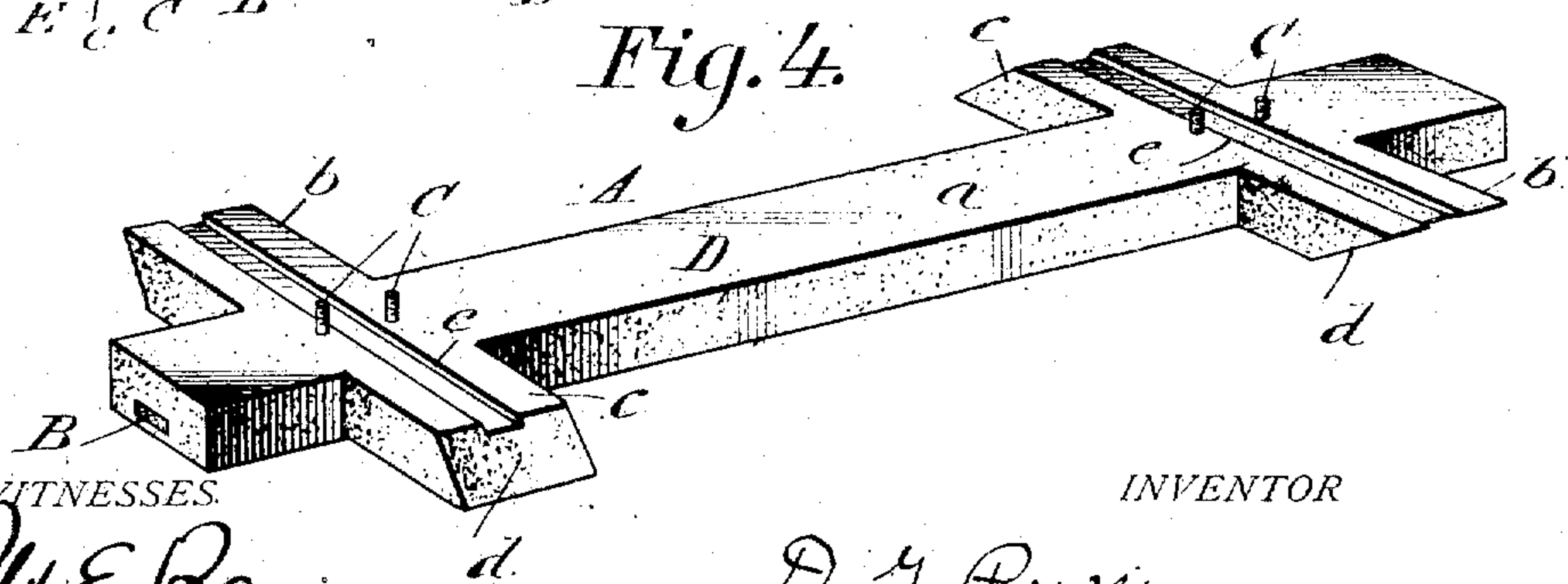
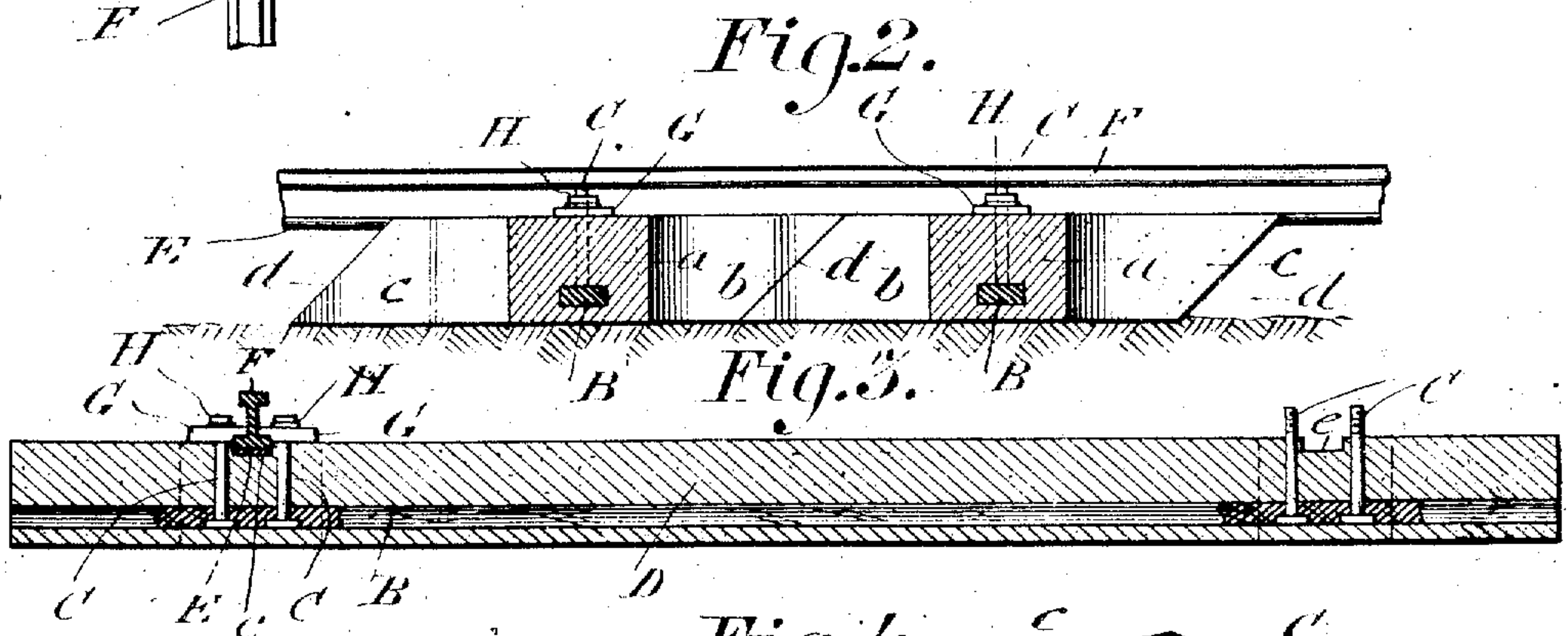
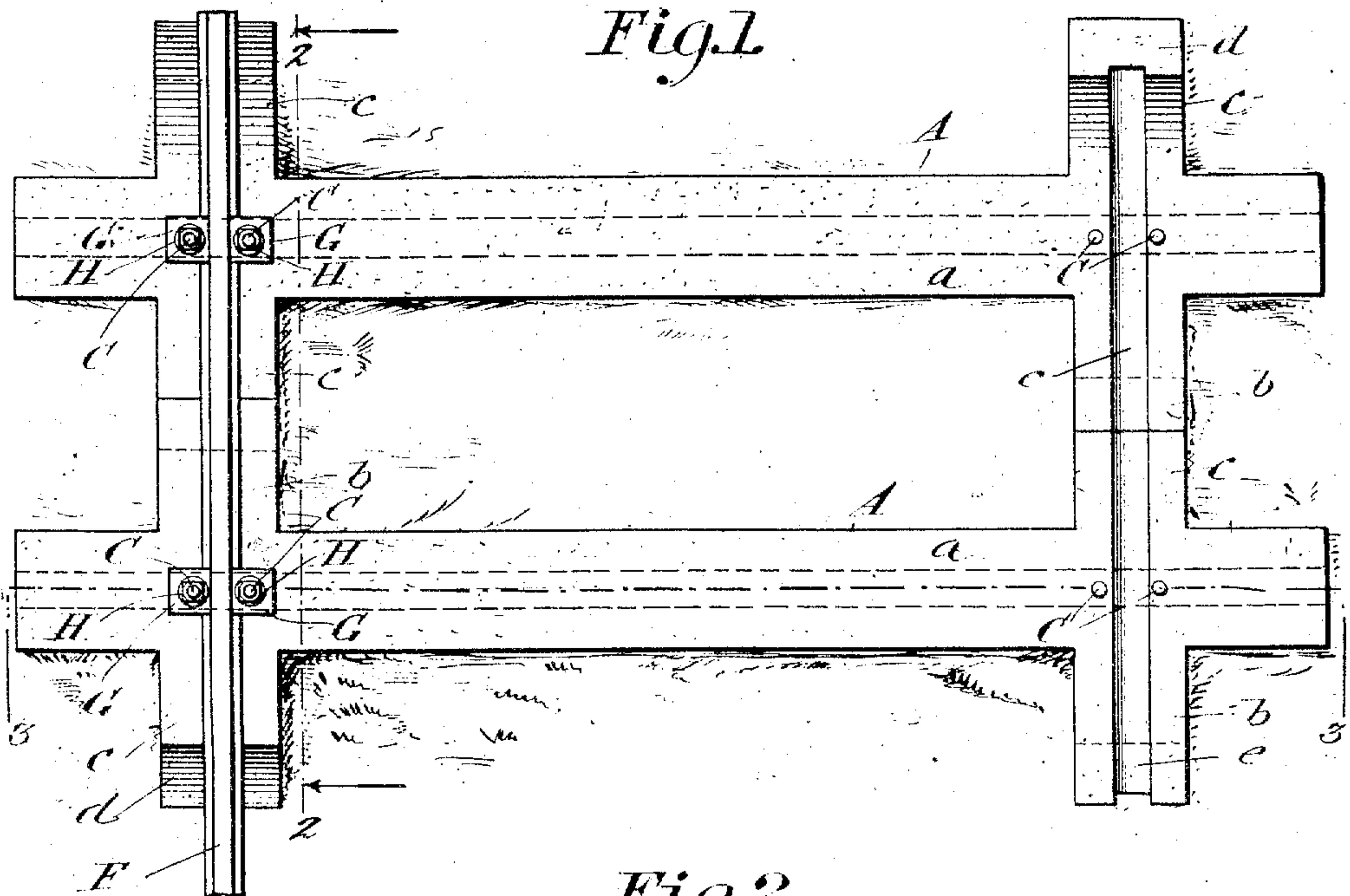


D. G. PRICE.
RAILWAY TIE.
APPLICATION FILED FEB. 3, 1911.

988,736.

Patented Apr. 4, 1911.



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RAILWAY-TIE.

988,736.

Specification of Letters Patent.

Patented Apr. 4, 1911.

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To all whom it may concern:

Be it known that I, DAVIS GARWOOD PRICE, citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Railway-Ties, of which the following is a specification.

My present invention pertains to railway ties of the composition type; and it consists in the peculiar and advantageous composition tie hereinafter described and particularly pointed out in the claims appended.

In the drawings accompanying and forming part of this specification: Figure 1 is a plan view illustrating adjoining ties constructed in accordance with my invention, and also illustrating a rail as properly arranged on and connected with the ties. Fig. 2 is a section taken in the plane indicated by the line 2—2 of Fig. 1, looking in the direction of the arrows. Fig. 3 is a section taken at a right angle to Fig. 2, and in the plane indicated by the line 3—3 of Fig. 1, and showing the wood core partly in elevation. Fig. 4 is a perspective view illustrative of the body of one tie and the parts permanently fixed therein.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A A are ties designed to be relatively arranged as shown in Figs. 1 and 2. The said ties are identical in construction, and therefore a detailed description of the one shown at the top of Fig. 1 and in Figs. 3 and 4 will suffice to impart a definite understanding of the plurality. The tie mentioned comprises a body of concrete or other suitable plastic material, a core B of wood embedded in and forming a permanent part of the tie, and bolts C which also form a permanent part of the tie and are designed for the fastening of rails to the tie in the manner hereinafter set forth.

D in Figs. 3 and 4 designates the concrete or plastic body referred to, and it will be readily understood as comprising a major portion *a* and arms *b* and *c* reaching at right angles from opposite sides of the major portion *a* and at points adjacent the ends thereof. The said arms *b* and *c* have beveled ends *d* which are preferably, though not necessarily, arranged as shown in Figs. 1, 2 and 4. In the upper sides of the major por-

tion *a* and arms *b* and *c*, are grooves *e* which extend in the same direction as the arms and are each arranged between two of the bolts C. The said grooves *e* are designed to receive a strip E, of wood, and a rail F; the said rail being superposed on the wood strip E which has for its office to prevent the transmission of shock and jar to the concrete or plastic body, as well as to form a cushion or elastic support for the rail.

As shown in Fig. 3, the heads of the bolts C are arranged in the wood core B and flush with the underside of the said core. By virtue of this the core B serves to form a cushion for the heads of the bolts and in that way prevents the said heads from grinding or disintegrating the concrete or other plastic material comprised in the body D, and becoming loose. I would also have it understood at this point that the wood core B serves incidental to the production of the tie as a templet for holding the bolts in proper position in the mold, and that subsequent to the production of the tie, the wood core serves to reinforce and lend increased strength to the concrete or plastic body, as well as to securely hold the bolts C in said body.

By reference to Figs. 1 and 2, it will be understood that by reason of the arms *b* and *c* of adjoining ties being beveled and relatively arranged so that the ties mate or match; the ties cannot tip or turn vertically, but are held down in perfectly level position. It will also be noted that the joints between adjoining ties are broken, and hence the support afforded to the rails by the plurality of ties is smooth and continuous.

After the ties are laid, as shown in Figs. 1 and 2, the wood strip E is placed in the aligned grooves of the ties, and the rail is superposed on the strip and so that the rail base rests partly at least in the said aligned grooves. Then clamping plates G are placed on the bolts C and over the rail base, and are secured in such position by nuts H or other suitable means. When the strip E and rail F are fastened as stated in the aligned grooves of adjoining ties, the said strip and rail will obviously prevent endwise movement of either tie with respect to the other.

I have illustrated the connection of but one strip E and but one rail F to the ties,

but it will be understood that the other strip and rail will be arranged and connected in the same manner.

The opposite beveling of the ends of the arms *b* and *c*, as best shown in Fig. 4, is advantageous, inasmuch as one end of one arm *c* is enabled to prevent upward movement of the tie while the end of the arm *b* at the same side of the major portion *a* is enabled to prevent downward movement of the tie, while the end of the other arm *c* is enabled to prevent downward movement of the tie, and the end of the arm *b* at the same side of the major portion *a* as the last mentioned arm *c* is enabled to prevent upward movement of the tie.

Having described my invention, what I claim and desire to secure by Letters Patent, is:

1. A railway tie, comprising a body of plastic material having a major portion and arms extending in opposite directions from the sides of said major portion at points adjacent the ends thereof and terminating in beveled ends, and also having grooves in the upper side of the major portion and the arms and extending in the direction of the length of the latter; a core embedded in and extending lengthwise of the major portion of the body; and bolts having heads

secured in the said core, said bolts extending above the body at opposite sides of the grooves in the upper side thereof.

2. A railway tie, comprising a major portion adapted to be placed crosswise of a railway, and arms extending in opposite directions from the sides of said major portion at points adjacent the ends thereof and terminating in beveled ends.

3. In a railway, the combination of ties respectively comprising a major portion extending crosswise of the railway, and arms extending from opposite sides of the major portion at points adjacent the ends thereof and terminating in beveled ends; said ties being arranged with the beveled ends of their arms matched or mated, and each tie being provided in its upper side with a groove that is alined with a similar groove in the other, a rail arranged in the alined grooves, and means fastening the rail to the ties.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DAVIS GARWOOD PRICE.

Witnesses:

A. FISCHER,
GEO. H. KENT.