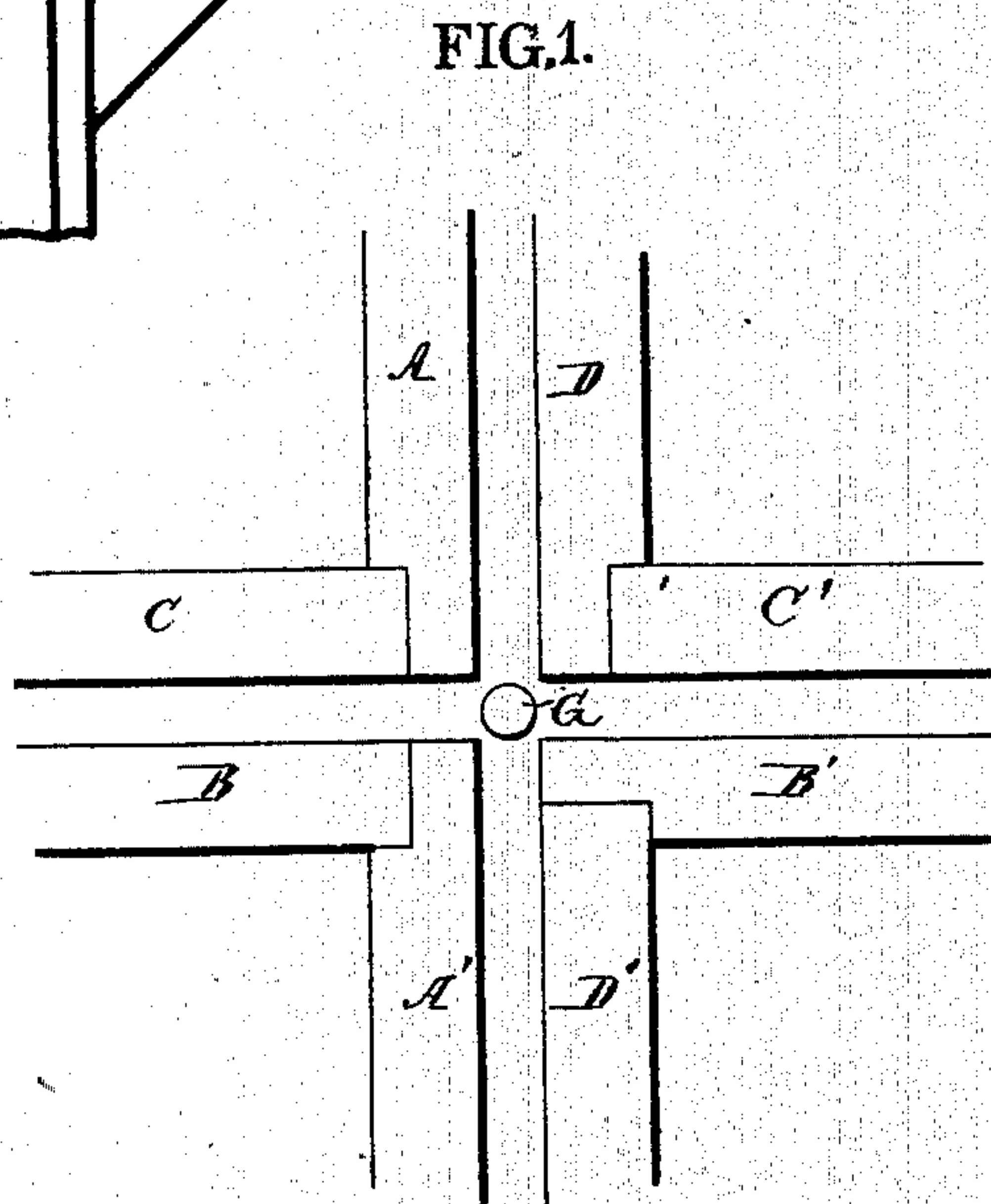
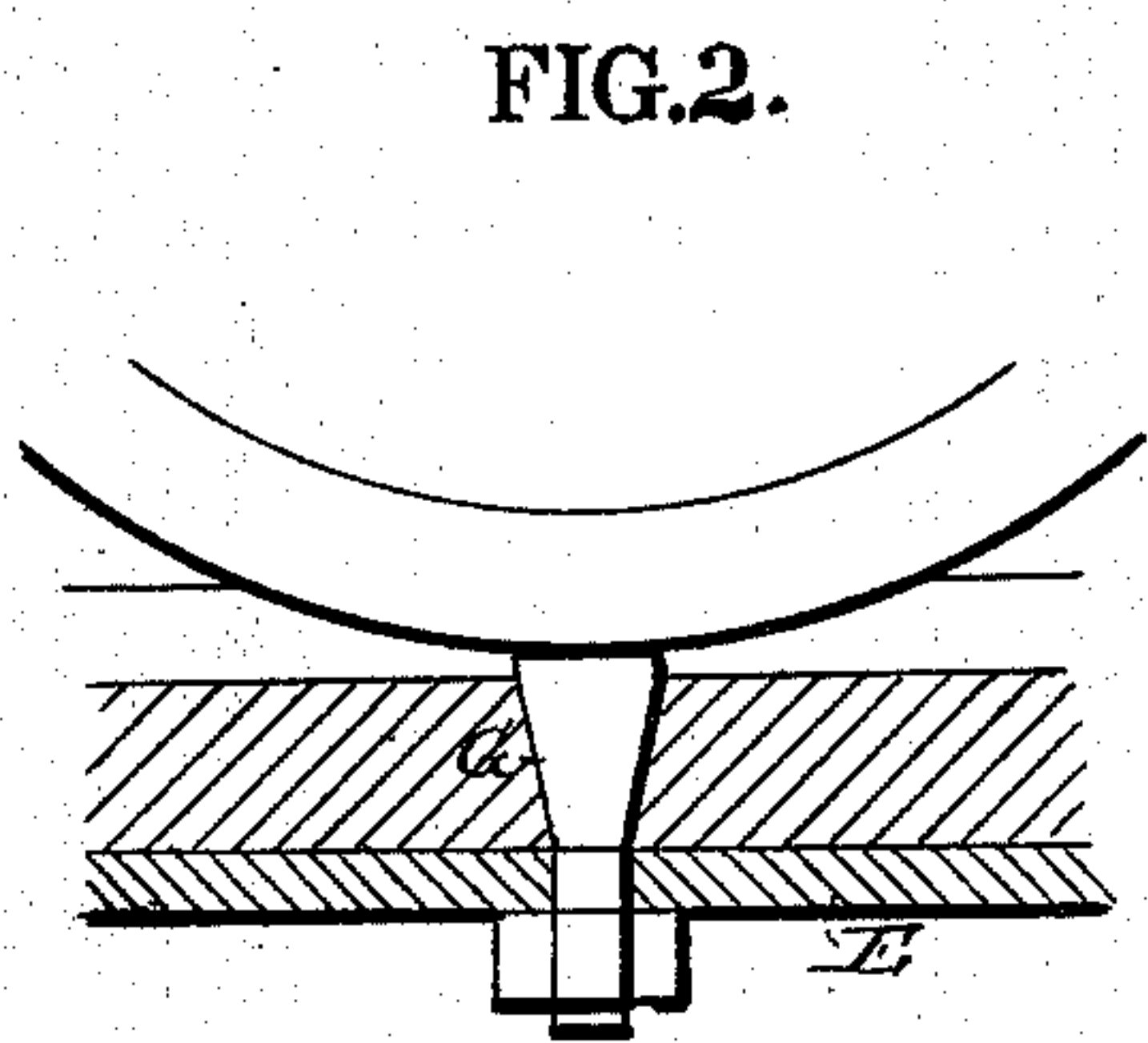
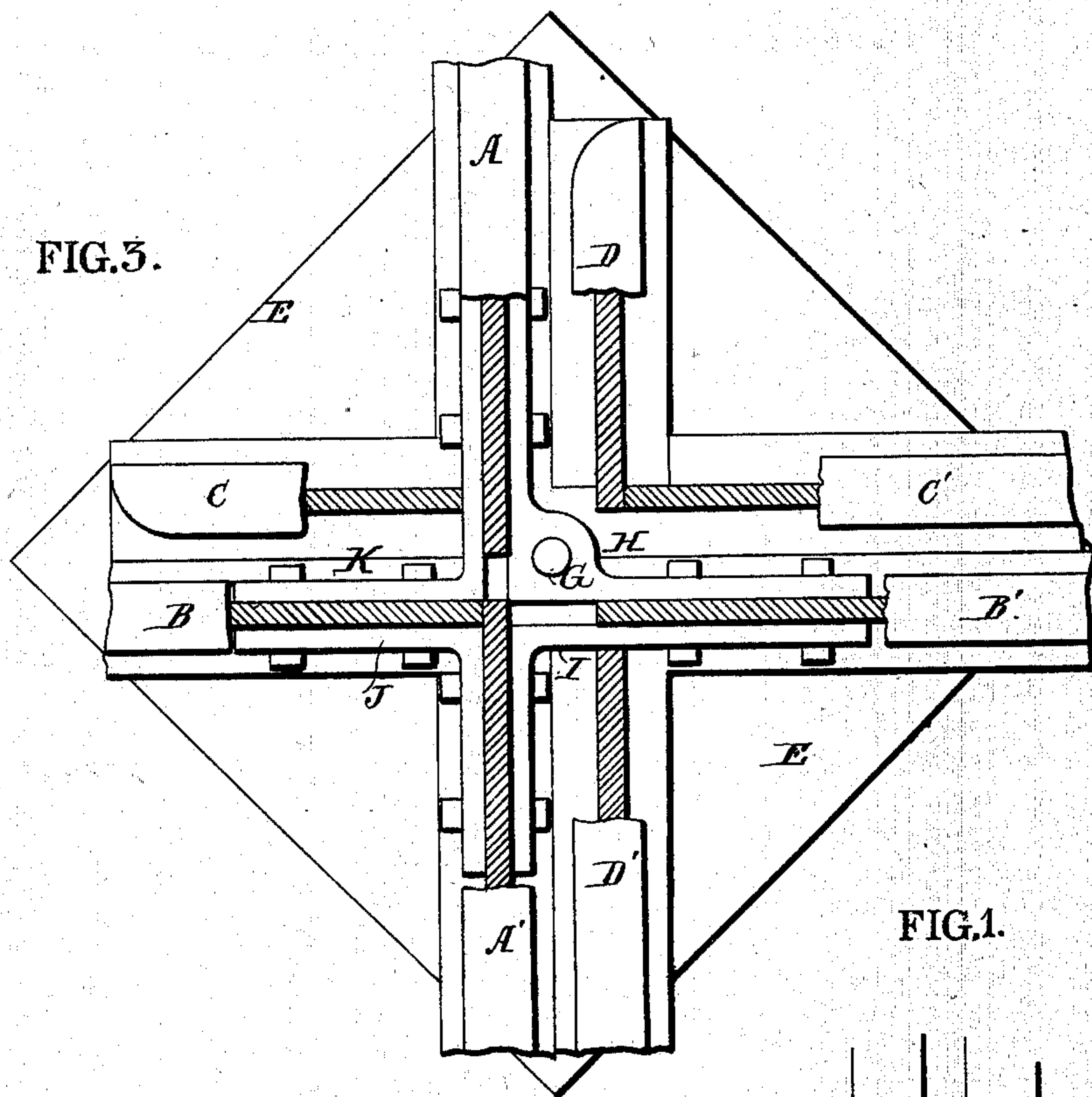


J. WOOD.
Railroad Crossings.

No. 139,643.

Patented June 3, 1873.



WITNESSES.

Harry Smith
Thomas McIlvaine

Joseph Wood
by his Atty.
Howson and Son

UNITED STATES PATENT OFFICE.

JOSEPH WOOD, OF RED BANK, NEW JERSEY.

IMPROVEMENT IN RAILROAD CROSSINGS.

Specification forming part of Letters Patent No. **139,643**, dated June 3, 1873; application filed November 11, 1872.

To all whom it may concern:

Be it known that I, JOSEPH WOOD, of Red Bank, Monmouth county, New Jersey, have invented an Improved Railroad Intersection, of which the following is a specification:

The object of my invention is to improve the railroad intersection for which Letters Patent were granted to me on the 12th day of December, 1871, No. 121,836, by rendering it more secure and permanent, and providing for its ready repair. These objects I attain by notching and fitting the rails of the intersection together, as shown in Figure 1, and by the use of a detachable pin, G, Fig. 2, of steel, at the gap which occurs where the rails intersect, so that the pin, over and in contact with which the flanges of the car-wheels ride, may be readily removed when worn, and replaced by a new one.

A A' represent the main rails of one track; B B', the intersecting main rails of another track, C C' and D D' being simply guard-rails, and the whole being secured to a bottom corner-plate, E, as described in my aforesaid patent. It should be understood that all the rails are made, by preference, of steel, and are of the usual form. Instead of the rails being simply butted together, as described in my said patent, the ends of some of the rails are notched laterally at and near their ends, to receive the ends of other and intersecting rails, in a manner which will be readily understood by referring to Fig. 1, the main rails being, by preference, notched rails, so that there may be as little interruption as possible in the continuity of their threads. At the point where the rails intersect, and where their continuity is necessarily interrupted for the passage of the flanges of the car-wheels, I introduce the tapering pin G, of steel, which, in the present instance, is secured to its place by a nut or rivet on the under side of the plate E, the top of the pin forming a bearing for the flanges of the car-wheels, so that the treads of the latter may ride easily over the gaps

formed at the intersection. This pin is necessarily subjected to greater wear than any other part of the crossing; but it can be readily removed, when deteriorated, to make way for a new one. I prefer to fit this pin into one of the splicing-bars by which the rails are secured together. In Fig. 3, for instance, an angular splicing-bar, H, serves to connect the main rail A to the intersecting main rail B', and this bar is enlarged at the corner for the reception of the pin G. The two main rails A' and B' are connected together by an angular splicing-bar, I, one leg of which passes through the web of the guard-rail D', and the two main rails B and A' are connected together by the angular splicing-bar J, while an angular splicing-bar, K, one leg of which passes through the web of the guard-rail C, serves to connect the two main rails B and A. It will thus be seen that care is taken to connect together the main rails by splicing-bars, in addition to the bottom plate E, as these rails are subjected to the most severe strains, the guard-rails being simply riveted to the bottom plate.

I claim as my invention—

1. A railroad intersection in which some of the rails are laterally notched at and near their ends, to receive the ends of other and intersecting rails, as and for the purpose set forth.

2. A detachable pin, G, inserted at the intersection of the rails, as and for the purpose specified.

3. The combination of the said pin with the angular splicing-bar H.

4. The combination of the within-described angular splicing-bars H, I, J, and K with the main rails of the intersection.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH WOOD.

Witnesses:

WM. A. STEEL,
HUBERT HOWSON.