

(No Model.)

G. W. WELLS.
RAILWAY CHAIR.

No. 449,867.

Patented Apr. 7, 1891.

Fig. 1.

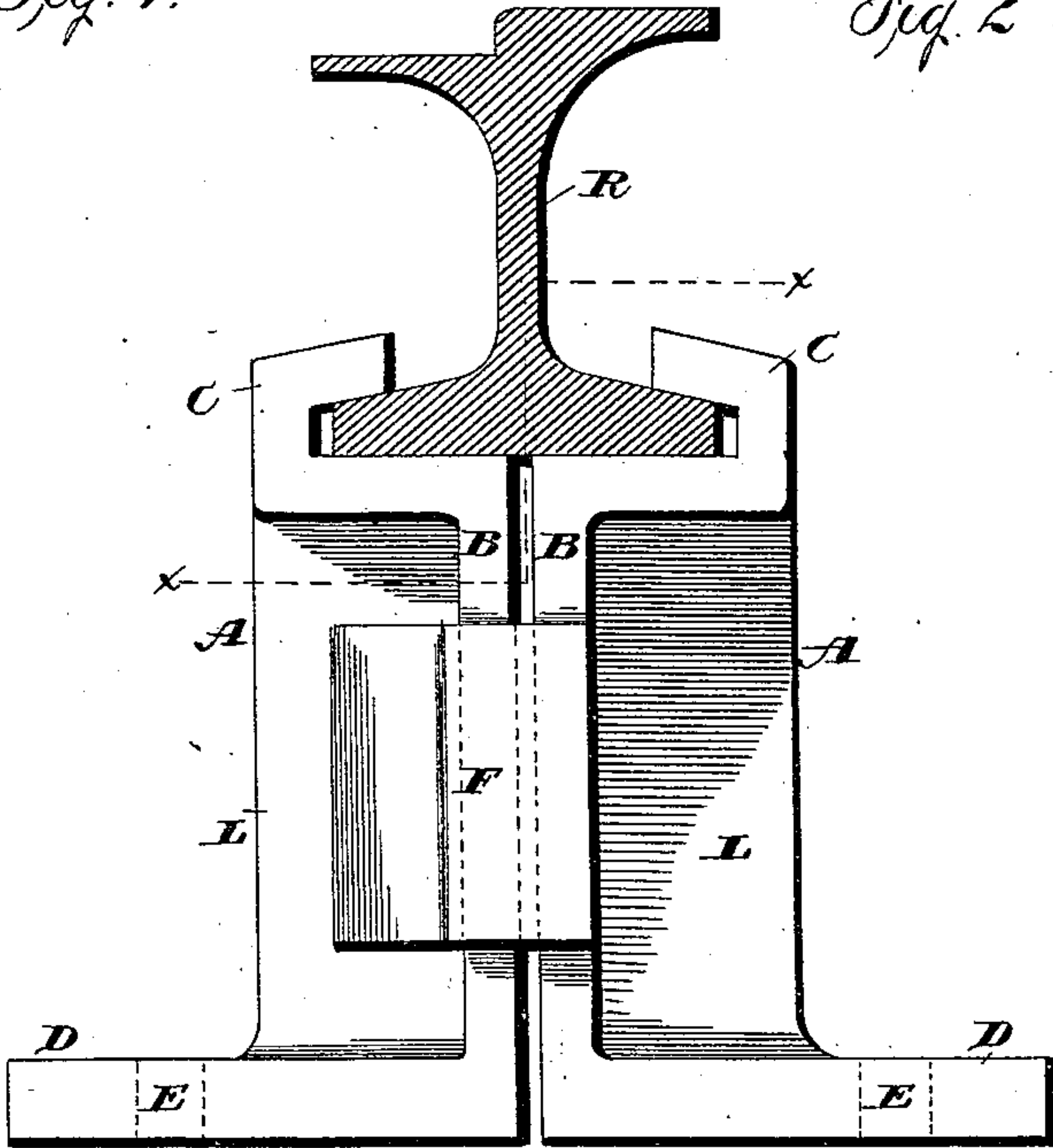


Fig. 2

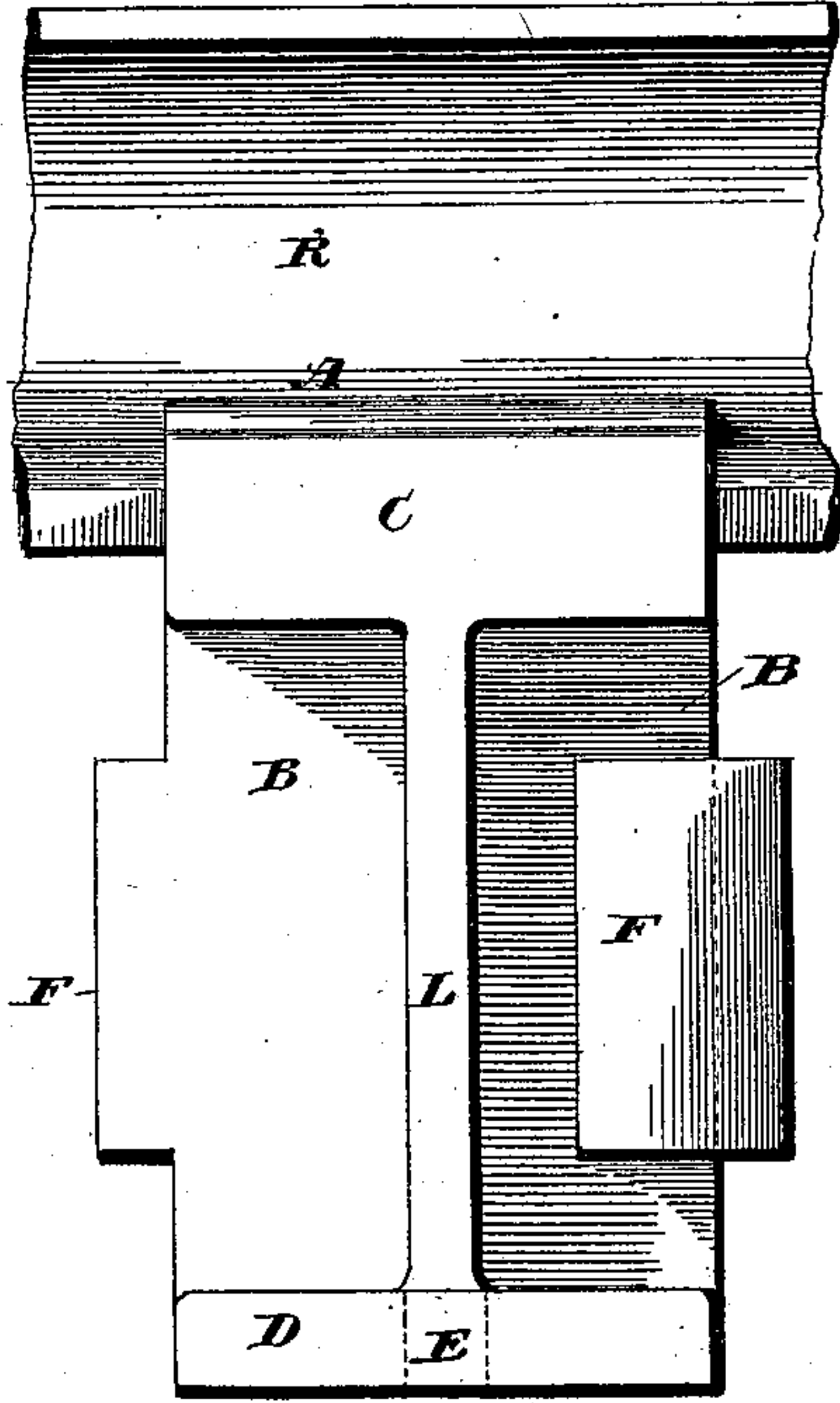


Fig. 4.

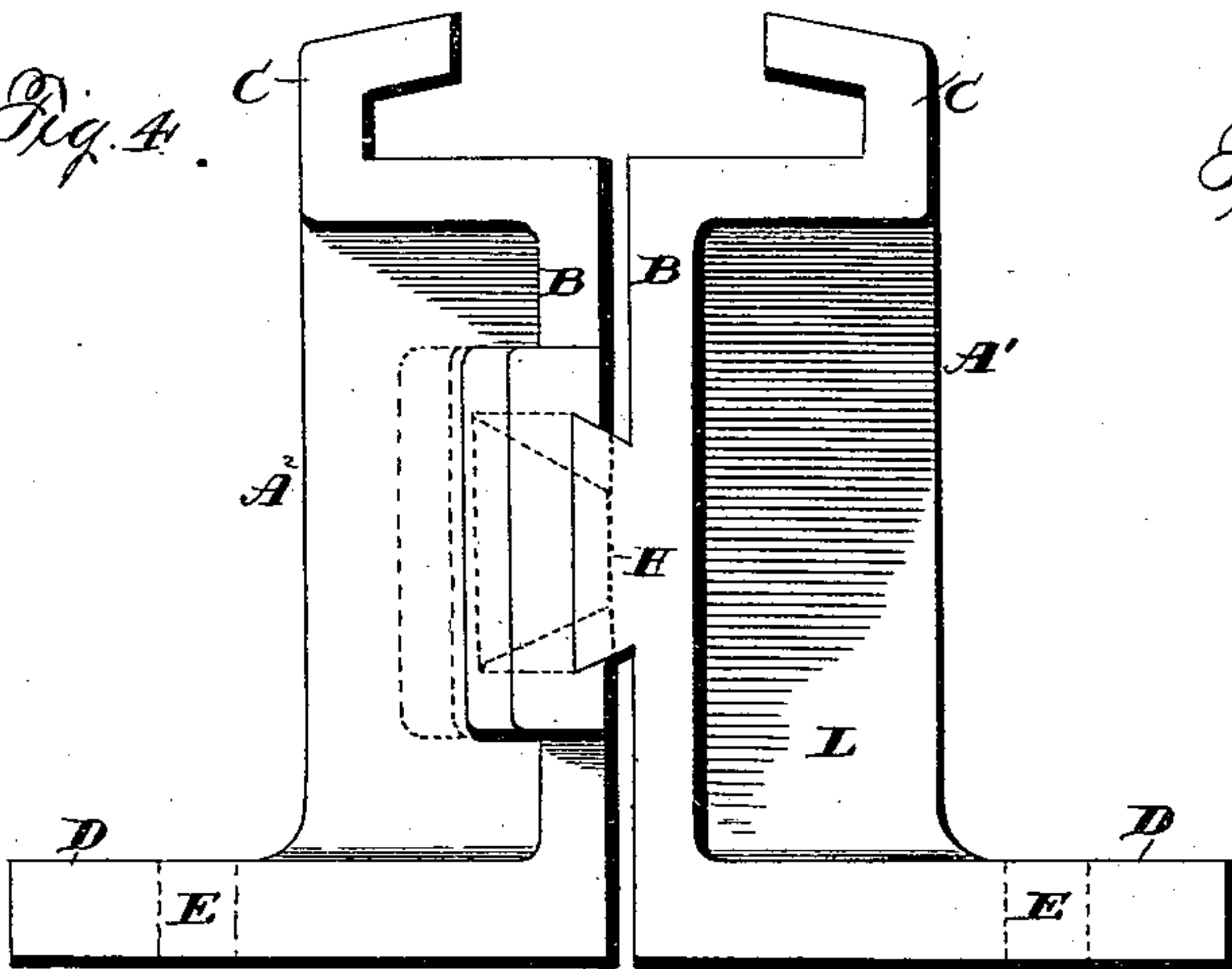


Fig. 3.

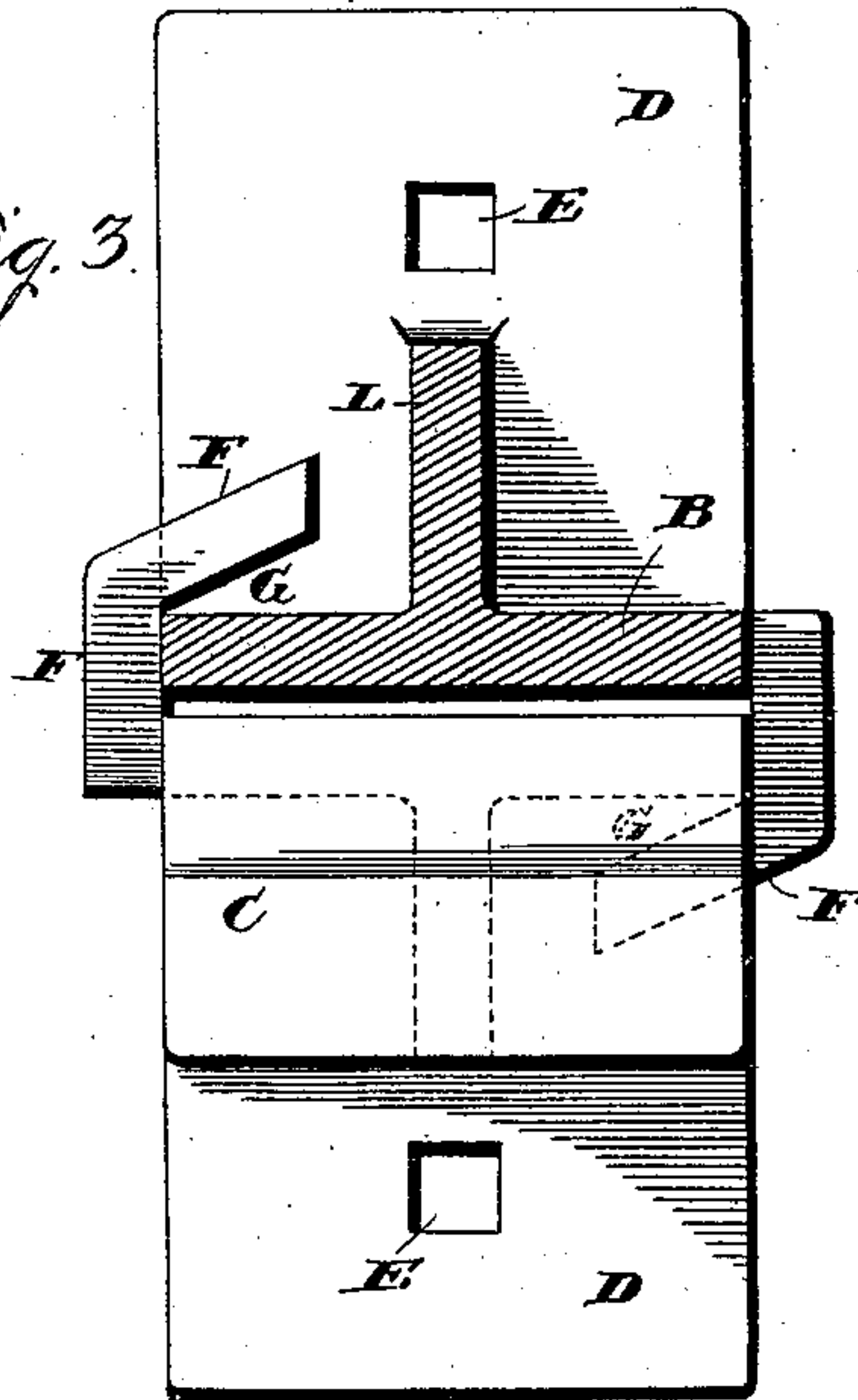
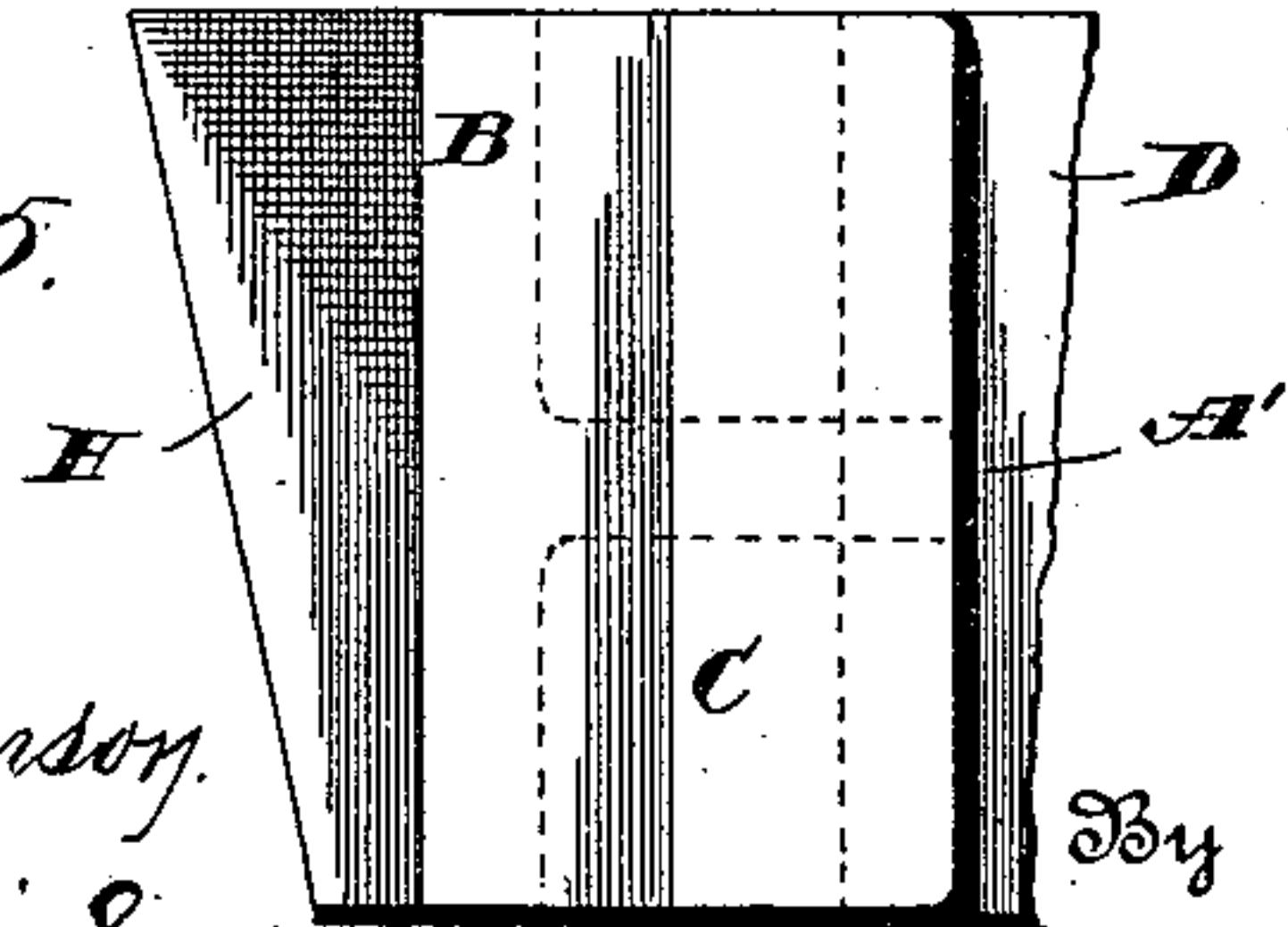


Fig. 5.

Witnesses

Chas. Williamson
Jas. Hutchinson



By his

Attorney

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UNITED STATES PATENT OFFICE.

GEORGE WALLACE WELLS, OF WORCESTER, MASSACHUSETTS.

RAILWAY-CHAIR.

SPECIFICATION forming part of Letters Patent No. 449,867, dated April 7, 1891.

Application filed December 8, 1890. Serial No. 373,986. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WALLACE WELLS, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Railway-Chairs, of which the following is a specification.

The object of this invention is to produce a practical, cheap, and efficient chair for supporting rails.

To this end the invention consists of a chair made in two interlocking sections, each section having a tapered interlocking portion located above the base of the chair and so constructed that when in position they are firmly held together by interlocking portions of the same and by the spikes, and that the use of nuts and bolts is avoided.

Referring to the accompanying drawings, Figure 1 represents an end elevation of my chair when in use clamping and supporting a rail. Fig. 2 is a side elevation of the same. Fig. 3 is a plan of the same, one of the sections of the chair being cut away on the line $x x$, Fig. 1, to show the interlocking mechanism. Figs. 4 and 5 represent a modification of the interlocking mechanism.

Referring to Figs. 1 to 3, inclusive, which represent the preferred form of construction, A A represents the two similar parts or sections of which the chair is constructed. Each section A has a head C, which is adapted to grip the side of the flange of the rail R and to support the same at its bottom. Of course it is understood that the shape of the head C may be varied to clamp and support any form of rail without in the least departing from the scope of my invention. The head C is supported from the base D by the T-rib B L, and the said base has spike-holes E E. Extending from the rib B L is a hook or interlocking portion F, which is adapted and shaped to catch on the rib B of the opposite section. This hook F is beveled or tapered, as shown at G. The manner of applying the chair to the rail is readily seen. The two parts A A are locked together, each head catching the flange of the rail, as shown. The sections are then spiked to the sleeper, and each spike is driven slightly tapering, so as to force

the two sections closer together. This causes the hooks to approach each other, and thus the sections are forced together to take a very firm bite on the rail. It will be seen that the rail is supported by two T-ribs and a very broad base, and thus a very strong and scientific support is provided to resist crushing strain. The chair may of course be made of extra width to support the ends of two meeting rails, as is done with the chairs now in use. The sections are made of cast-iron, although of course any suitable material may be used; and here will be seen the great economy and utility of the device, as absolutely no machine-work is required, the chairs going right from the foundry to the road-bed. No bolts and nuts are used, and when once in place the device does not have to be inspected to see if anything is loose; and, further, the chair may be readily removed, so as to allow the rail to be changed, by simply removing one spike.

A modification is shown in Figs. 4 and 5, in which a tapered dovetail locking mechanism is used instead of the hooks H H, before described. This locking mechanism H is applied, used, and has the advantages of the previous device, except that two different castings A' A² are necessary for each chair instead of two similar castings.

Endless modifications may be made by a skilled mechanic without departing from the scope of my invention—viz., a railroad-chair composed of the two interlocking sections adapted to clamp and support the rail, each section having the interlocking mechanism described.

A practical test has demonstrated the great utility of my device.

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

1. A railroad-chair composed of two sections, each section, having an oblique or inclined interlocking portion adapted to engage the other section, located above and independent of the base of the chair, substantially as described.

2. A railroad-chair composed of two similar sections adapted to interlock by a movement parallel to the rail, each section having

an oblique or inclined interlocking portion adapted to engage the other section, located above and independent of the base of the chair, substantially as described.

5 3. A railroad-chair composed of two sections, each section having the base, the head, and the intermediate rib, and the hook extending from the section at a point above the base, substantially as described.

10 4. A railroad-chair composed of the two similar sections, each section having the base, the head, and the intermediate rib, and the hook having the oblique or inclined face extending from the said rib, adapted to engage the
15 rib of the other section, substantially as described.

5. A railroad-chair composed of the two similar sections, each section having the head, the base, and the supporting T-rib between
20 the same, and the hooks extending from

the sides of the T-ribs, substantially as described.

6. A railroad-chair composed of the two similar sections, each section having the head, the base, and the supporting T-rib between 25 the same, and the hooks having the tapered portions extending from the sides of the T-ribs, substantially as described.

7. As an article of manufacture, the section A, having the head C, the base D, and 30 the rib B L between the same, and the hook F, projecting from the side of the rib, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 35 witnesses.

GEORGE WALLACE WELLS.

Witnesses:

LOUIS U. SOUTHGATE,
WALTER S. BOWER.