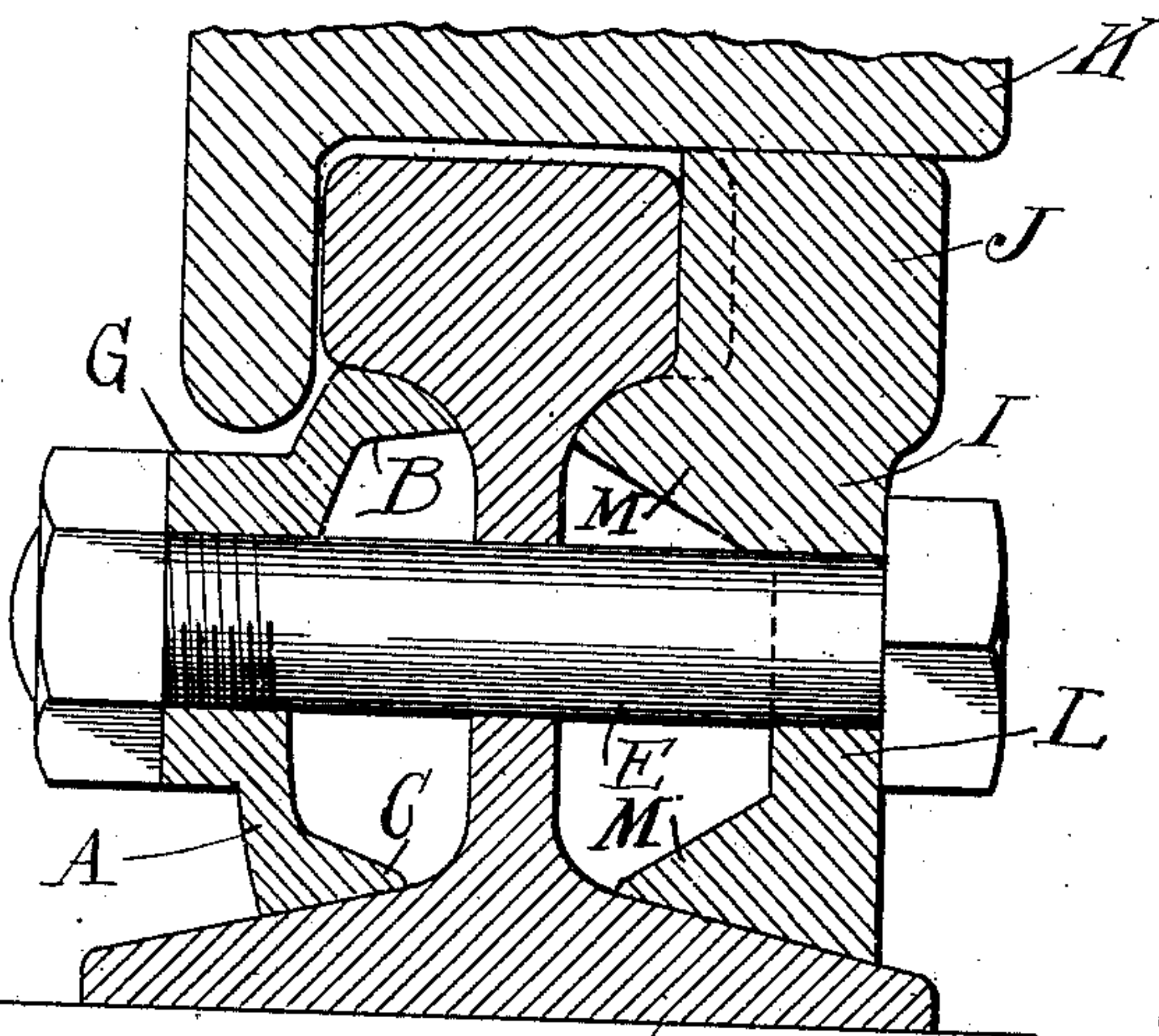


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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SOUND-DEADENING MEANS FOR RAILWAYS.

No. 840,258.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed April 30, 1906. Serial No. 314,347.

To all whom it may concern:

Be it known that I, JOHN SCHENBECK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sound-Deadening Means for Railways; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a novel construction in sound-deadening means for railways, the object being to provide simple and efficient means whereby the noise of trains running over rails is greatly reduced; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a vertical transverse section of a rail having sound-deadening means constructed in accordance with my invention disposed thereon. Fig. 2 is a fragmentary top plan view of two adjoining rails, showing connecting means disposed thereon and adapted to protect the joint between said rails to prevent the wheels of rolling-stock from passing over said joint with a jolt. Fig. 3 is a vertical transverse section on the line 3 3 of Fig. 2, showing in fragmentary section a car-wheel running over the rail.

My invention is particularly adapted for use on elevated-railway structures in large cities and on railroads generally, not only to deaden the sound or vibration causing such sound during the passage of a train over the rails, but likewise to reinforce and strengthen the rails themselves and reinforce and protect the same at the joints.

To these and other ends I dispose on each side of the web of a rail a longitudinally-disposed concavo-convex plate A, provided on its edges with flanges B and C, said plates being disposed with their convex faces outwardly and so that the flange B presses upon the under face of the head of the rail and the flange C on the upper face of the flange of the rail. At intervals bolts E are passed through both plates and through the web of the rail, and by means thereof said plates A are drawn toward said web of said rail with great force. By means of the wedge action of said plates the movement of the same to-

ward said web will obviously tend to place said web under vertical tension and said plates under lateral compression.

If desired, strips F, of felt or other suitable relatively soft packing, may be disposed between the flanges of the plates A and a part of the rail; but this is not essential. In order that the head and nuts of the bolt E may have suitable bearing-surfaces, the said plates A may be provided with bushes G surrounding the openings, through which said bolts E pass, the outer faces of said bushes being disposed parallel with each other on opposite sides of the rail when said plates are placed in position thereon. The relatively high tension to which the web of the rail is thus subjected and the compression of said plates A serve to prevent vibration of the metal, and thus deaden the sound, while at the same time the rail is increased in weight and greatly reinforced, so that its life is increased and danger of spreading thereof is lessened. In order to further protect said rails from wear at the ends at which they adjoin and which by reason of the blows imparted thereto by the wheels of passing trains which act to wear the same greatly at this point, I prefer to cut away the heads of said rails on their outer faces at their end portions on an incline, as shown at H in Fig. 2.

The plate I, disposed on the outer side of the rail, carries a head J, which is increased in width midway between its ends to fit the relatively V-shaped recess formed by the cut-away portions of the two adjoining rails, the upper face of said head J being flush with an upper face of the head of the rail or slightly raised above the same, as shown in Fig. 3, so that the tread of the wheel K in passing over the joint between said rails is raised out of contact therewith, and thus said rails are protected against wear at this point. The upper face of said head J is inclined downwardly at its ends, so that the wheel in mounting the same will not appreciably jar. The said plate I differs in shape from the plate A in that the web portion L thereof is disposed parallel with the web of the rail and is of an increased thickness to provide sufficient strength to carry the weight of the rolling-stock passing over the same, the flanges M thereof being likewise heavier and relatively V-shaped in cross-section.

I claim as my invention—

Sound-deadening means for railways including wedges disposed in the recesses formed on opposite sides of the rail between
5 the head and flanges thereof, bolts passing through said wedges and the web of the rail at intervals to force said wedges into said recesses, heads carried by the outer plates and adapted to break joint with the rail-joint,
10 V-shaped projections on the inner faces of said heads between their ends adapted to enter V-shaped recesses formed by the tapered cut-away portions of the outer faces

of the heads of adjoining rails, said heads of said wedges being disposed at a higher elevation at their middle portions than said rails and adapted to carry the weight of the rolling-stock passing over the rail-joint to relieve the end portions of said rails from wear.

In testimony whereof I have signed my name in presence of two subscribing witnesses.

JOHN SCHENBECK.

Witnesses:

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