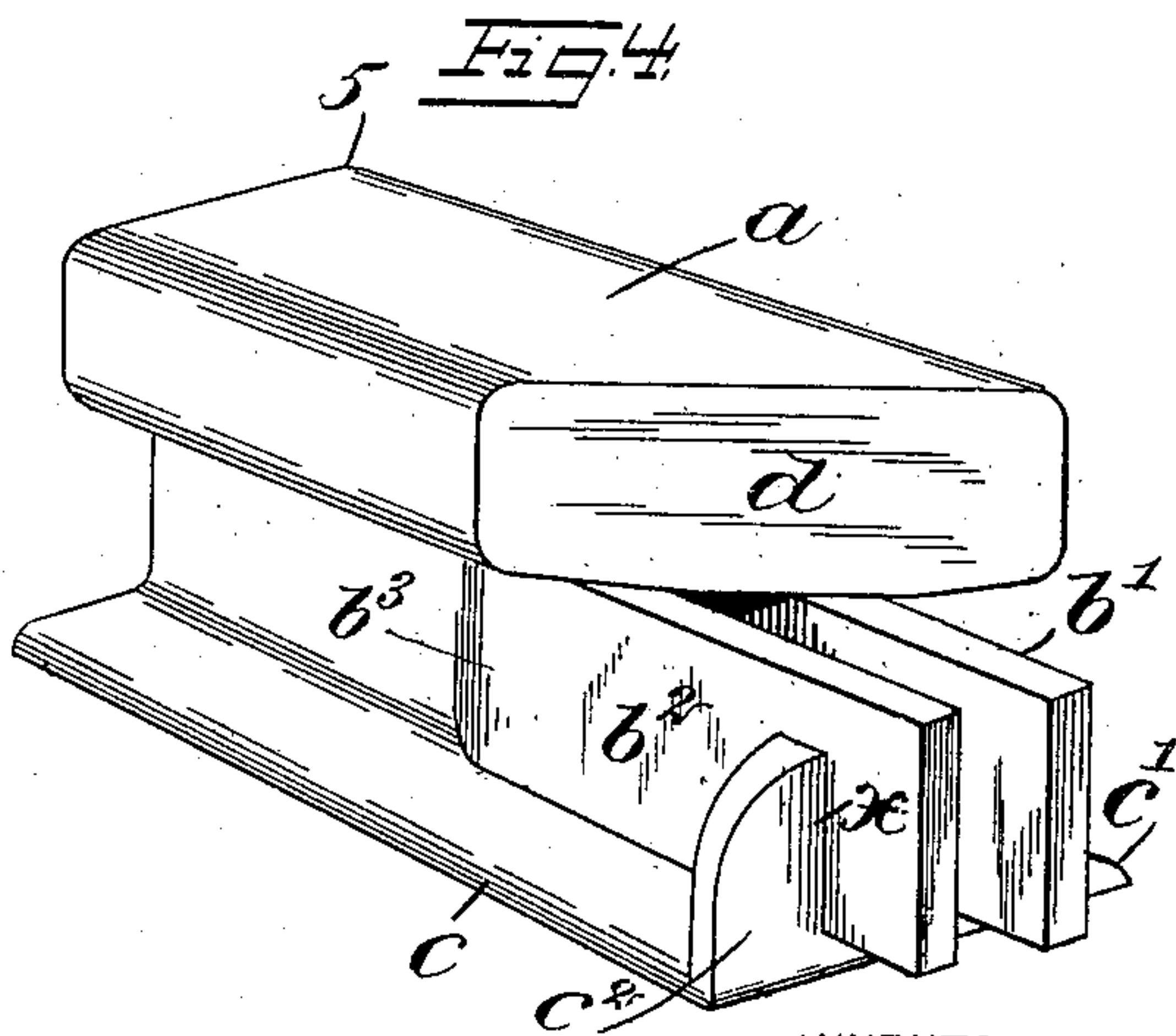
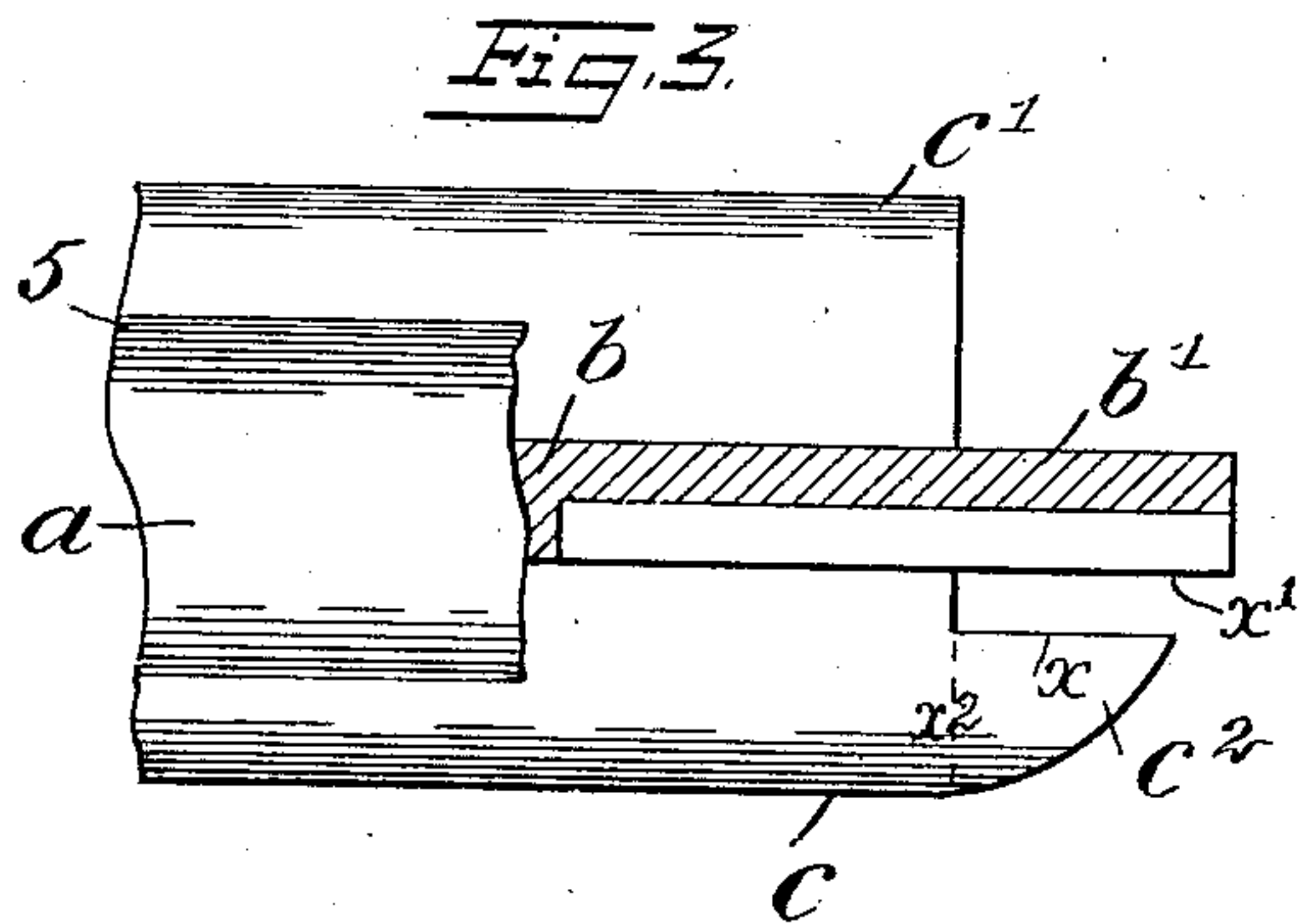
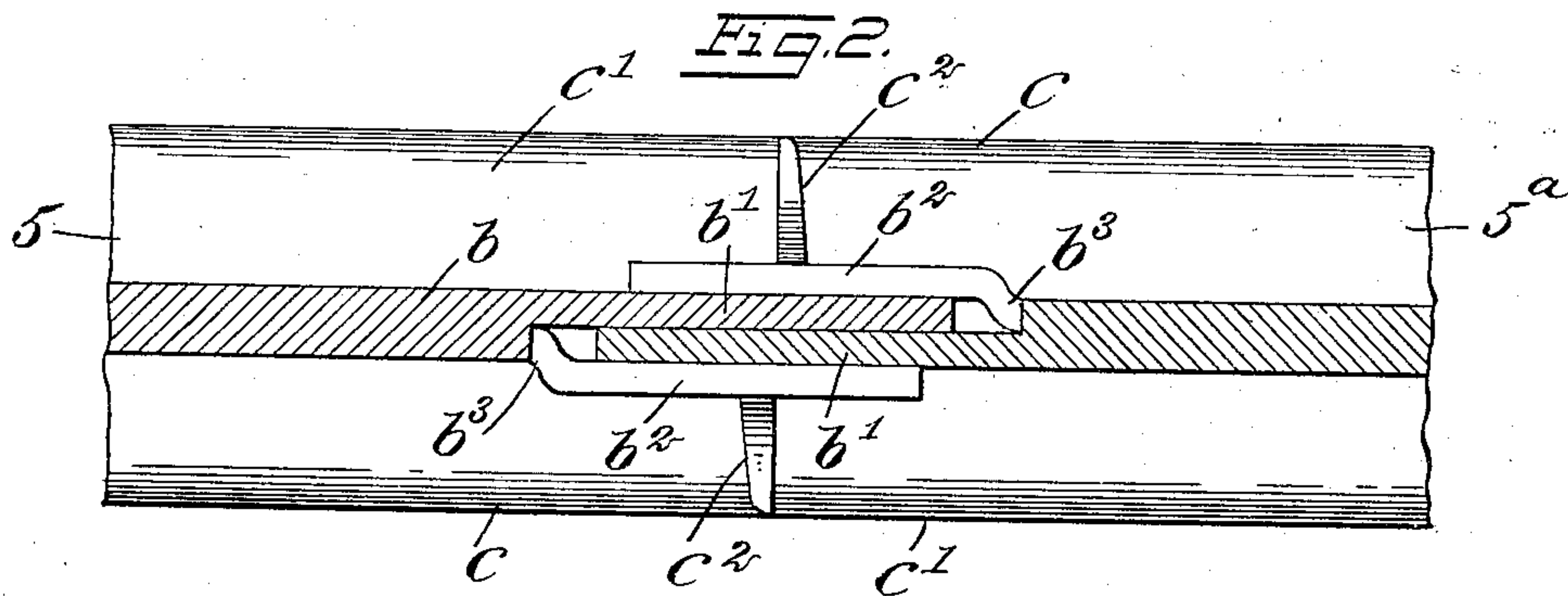
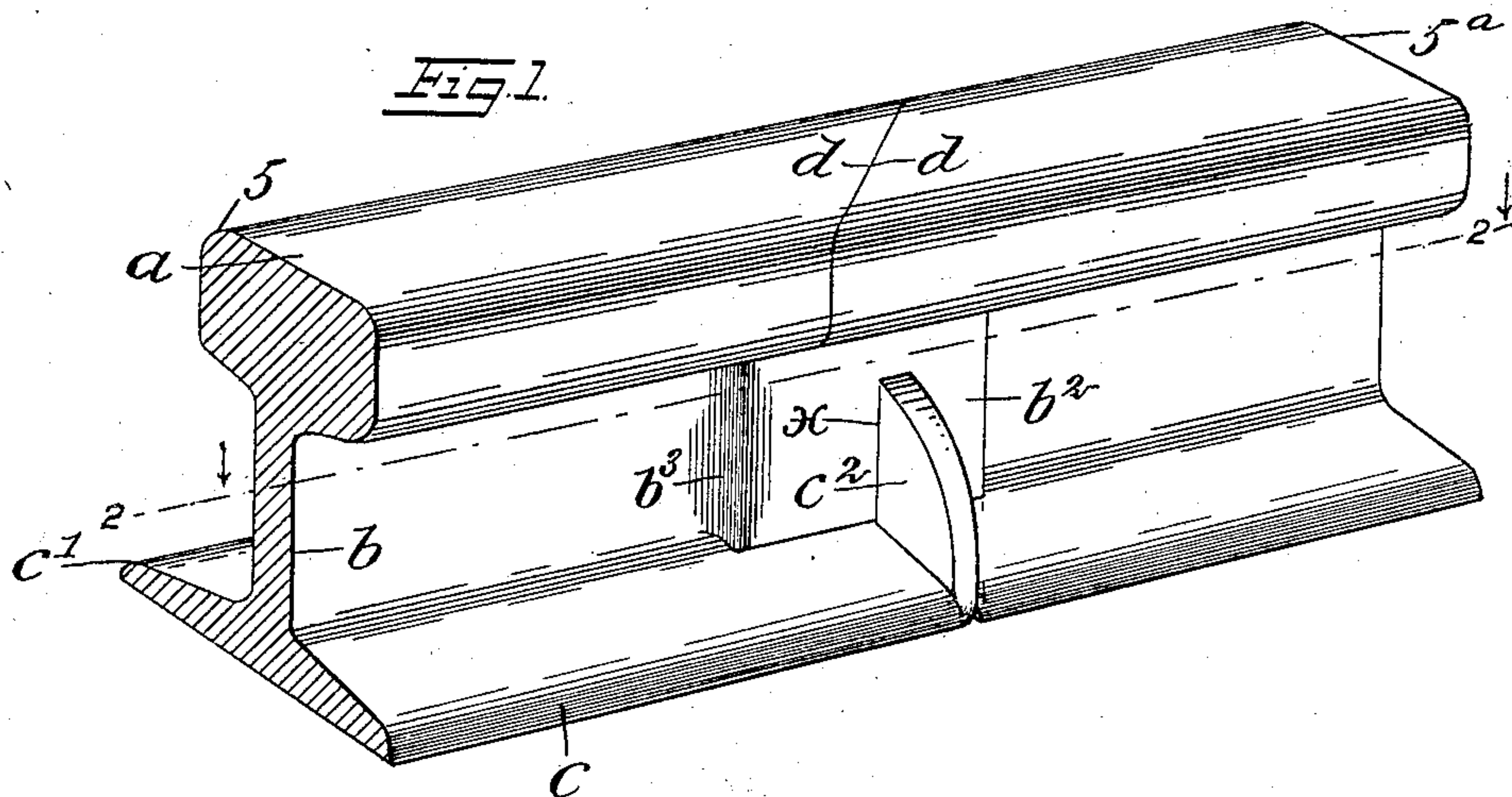


No. 897,784.

PATENTED SEPT. 1, 1908.

J. C. RIGGS.
 TRACK RAIL JOINT.
 APPLICATION FILED AUG. 27, 1907.



WITNESSES
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JOHN CALVIN RIGGS, OF BERKELEY, CALIFORNIA.

TRACK-RAIL JOINT.

No. 897,784.

Specification of Letters Patent.

Patented Sept. 1, 1908.

Application filed August 27, 1907. Serial No. 390,267.

To all whom it may concern:

Be it known that I, JOHN CALVIN RIGGS, a citizen of the United States, and a resident of Berkeley, in the county of Alameda and State of California, have invented new and useful Improvements in Track-Rail Joints, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide the ends of railroad track rails of standard T-form, with novel features which will effect a positive interlocking connection between such ends, when in pairs they are forced together in sequence, rendering a joint between two engaged ends of the rails practically continuous, and obviating jar, noise and injurious wear, that occurs when the rolling wheels of cars impinge upon the ends of track rails that are formed and supported in the usual manner.

The invention consists in the novel construction and combination of parts, as is hereinafter described and defined in the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of two end portions of track rails connected by the improved means; Fig. 2 is a partly sectional plan view, taken substantially on the line 2—2 in Fig. 1; Fig. 3 is a partly sectional plan view showing novel details of construction for the end portion of a track rail, a portion being removed, and Fig. 4 is a perspective view of an end portion of a track rail embodying features of the invention.

The end portions 5, 5^a of two T-rails are each as usual formed with a ball *a*, web *b* and base flanges *c*, *c'* projected in the same plane at each side of the web.

In the formation of the improved rail joint, the ends of the T-rails when finished for connection in pairs with each other, are alike, so that the description of one end portion on a track rail will suffice for any number of the same.

In manufacturing the improved rail joints, the head or ball *a* on a rail end is shortened with regard to the length of the base flanges *c*, *c'*, and is cut diagonal to the longitudinal plane of said ball as shown at *d*, in Figs. 1 and 4.

The end portion of the web *b* is extended somewhat in advance of the base flanges *c*, *c'*,

and is slotted longitudinally at the center of thickness, thus producing two leaf members *b'*, *b*² thereon which extend a short distance behind the diagonal end wall *d* of the ball *a*.

The leaf member *b*² is offset laterally where it merges into the body of the web *b*, as shown at *b*³, and from said offset extends parallel with and spaced from the straight member *b'*.

It will be obvious that the leaf member *b*² must be separated from the base flange *c* it is adjacent to, but the opposed leaf member *b'* is preferably formed integral with the base flange *c'*. The free end *c*² of the base flange *c*, is rounded on the outer edge to give it curved shape, and at the opposite edge *x*, is cut away so as to space it from the nearest side edge *x'* of the web *b*, as shown in Fig. 3.

To complete the novel formation of the track rail end, the portion *c*², that is projected forward on the base flange *c*, is bent on the line *x*² in a vertical plane, so that its edge *x* will be disposed parallel with the vertical surface of the integral leaf member *b'* and have contact with the outer surface of the offset member *b*², thus affording lateral support thereto, as is shown in the drawings.

When the track rails having the improvement are to be jointed together and arranged in sequence on cross ties or the like, two rails are placed in alinement and the leaf member *b'*, on one rail end is introduced between a like member on the other rail end and the parallel offset member *b*² thereon. It will be seen that if the rail ends when thus engaged are slid longitudinally, the diagonal face *a* on the ball of one rail will impinge upon a like face on the other rail and complete the joint. When fully inserted, the leaf members *b'* on the connected track rails, will be closely embraced by the spaced leaf members *b'*, *b*² on the other rail end, which will prevent side play of parts and render the joint very strong, prevent sagging of the rail ends, obviate noise due to percussion of wheels striking rail ends on ordinary rail joints and afford a very durable track rail connection.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a joint between two track rail ends, two spaced leaf members formed on the end of each track rail in advance of the web thereon, one of each of these spaced members having sliding inserted engagement between the spaced members on the other rail, and seat-

ing upon corresponding base-flanges of the track rails.

2. In a joint between two track rail ends, two spaced leaf members formed on each track rail, one of said members on each rail end being offset and thus disposed at one side and in advance of the body of the rail-web, the straight member of each rail having inserted engagement between the spaced members on the mating rail end and passing over the base-flanges thereof whereon said straight members seat.

3. In a track rail joint, two spaced and parallel leaf members formed on an end of a rail web, one of said members being offset at its junction with the end of said rail web, and a flange turned upward from an end of one base flange on said track rail, and having contact at its upright edge upon the offset leaf member for its lateral support.

4. In a joint connection between the ends of two track rails, a straight leaf member, and an offset parallel leaf member, both formed on a respective end of the web on each track rail, the ball on each rail having an end face disposed diagonally to the longitudinal plane of a respective track rail web, the straight leaf member on each rail web sliding into the space between the leaf members on the other track rail, and when the diagonal end faces of the balls of the track rails impinge forming a laterally reinforced continuous rail joint connection.

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

JOHN CALVIN RIGGS.

Witnesses:

JAMES D. WATERMAN,
JACOB BAUME.