

(No Model.)

R. T. WHITE.

STREET RAILWAY CONSTRUCTION.

No. 375,852.

Patented Jan. 3, 1888.

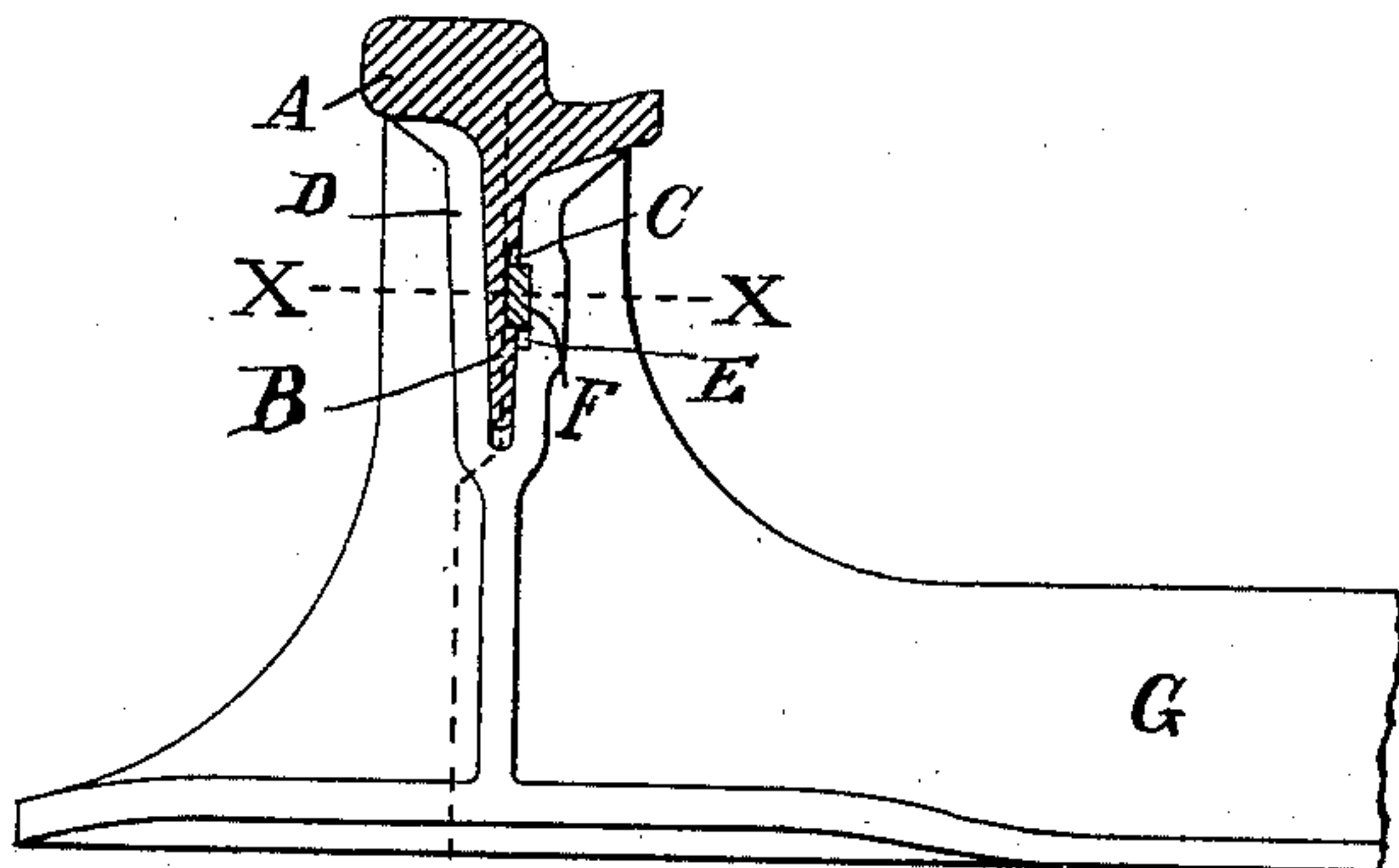


FIG. 2.

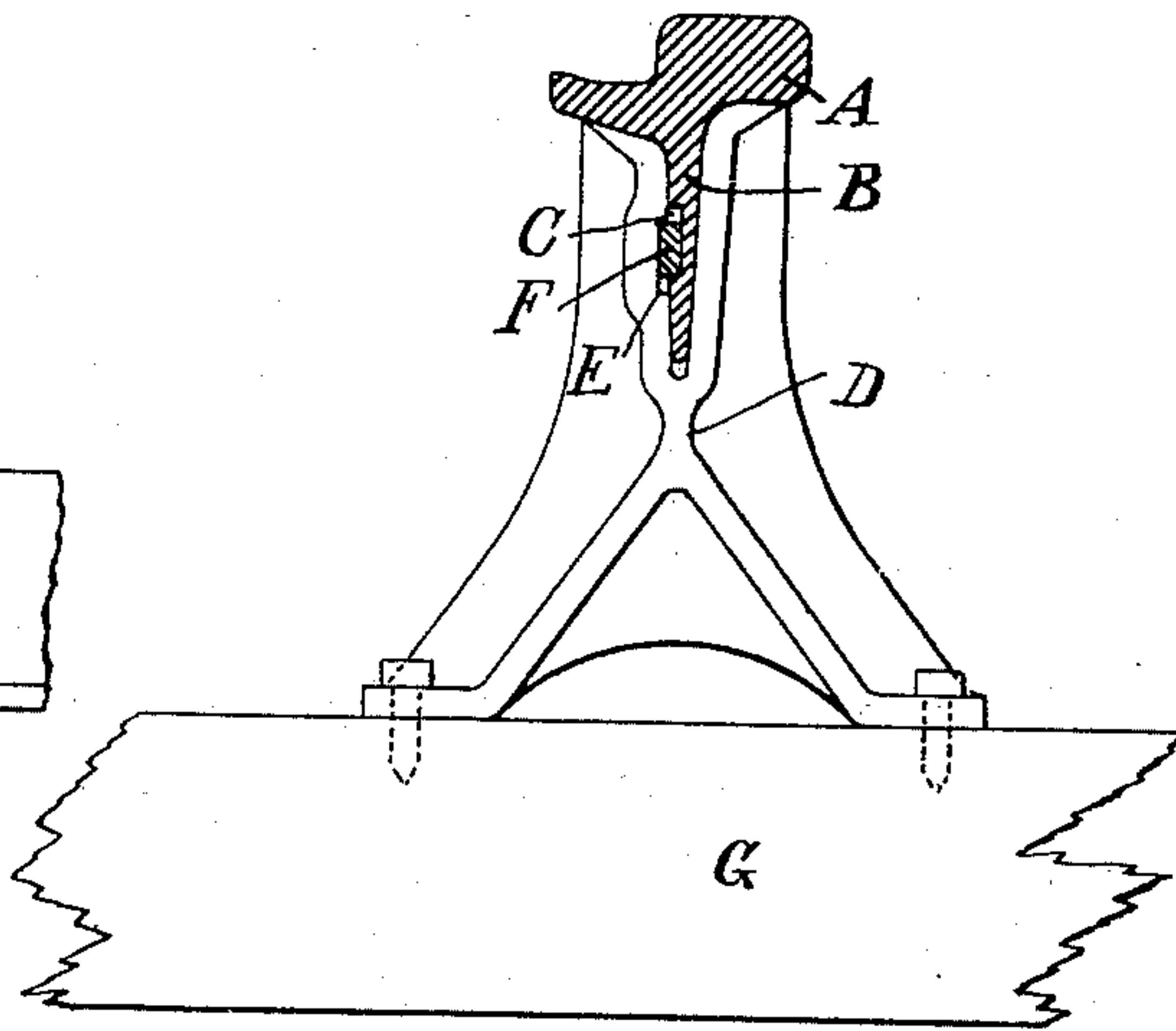


FIG. 1.

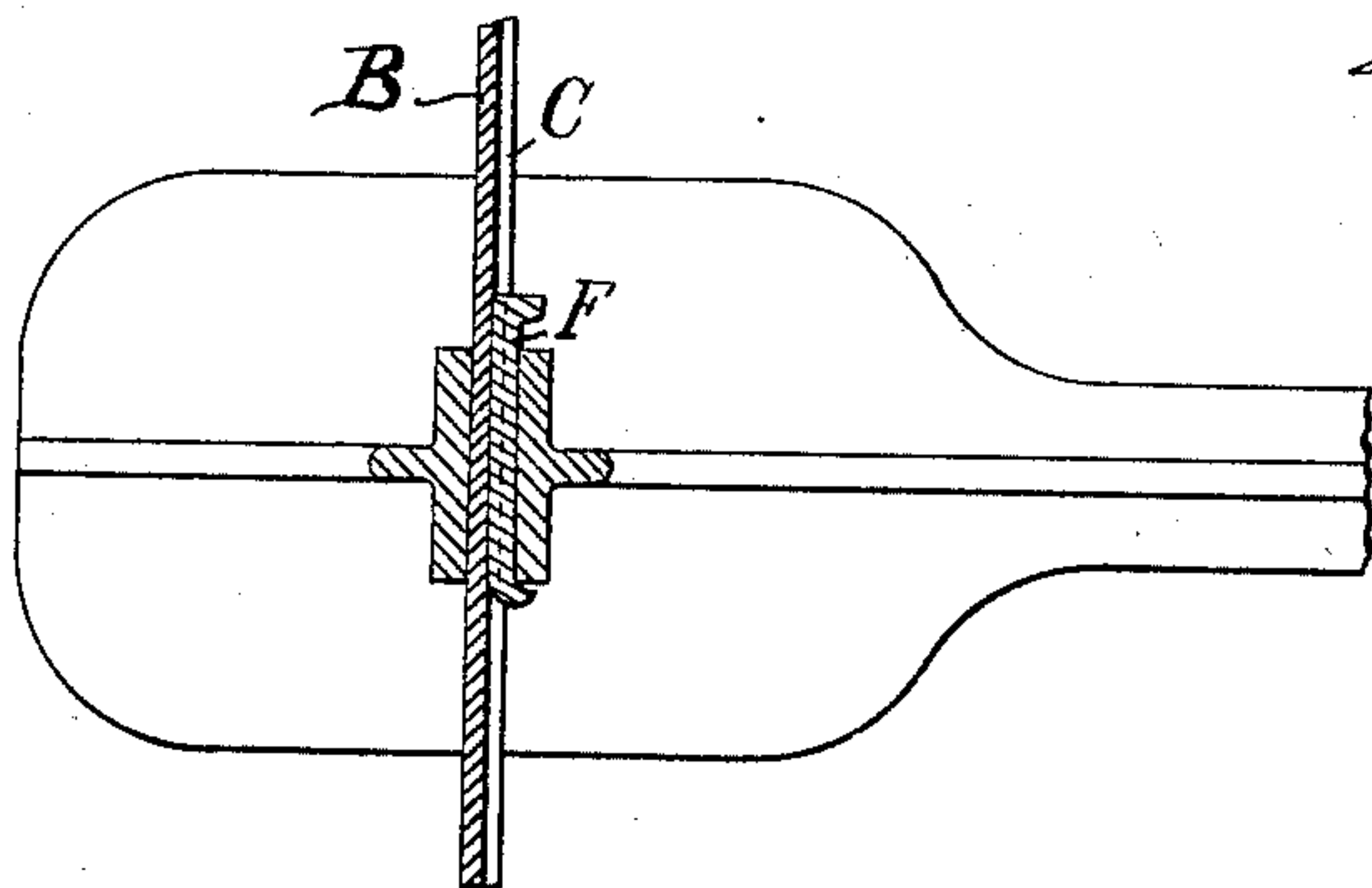


FIG. 3.

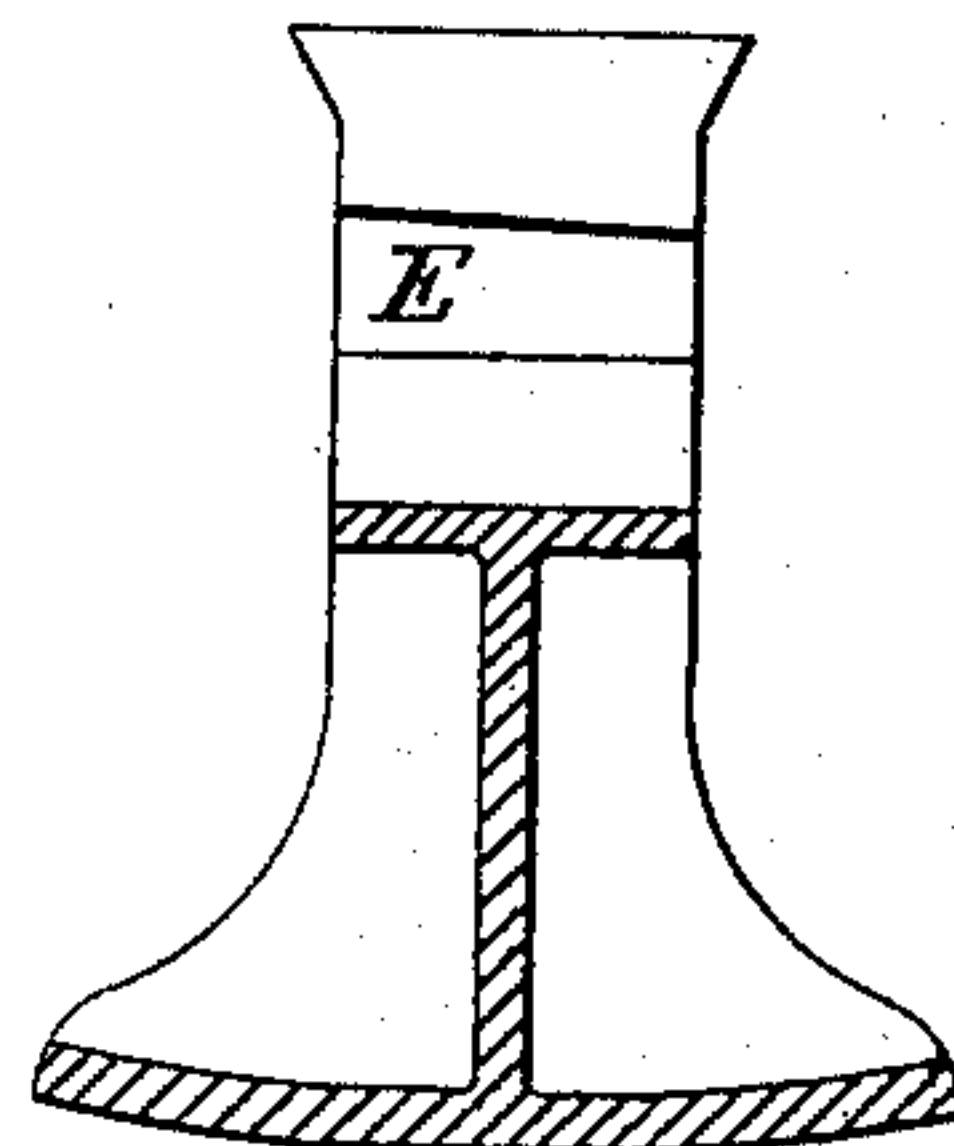


FIG. 6.

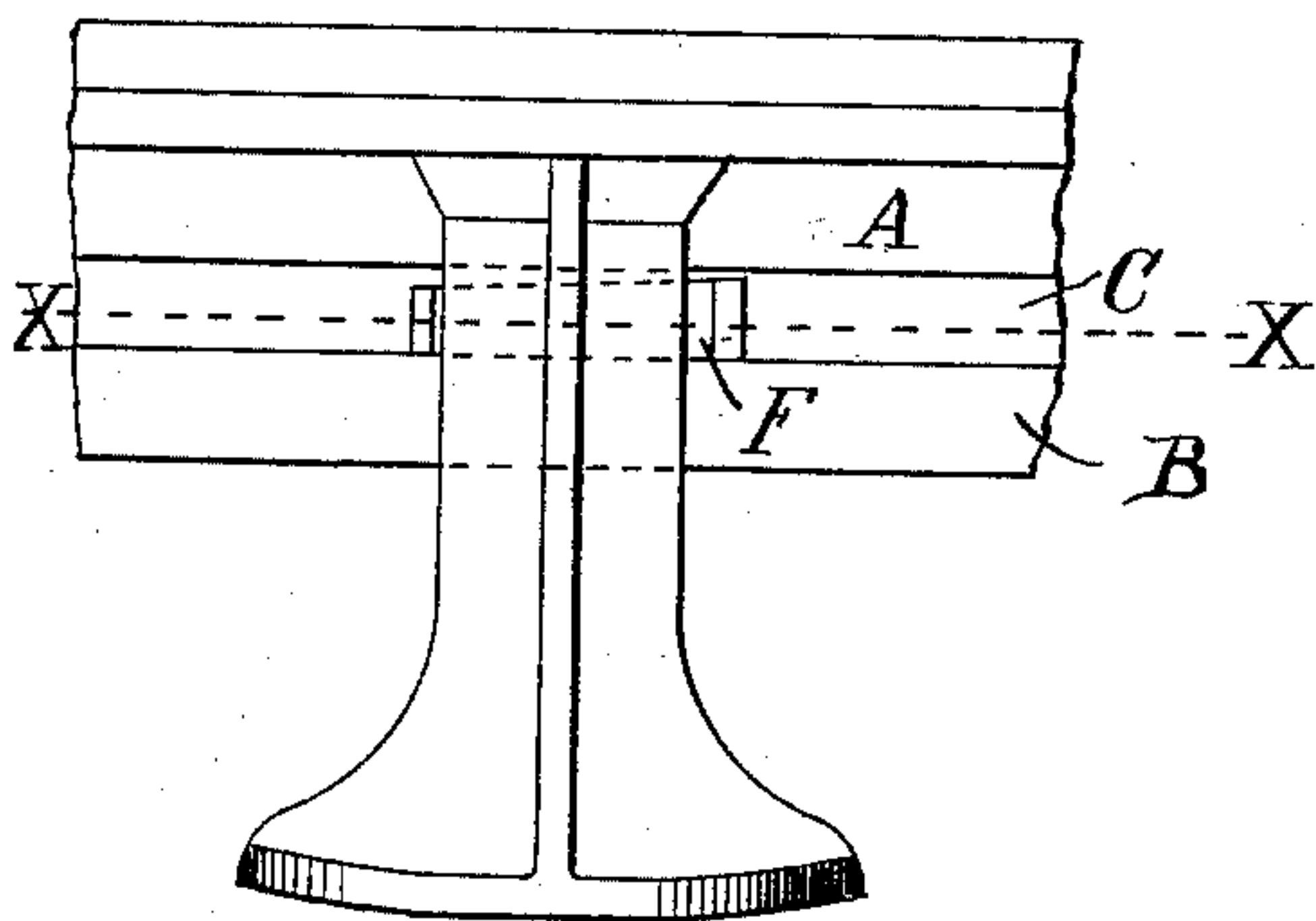


FIG. 4.

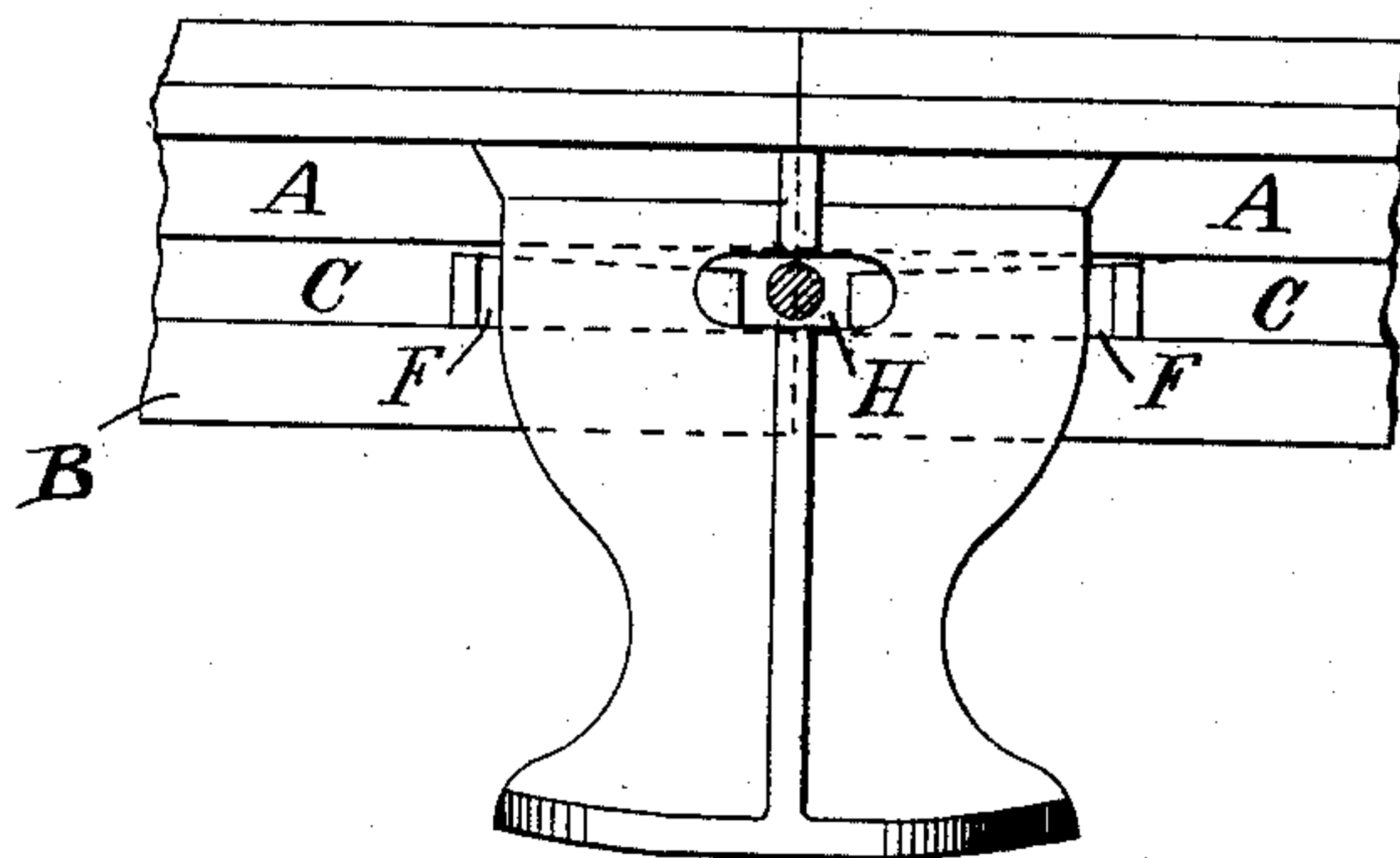


FIG. 5.

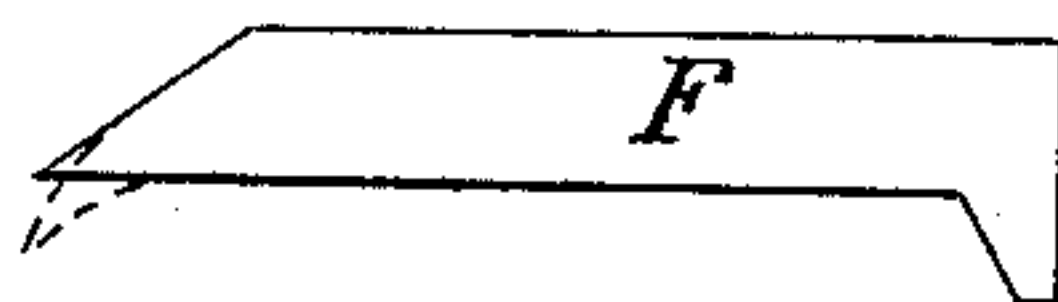


FIG. 7.

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UNITED STATES PATENT OFFICE.

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STREET-RAILWAY CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 375,852, dated January 3, 1888.

Application filed October 10, 1887. Serial No. 251,888. (No model.)

To all whom it may concern:

Be it known that I, REYNOLDS T. WHITE, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Street-Railway Construction; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of my invention is to construct a substantial and economical street-railway road-bed; and it consists in the certain details of construction of the rails, chairs, and sleepers, and the peculiar way of holding the rails in the chairs, as hereinafter fully described, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 represents an end view of a girder-rail secured into a metal chair by a key, the chair being secured to a wooden sleeper. Fig. 2 represents an end view of a girder-rail keyed into a combined chair and sleeper. Fig. 3 is a horizontal section taken on line X X of Figs. 2 and 4. Fig. 4 is a side view of the same. Fig. 5 represents the ends of two adjacent rails keyed into one chair. Fig. 6 represents a vertical cross-section of a combined chair and sleeper, one side being cut away to show the keyway. Fig. 7 represents a key drawn to an enlarged scale.

A represents a rail of any desired form of tread, having a rib, B, on its under side at or near its center, the rib B being provided with a slot, C.

D is a chair of metal and of the form shown, secured to a wooden sleeper, G, by spikes or lag-screws. The chair D is provided with a keyway, E, cast therein, as shown, so that when the rail A is laid in the chair and the key F driven in the rail A is drawn down solid onto the top of the chair D.

In Fig. 5 I have shown a chair to be used at joints of adjacent rails. This chair is of suitable width and provided with an opening, H,

through its center, so as to get at the ends of the keys F, should it be desired to drive them out or to turn their points up.

It will be seen that when the chairs are made to set on wooden sleepers they are spread at the bottom and provided with ribs, as shown in Fig. 1, so as to stiffen and keep the rails from what is termed "rolling" when heavy teams are passing in or out or over the track; but when an iron sleeper is used the chairs and sleeper are cast in one piece and of the required length to form a gage for the rails and about the form shown, so that the paving can come up close to the rails and not interfere with the sleeper or chair. The end of each rail is recessed or hollowed out, so that when the ends of two adjacent rails are placed together in the chair an opening will be left through which a key-bolt is passed, and when the key is inserted in the bolt it clamps the chair to the webs of the rails, and the keys F draw the rails down, preventing any side or upward movement of the rail, but at the same time allowing the rail to expand or contract.

Having thus described my invention, what I claim is—

1. A street-railway rail, A, having a tapering rib, B, on its under side at or near its center, said rib being provided with a groove, C, in combination with a chair, D, provided with an opening to receive said rib, and a tapering keyway, E, and the key F, substantially as and for the purposes set forth.

2. A metal chair spread at its bottom transversely from the rails and provided with an opening adapted to receive the rib of the rail, and tapering keyways, in combination with a rail having a tapering rib at or near its center on its under side, said rib being provided with a groove on one of its sides and capable of being keyed into the chair, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

REYNOLDS T. WHITE.

Witnesses:

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HENRY W. FOLSOM.