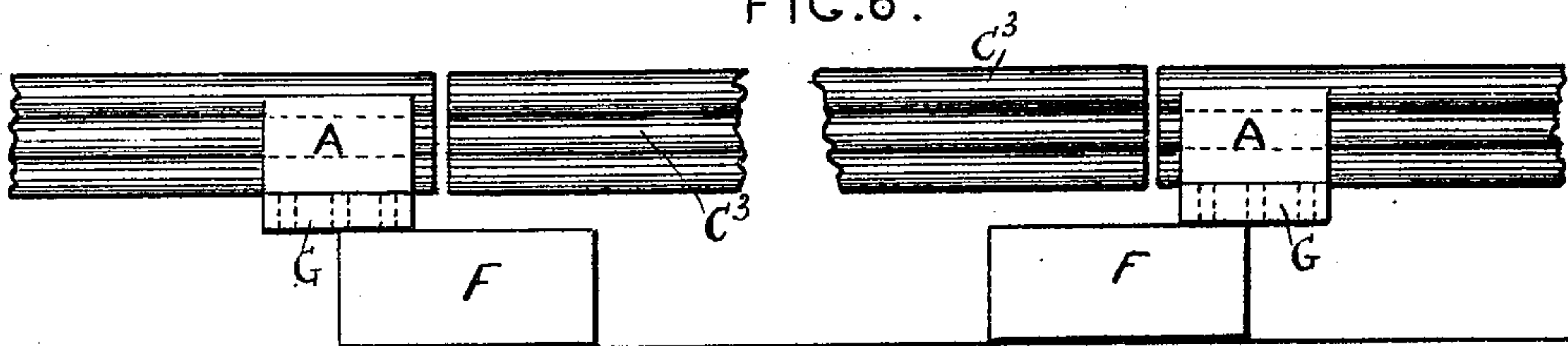
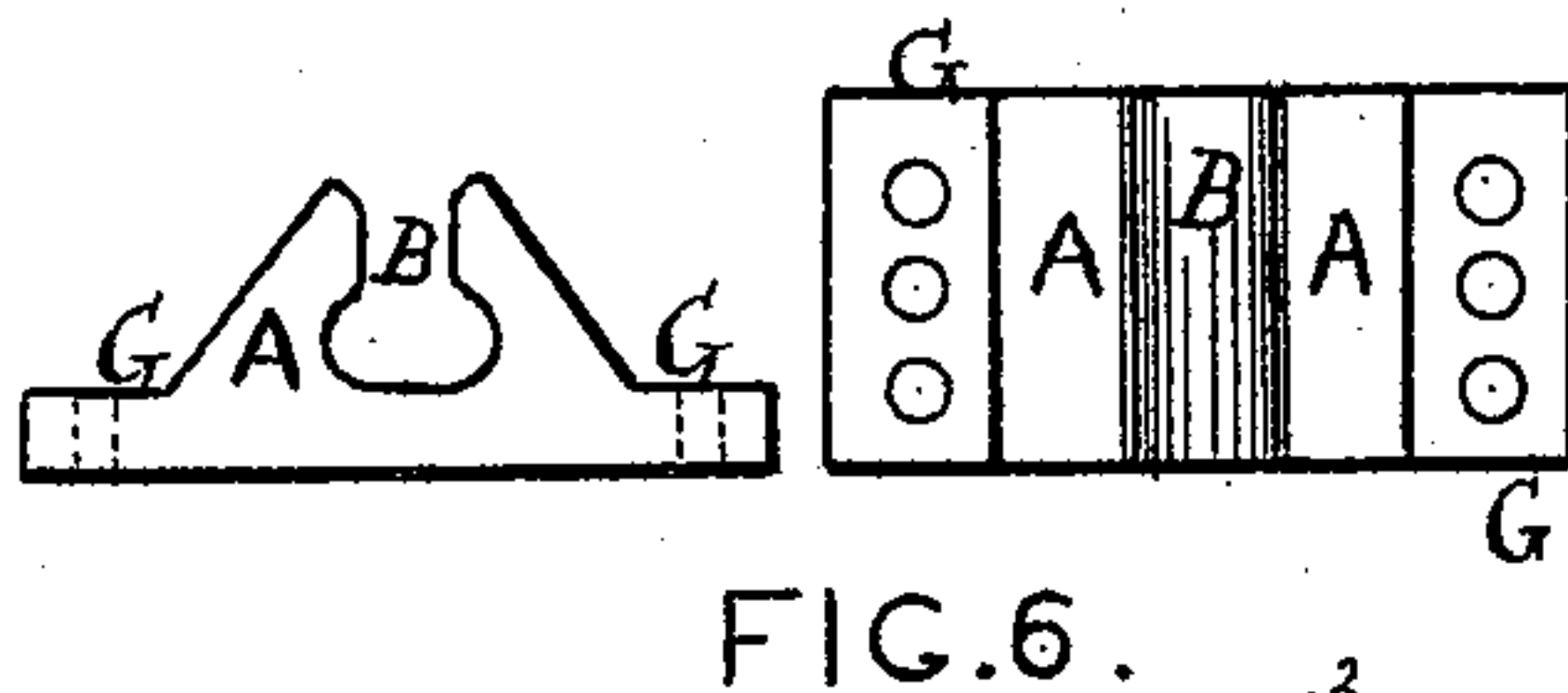
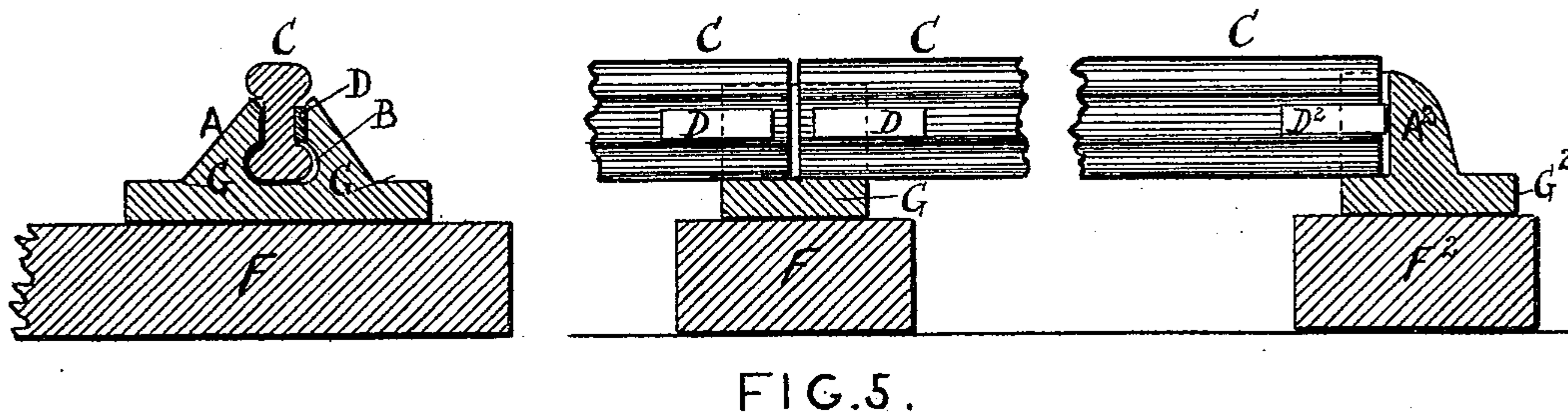
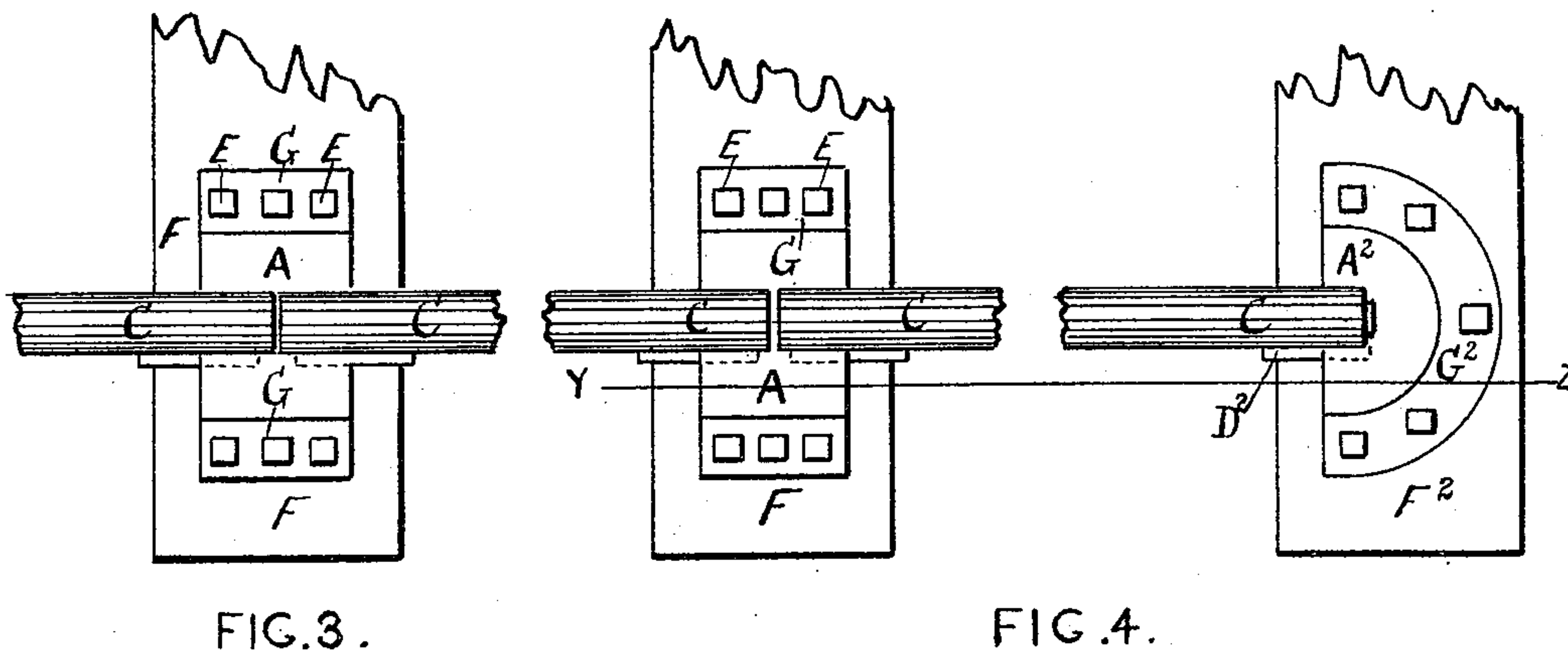
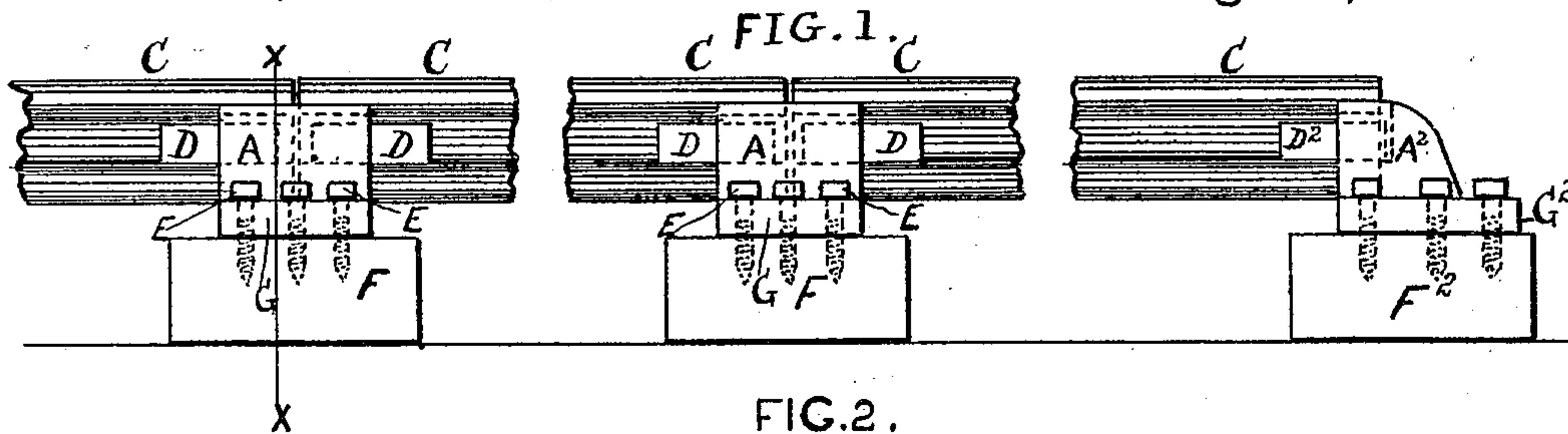


(No Model.)

T. SAYERS.
RAILWAY JOINT CHAIR.

No. 481,122.

Patented Aug. 16, 1892.



Witnesses:
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F. B. Keefe

Inventor:
Tom Sayers.
by Marshall Bailey his atty.

UNITED STATES PATENT OFFICE.

TOM SAYERS, OF BOMBAY, INDIA.

RAILWAY JOINT-CHAIR.

SPECIFICATION forming part of Letters Patent No. 481,122, dated August 16, 1892.

Application filed August 25, 1891. Serial No. 403,740. (No model.)

To all whom it may concern:

Be it known that I, TOM SAYERS, hotel proprietor, a subject of the Queen of Great Britain, residing at "Temple Bar" Hotel, Rampart Row, Fort, Bombay, in the Empire of India, have invented new and useful Improvements in Railway Joint-Chairs, of which the following is a specification.

The object of this invention is to provide a cheap and simple form of railway joint-chair, by the use of which a section of the rail of the permanent way can be easily and quickly renewed when necessary.

According to this invention, the joint-chair is made with a longitudinal groove extending from end to end, the said groove being shaped to correspond with the cross-section of the web and foot of the rail with which it is to be used. The joint-chair is provided with a flange on each side, which is bolted or otherwise secured to the sleeper in the ordinary manner. The abutting ends of the two rails are passed endwise into the joint-chair, and are secured by means of a wedge or key. To renew a section of the line, the joint-chair at each end of the worn rail is unscrewed and slid along the adjoining rails. The worn rail may now be lifted out of position, the new rail laid down, and the joint-chair at each end slid into place and tightened by the keys in the ordinary manner.

In order that this invention may be well understood and carried into practice, it will now be described with the aid of the accompanying drawings, in which similar letters of reference indicate the same or corresponding parts.

Figure 1 is a side elevation, and Fig. 2 a plan, of part of the permanent way of a railway provided with joint-chairs in accordance with this invention. Fig. 3 is a section on the line X X, Fig. 1. Fig. 4 is a section on the line Y Z, Fig. 2. Fig. 5 shows an end elevation and plan of one of the improved joint-chairs; and Fig. 6 is a side elevation of part of a railway permanent way, showing the method adopted for renewing a worn or other rail.

In Figs. 1 to 5 of the drawings, A represents an improved railway joint-chair, and B the longitudinal groove or channel in the same. The shape or configuration of the groove or channel B is clearly shown in Figs.

3 and 5, and, as before stated, corresponds with the cross-section of the webs and feet of the rails with which it is to be used. C C are the rails and D D the wedges or keys. The joint-chair is secured by the flanges G to the sleeper F by means of a suitable number of bolts, spikes, or their equivalents E, and the rails C C are slid endwise into the longitudinal groove or channel B and tightened up by the wedges of keys D in the ordinary manner. In Figs. 1 and 2 is shown a block-chair A², for use only at the ends of the permanent way. It is provided with a groove or channel extending about half-way in or thereabouts, into which is passed the extremity of the end rail, which is tightened up with one wedge or key D². A semicircular or other-shaped flange G² is formed on the block-chair, by means of which it is bolted or otherwise secured to the end sleeper F².

In Fig. 6 is shown the method adopted for removing a rail and substituting another. It is assumed that the rail C³ requires to be removed for some cause or other. The bolts, spikes, or their equivalents are unscrewed or otherwise detached from the sleepers F, and each joint-chair A is slid endwise onto the contiguous rail. This position is shown in Fig. 6. The rail C³ may now be lifted up and a new rail substituted, and the joint-chairs A slid back into their places and secured to the sleepers.

It will be understood that ordinary chairs may be used intermediate between the joints.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

The combination, in a railway, of a joint-chair having the usual flanges and provided with a longitudinal groove or channel corresponding to the cross-section of the feet and webs of the rails, a rail located in said groove or channel having its base resting upon the bottom of the chair, and wedges for insertion from each end thereof between said chair and web of the rail, substantially as described.

TOM SAYERS.

Witnesses:

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His clerk.