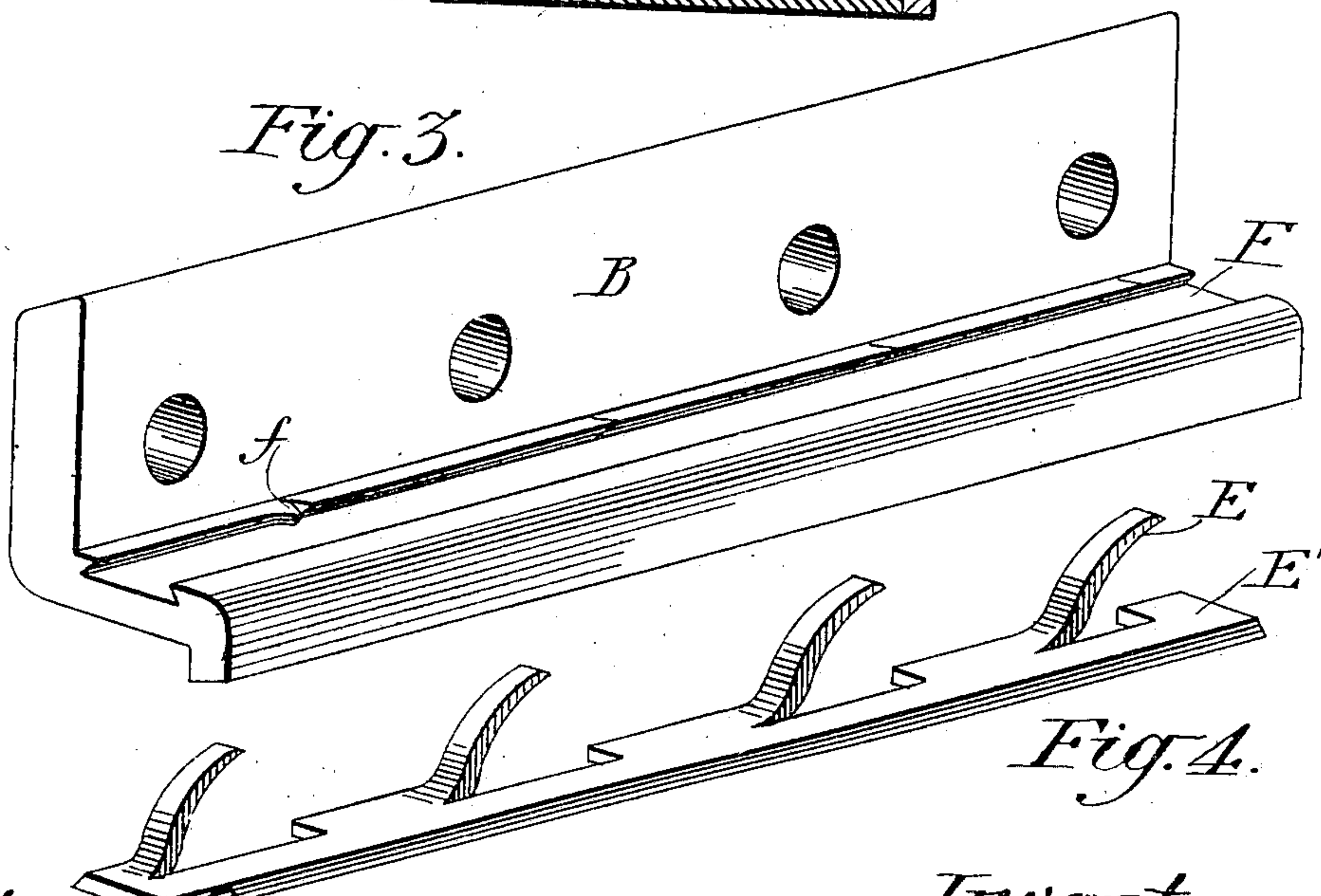
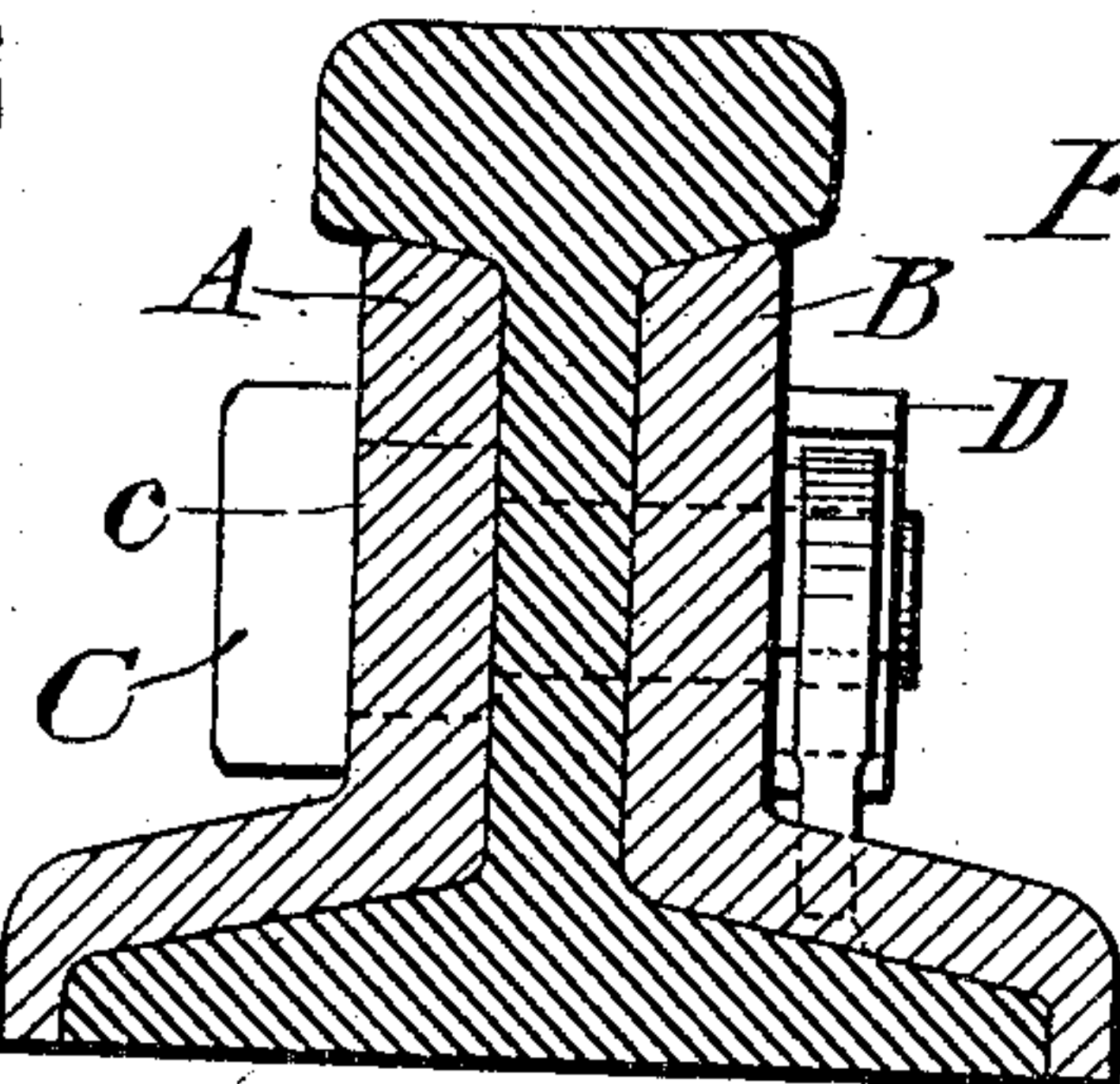
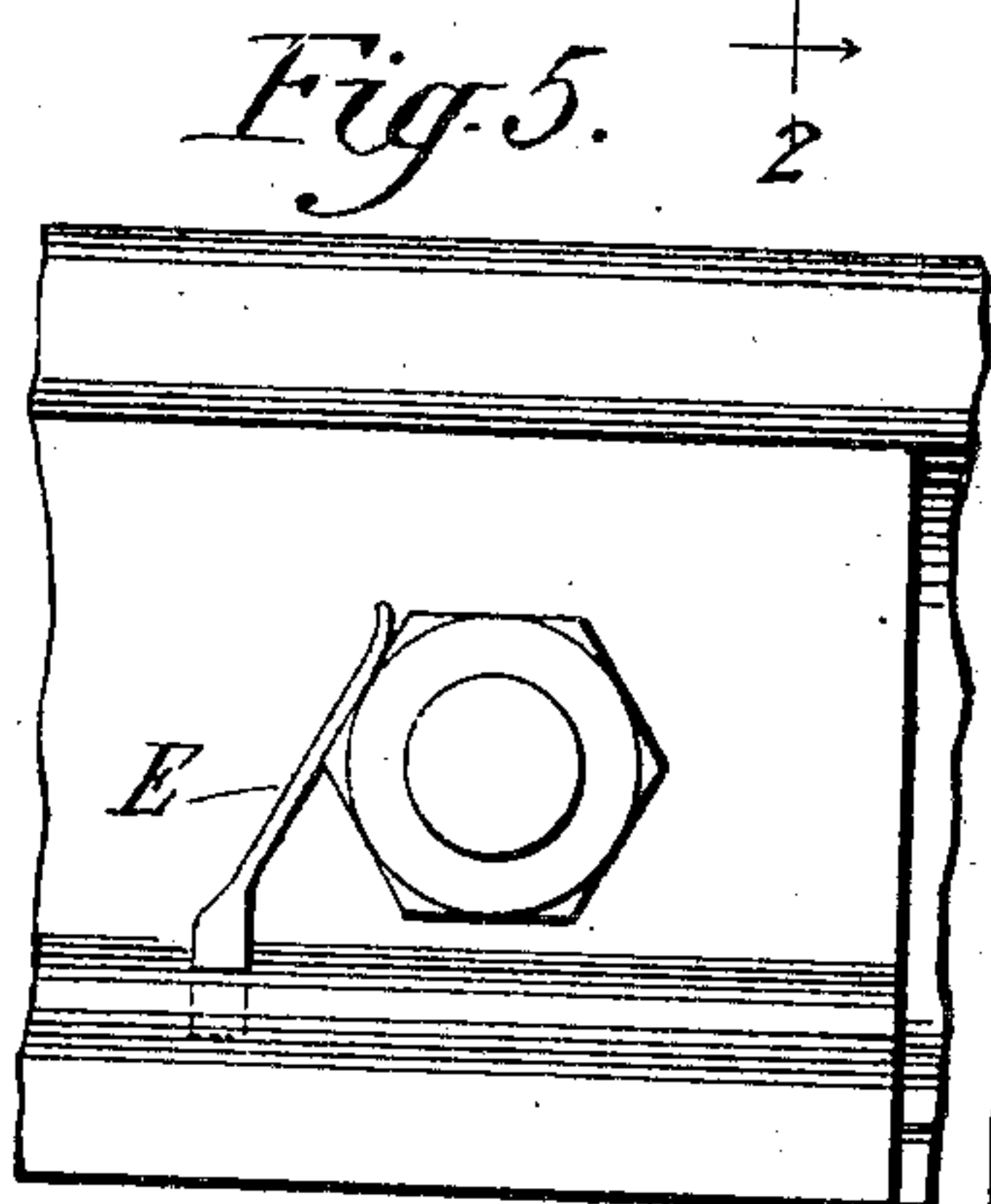
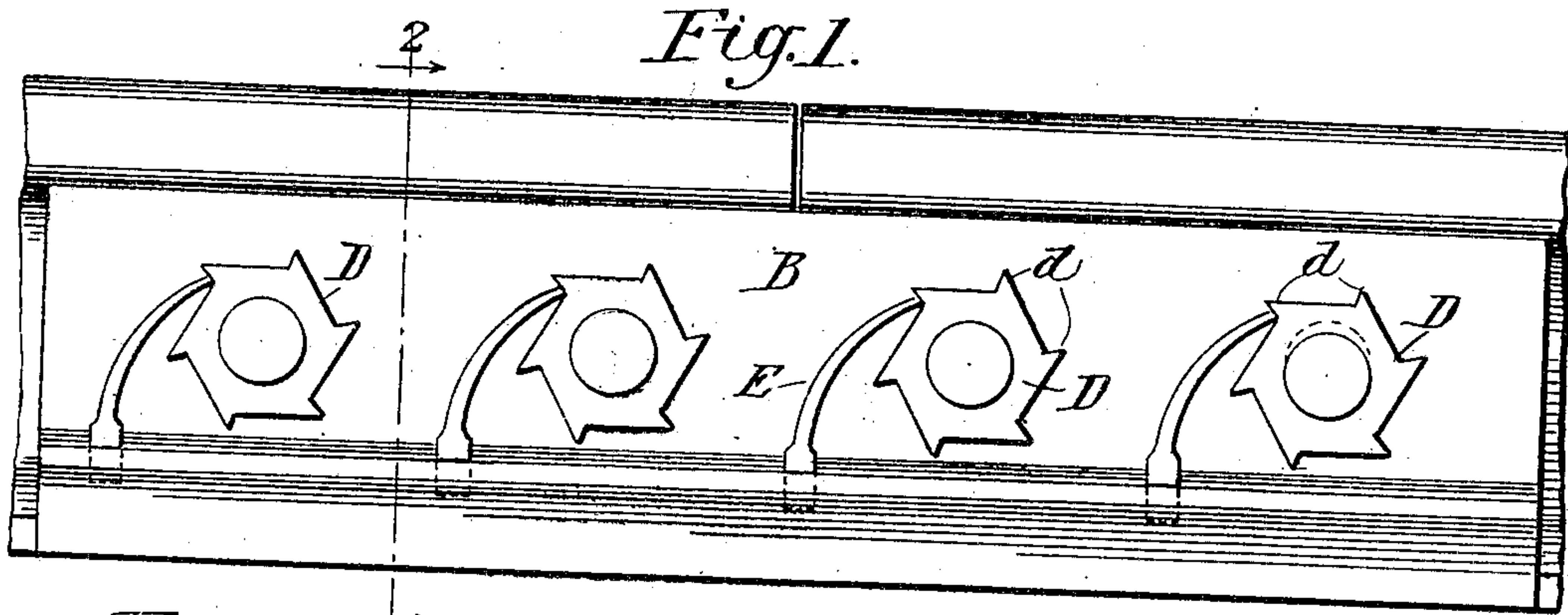


No. 819,172.

PATENTED MAY 1, 1906.

L. L. SAVOIE,
RAIL JOINT.
APPLICATION FILED MAY 13, 1906.



Witnesses
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LEO L. SAVOIE, OF NEW ORLEANS, LOUISIANA.

RAIL-JOINT.

No. 819,172.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LEO L. SAVOIE, a citizen of the United States of America, and a resident of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Improvement in Rail-Joints, of which the following is a specification, the accompanying drawings forming a part thereof.

10 The object of my invention is to provide a rail-joint which will hold the ends of the rails firmly and which will not become loose under the jarring of ordinary use.

15 The preferred embodiment of my invention is shown in the accompanying drawings, in which—

Figure 1 is a view in side elevation of two rails with the rail-joints attached. Fig. 2 is a view of a cross-section on the line 2 2 of Fig. 1. Fig. 3 is a perspective of a modified form of side bar. Fig. 4 is a view of a modified construction of nut-locking means arranged to be attached to the form of side bar shown in Fig. 3. Fig. 5 is a view showing a nut-locking means applied to the ordinary hexagonal nut.

20 The device comprises two plates or side bars A and B, each bar having a vertical side portion and a substantially horizontal base portion, the bars being formed to fit on opposite sides of the two rails, the vertical side portion fitting against the web of the rail and the base portion overlying the side of the foot of the rail, the vertical sides being perforated to receive bolts C, which pass therethrough and the web of the rail. The vertical side of the bar A, which is the bar adjacent the head of the bolt, is provided with an enlarged aperture which receives a correspondingly-formed portion *c* of the bolt C, (shown on dotted lines in Fig. 2,) this aperture is shaped with relation to the enlarged portion of the bolt, so that the bolt may not turn relatively to the bar. The end of the bolt passes through the vertical side of the side bar B and is threaded to receive the nut D. This nut is preferably hexagonal, having six flat sides or faces, and a portion of each side is continued in a direction to form a tooth, each tooth presenting a face in the direction in which the nut would be turned to unscrew it from the end of the bolt. A spring-tooth E is secured to the base of the side bar B in position to engage with the faces of the teeth on the nut in such a manner that the reverse rotation of the nut to unscrew the same is prevented. Each

tooth may be made separate and secured in any proper manner in the base of the side bar B in position to engage its proper nut; but the teeth may be all cut from a plate E', as shown in Fig. 4, the plate being secured in position to the base of the side bar B. Preferably the plate E' has its upper side edges beveled to fit in a correspondingly-dove-tailed groove F, cut in the base of the side bar. After the plate E' has been fitted in the groove F the overhanging edges of the groove are swaged in, as at *f*, to engage with the edges of the recesses formed in the plate E' by the removal of the teeth, and thus the plate is firmly and readily secured to the base of the side bar B.

The groove F is easily formed in the base of the side bar, and the teeth are readily cut and pressed up from the plate E', and the teeth are all brought into proper position when the plate E' is properly placed.

While it may be preferable to employ the toothed nut shown in Figs. 1 and 2, such form of nut is not absolutely essential, as I have found that the ordinary hexagonal nut may be retained by the spring-tooth E being arranged to bear against one of the flat sides, as shown in Fig. 5. In this modification the teeth may be formed singly and each secured to the base of the side bar, or the teeth may be struck up from a plate, as shown in Fig. 4, the teeth as shown in such figure being applicable either to a toothed nut or to the ordinary form of nut.

While I have shown the nut as provided with six faces and teeth, it is obvious that a nut with either more or less than that number of faces and teeth may be employed. The nut, however, with six faces will ordinarily answer all requirements, as the average bolt is cut with ten threads to the inch. Hence every turn of the nut will advance the same one-tenth of an inch on the bolt, and one-sixth of a turn, which will be necessary to bring any tooth into position to be engaged by the retainer, will only advance the nut one-sixtieth of an inch.

Having thus described my invention, I claim—

1. A chair for rail-joints comprising side bars formed to engage the base and web of the rails on opposite sides thereof, each side bar comprising a vertical web-engaging portion and a horizontal base-engaging portion, the web-engaging portions being perforated to receive bolts, bolts passed through said

web-engaging portions and the included rail-webs, nuts threaded to said bolts, and a plate secured to the horizontal base-engaging portion of one of said side bars and provided
5 with spring locking members to engage with said nuts.

2. A rail-joint connection comprising side bars arranged to engage on opposite sides of the meeting ends of two rails, each bar comprising a vertical web-engaging portion and a
10 substantially horizontal base portion which fits over the foot of the rails, the vertical portions being perforated to register with perforations in the rail - webs, bolts having
15 threaded ends, nuts to engage on the ends of said bolts, and means for preventing the unscrewing of said nuts comprising a plate having teeth struck up therefrom fitted in a dovetailed groove cut in the base portion of one of
20 said side bars.

3. A rail-joint connection comprising side bars arranged to engage the webs on opposite

side of the meeting ends of two rails, each bar having also a projecting base portion to fit over the side of the rail-feet and said bars
25 being perforated to register with perforations in the rail - webs, bolts arranged to pass through said perforations, each bolt being provided with means engaging one of said side bars whereby it is held from turning,
30 nuts arranged to fit one on each of said bolts, and a plate having a number of teeth struck up therefrom to engage with said nuts, said plate being secured to the base portion of one of said bars by being fitted in a dovetailed
35 groove cut in said base and the edges of said groove being swaged in to engage in recesses formed on said plate.

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

LEO L. SAVOIE.

Witnesses:

H. H. BULIN,
PERCY HEINES.