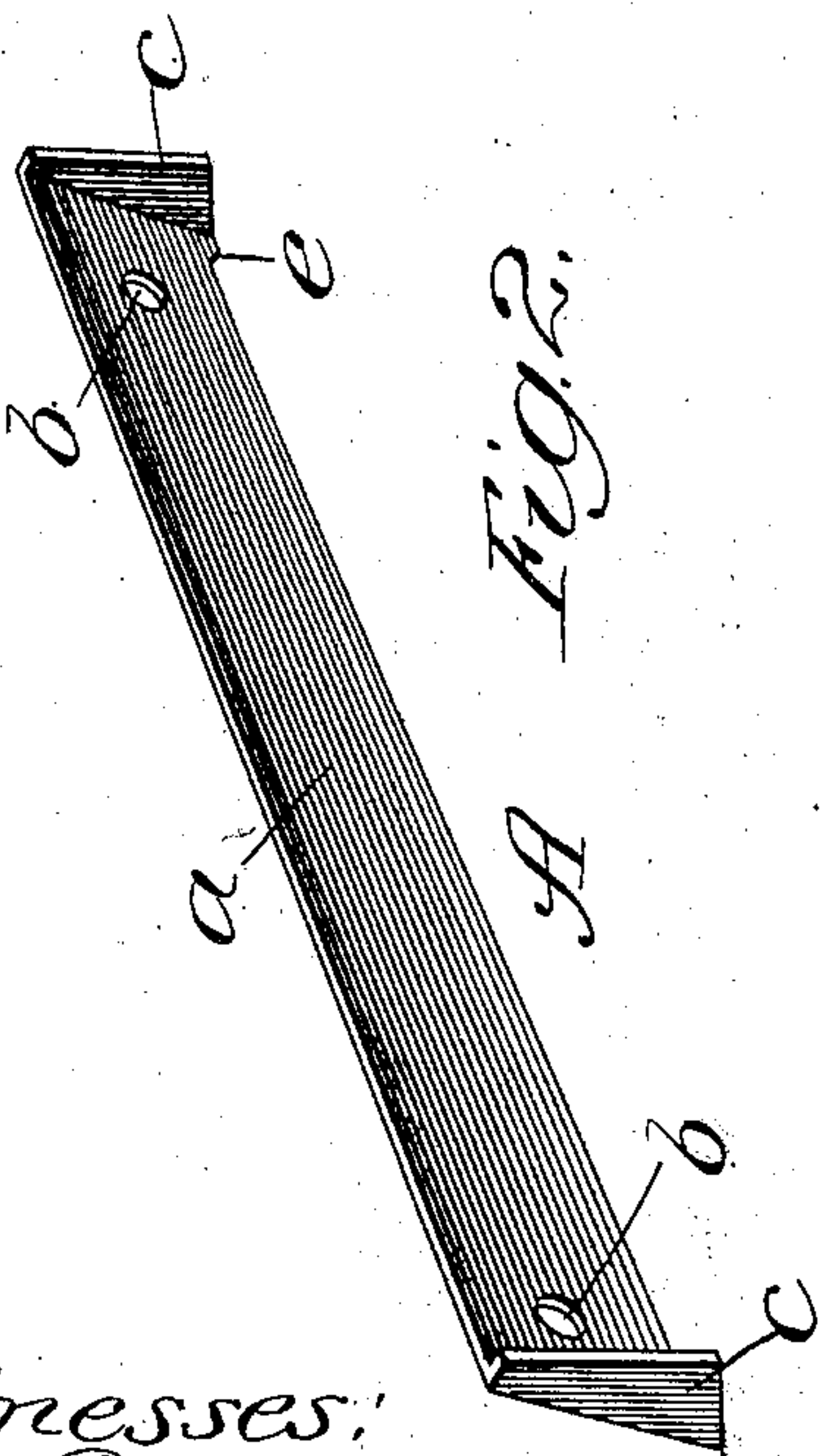
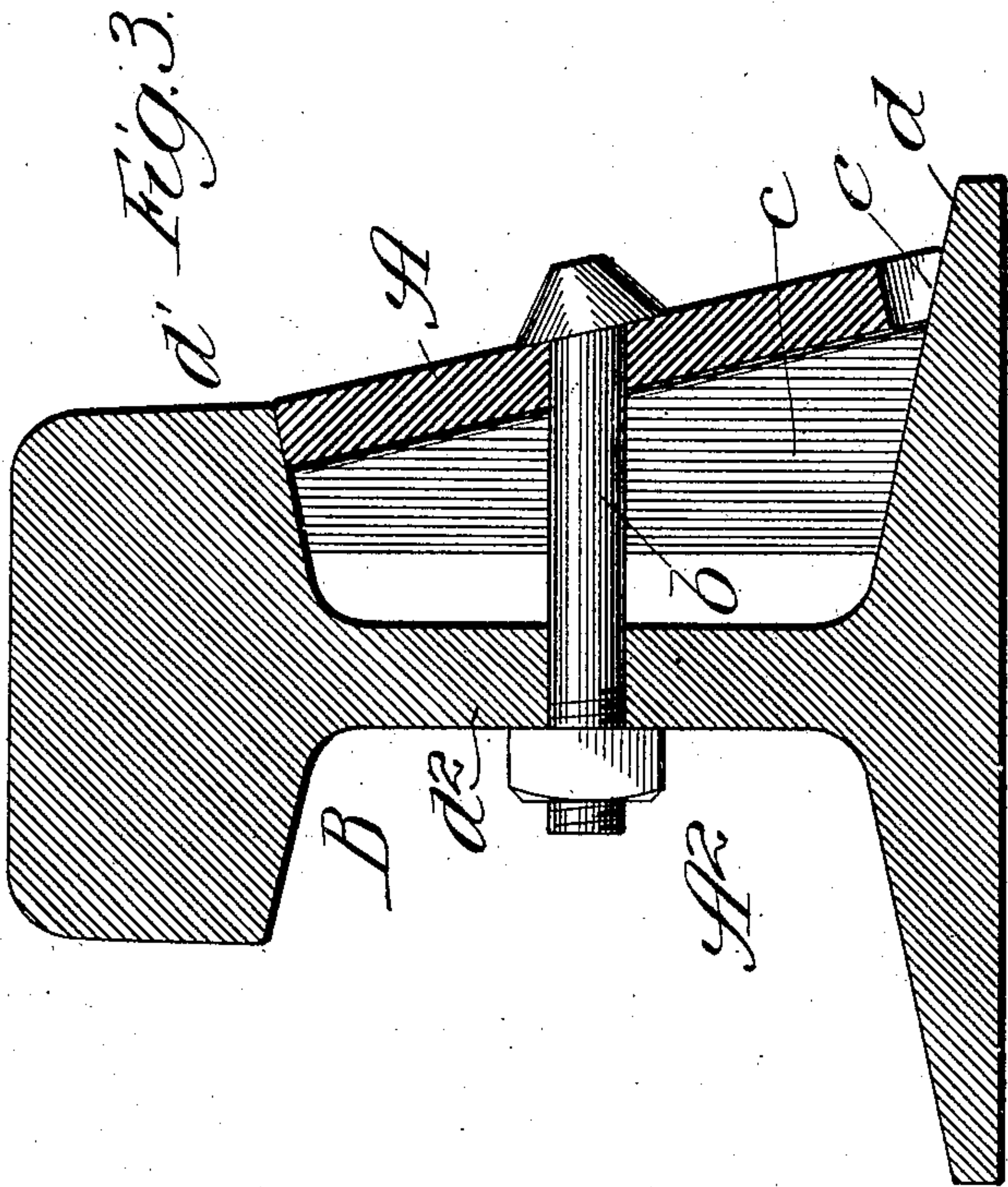
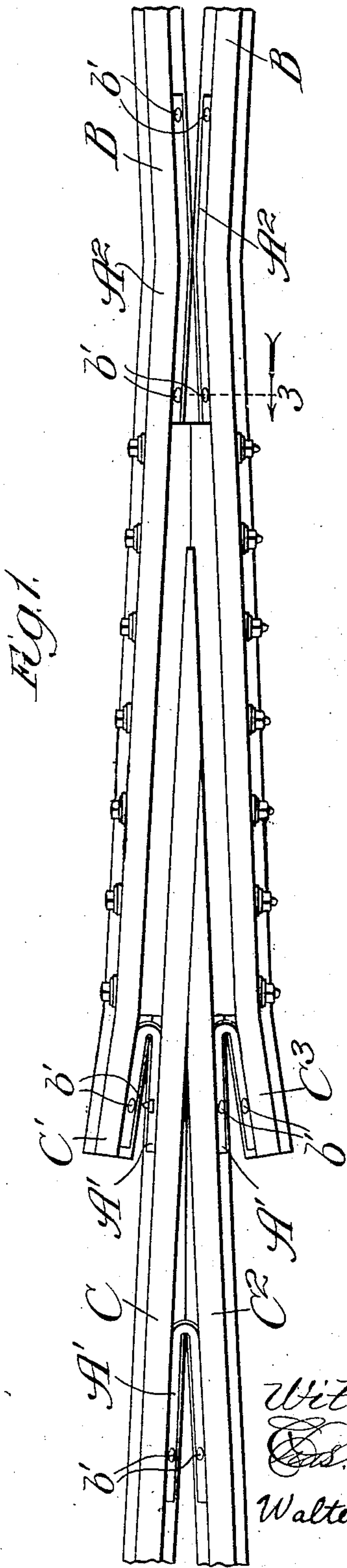


No. 764,830.

PATENTED JULY 12, 1904.

A. A. STROM.
FOOT GUARD FOR RAILWAY TRACKS.
APPLICATION FILED APR. 15, 1904.

NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE.

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FOOT-GUARD FOR RAILWAY-TRACKS.

SPECIFICATION forming part of Letters Patent No. 764,830, dated July 12, 1904.

Application filed April 15, 1904. Serial No. 203,318. (No model.)

To all whom it may concern:

Be it known that I, AXEL A. STROM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Foot-Guards for Railway-Tracks, of which the following is a specification.

My invention relates to an improvement in the class of devices employed in connection with railway-frogs and in other connections in railways to prevent persons walking on the tracks from wedging their feet between converging rails.

The primary object of my invention is to adapt these foot-guards to be readily formed in improved forms out of bar metal, thereby to attain the advantages of cheapness of production and comparative lightness, facility of application to their positions of use, and adaptability to manufacture in various forms the better to fit the different situations of their use in a frog and to enable them to be provided in some of such situations in double or practically double form to take the place of two foot-guards hitherto required to be provided in each such situation.

Referring to the accompanying drawings, Figure 1 is a plan view of a railway-frog equipped with my improved foot-guards in two forms in which my improvement adapts them to be provided; Fig. 2, a perspective view of the foot-guard in its simplest form, and Fig. 3 a section taken at the line 3 on Fig. 1 viewed in the direction of the arrow and enlarged.

The simplest form of the guard is that represented in Fig. 2 and denoted A, comprising a thin steel bar *a*, provided with bolt-holes *b* and having its end portions correspondingly bent to right angles with the body of the plate to form stop-ears *c c*, inclined along their inner edges to taper upwardly and also inclined on their lower edges, as represented, to conform to the inclination of the flange *d* of a rail B, against which they fit. From near the base of each ear *c* the metal of the bar is expanded to form the similar reduced bearing or seating points *e* adjacent to the ears, only

one of these points being represented in Fig. 2, owing to the nature of the view selected for illustration. The guard of the described construction is formed out of a bar-blank. To adjust it in place on a rail, it is seated at its bearings *e* and inclined bases of the ears *c* on the rail-flange *d* and fits at its upper edge against the under side of the rail-head *d'*, crosswise of which the upper bearing ends of the ears extend, and in that position the guard is secured by bolts *b'*, passed through the holes *b* and through coincident holes in the rail-web *d''*. With a guard A similarly adjusted against the opposing side of another rail adjacent to but diverging from that equipped as described the two guards serve the usual purpose of covering the reëntrant sides of the two rails and forming between them an upwardly-flaring cavity in which a person's foot cannot become caught against easy withdrawal. The advantage due to the provision of the narrow bearing-points at *e*, which is the preferred construction for the guard, consists in the stability they afford to it when seated as against the full length of the lower edge of the plate *a* affording its seat, whereby inequalities in that edge or in the surface of the rail-flange *d*, or in both, would tend to render the guard wobbly in its operative position. This construction of guard adapts it to be made double, as two united guards, in the form shown at A' in Fig. 1 or in that shown at A² in the same figure by employing a greater length of bar than is required for producing the single guard illustrated in Fig. 2 and bending it upon itself at its transverse center. The double guard A' is thus produced and affords guards for the opposing sides of each of the two converging rails C C² C C' and C² C³ in a frog, as represented in Fig. 1, thereby adapting the guard for both rails in each instance to be adjusted more conveniently and expeditiously than where a separate guard is provided for each rail. The same is true of the guard shown at A² in Fig. 1, which is formed in the same manner as the guard A', but only bent upon itself sufficiently to cause it to describe an obtuse angle conforming to the an-

gle in each frog-rail B B, to either of which its shape adapts it to be applied as described of the guard form A, instead as hitherto of requiring two separate guards to cover the rail
5 at opposite sides of the apex of the angle. The guard A² is in a sense thus also a double guard.

What I claim as new, and desire to secure by Letters Patent, is—

- 10 1. As a new article of manufacture, a foot-guard for railway-tracks formed out of bar metal with bolt-holes and ears forming the ends extending at right angles to the body of the bar, said ears having their bearing edges
15 inclined to conform to the inclination of the surface of the rail-flange on which they seat,

and reduced bearing-points on the lower edge of the bar adjacent to said ears.

2. As a new article of manufacture, a foot-guard for railway-tracks formed out of bar 20 metal with bolt-holes, and ears forming the ends extending at right angles to the bar, said ears having their bearing edges inclined to conform to the inclination of the surface of the rail-flange on which they seat, and re- 25 duced bearing-points on the lower edge of the bar adjacent to said ears, said bar being bent to form it into a double foot-guard.

AXEL A. STROM.

In presence of—

WALTER N. WINBERG,
W. B. DAVIES.