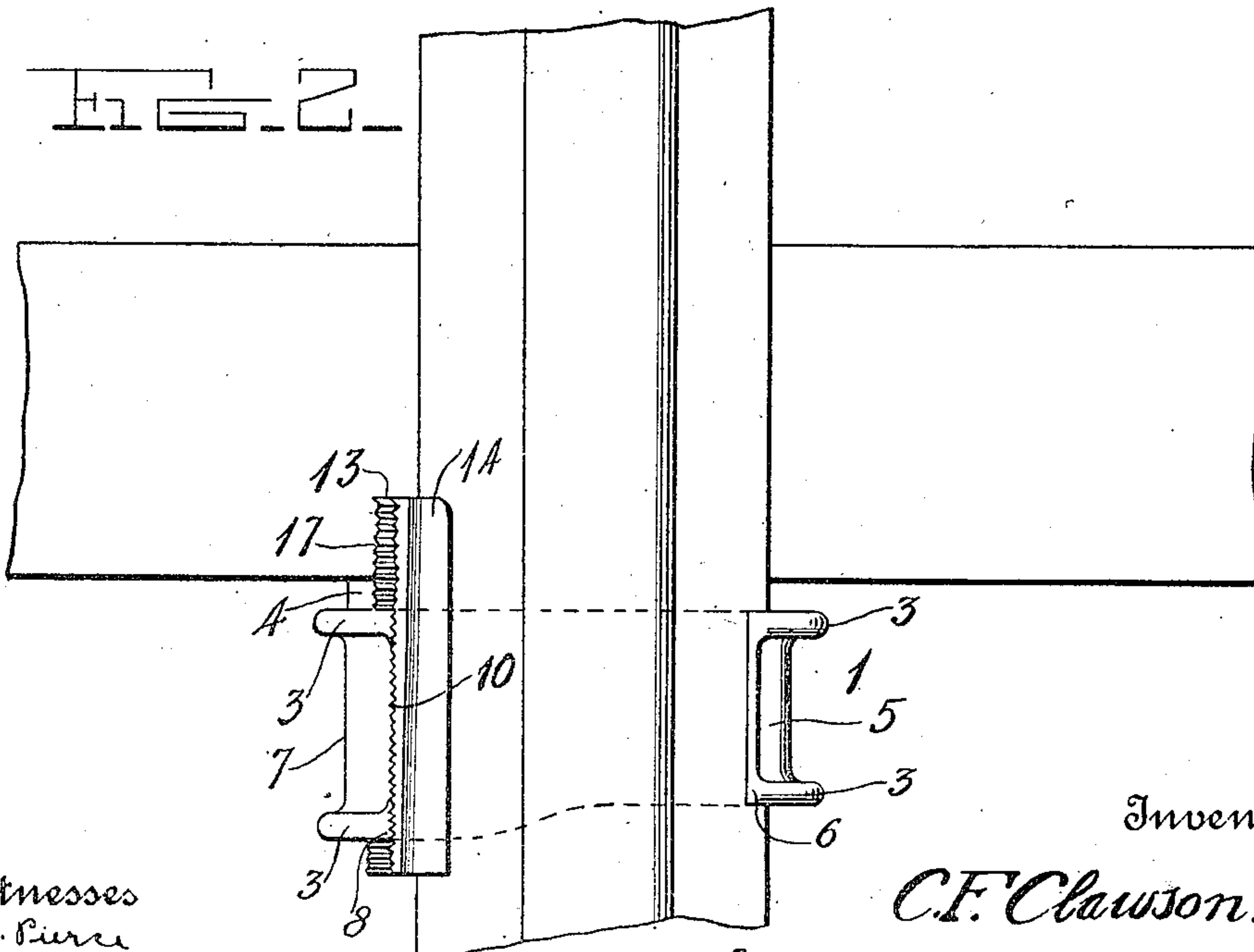
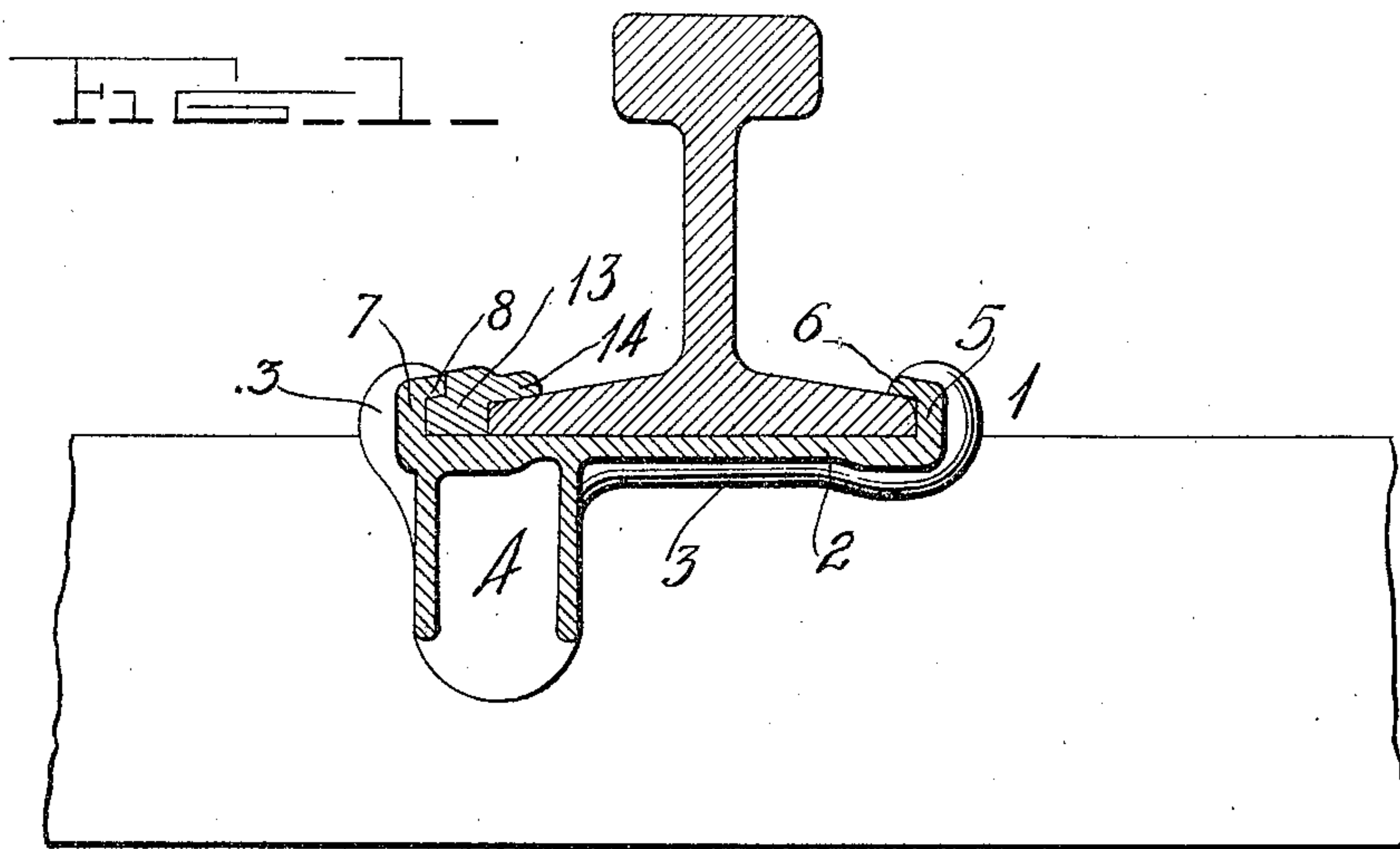


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RAIL ANCHOR.
APPLICATION FILED OCT. 17, 1910.

999,299.

Patented Aug. 1, 1911.

2 SHEETS—SHEET 1.



Witnesses
J. R. Curran
O. B. Hopkins.

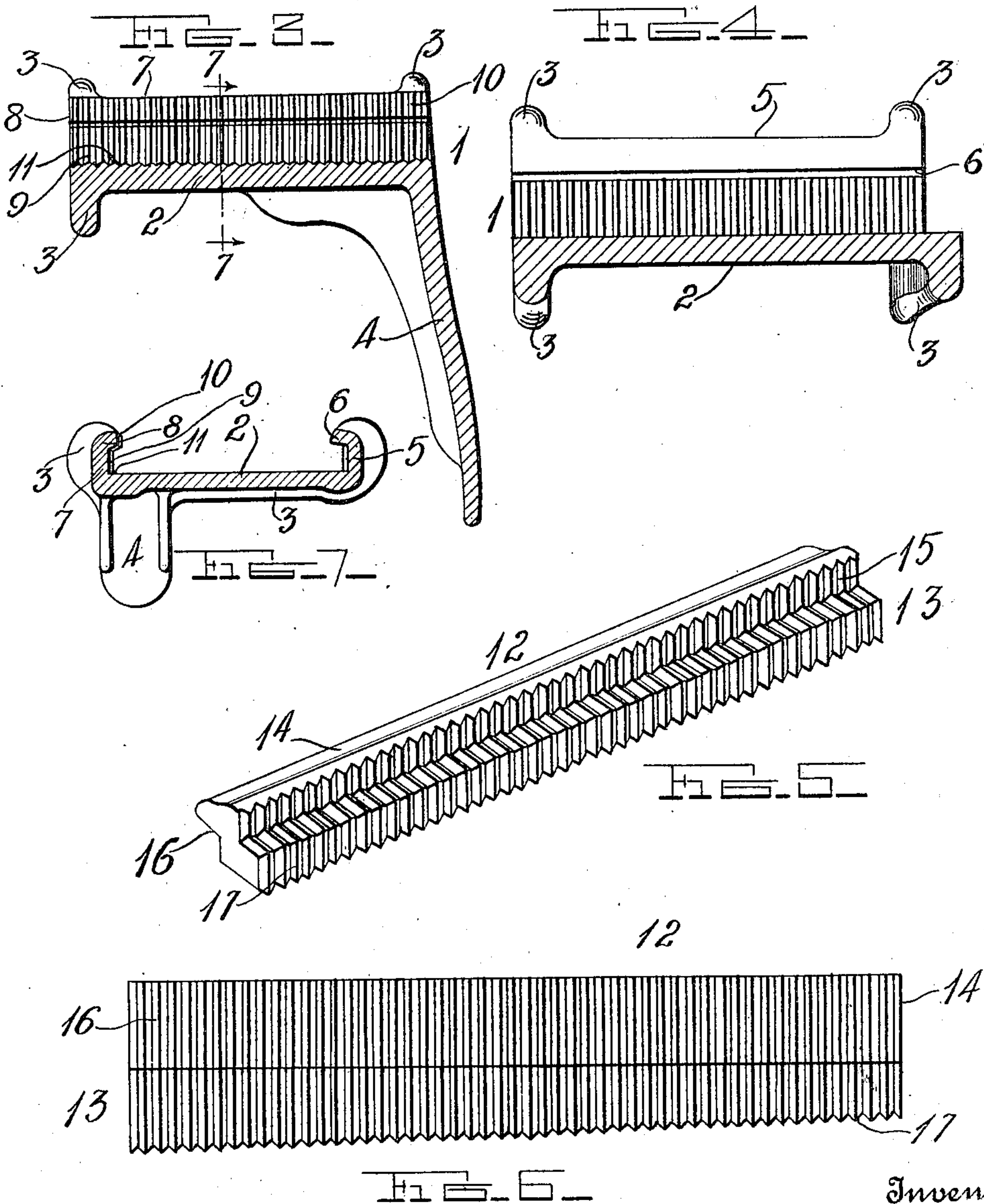
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UNITED STATES PATENT OFFICE.

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RAIL-ANCHOR.

999,299.

Specification of Letters Patent.

Patented Aug. 1, 1911.

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To all whom it may concern:

Be it known that I, CHARLES F. CLAWSON, a citizen of the United States, residing at Mount Pleasant, in the county of Henry and State of Iowa, have invented certain new and useful Improvements in Rail-Anchors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in anchors for railway rails.

One object of the invention is to provide a railway anchor having an improved means whereby the same is secured in rigid engagement with a rail and the latter thereby positively held against creeping.

Another object is to provide a rail anchor which will be extremely simple and exceptionally strong in construction and which may be quickly and easily applied to a rail.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings: Figure 1 is a vertical cross sectional view through my improved anchor showing the same applied to a rail; Fig. 2 is a top plan view of a portion of a rail and tie showing the application of the anchor thereto; Fig. 3 is a vertical sectional view through the anchor looking toward one side thereof; Fig. 4 is a similar view looking toward the opposite side; Fig. 5 is a perspective view of the wedge or gripping member looking toward the outer side thereof; and, Fig. 6 is a bottom plan view of the wedge. Fig. 7 is a vertical cross sectional view on the line 7-7 of Fig. 3.

Referring more particularly to the drawings, 1 denotes the body portion of my improved anchor, said body portion comprising a base plate 2 which is preferably of greater width at one side than the other and which is provided with a flat upper surface adapted to engage the base of the rail as shown. On the under side of the plate 2 adjacent to its front and rear edges are formed reinforcing flanges 3 and on the front edge of the plate 2 adjacent to one

end is a downwardly projecting forwardly curved stop lug 4 which is adapted to engage the side of the tie when the anchor is arranged in position on the rail.

On one end of the plate 2 is formed an upwardly projecting rail engaging flange 5 having on its upper edge an overhanging lip 6. The flange 5 and lip 6 are adapted to be engaged with one edge or base or flange of the rail. The flange 5 and lip 6 are braced at the front and rear ends thereof by a continuation of the reinforcing ribs 3 on the front and rear edges of the plate 2. On the opposite end of the plate 2 is formed an upwardly projecting wedge receiving flange 7 having on its upper edge an overhanging lip 8. The front and rear ends of the flange 7 and lip 8 are reinforced by a continuation of the opposite ends of the ribs 3. The flange 7 is formed at a slight angle with respect to the flange 5 and on the inner surface of the flange 7 is formed a series of teeth 9 while on the inner side of the lip 8 is formed a series of teeth 10. On the upper side of the plate 2 adjacent to the flange 7 is formed a row or series of teeth 11.

The plate 2 is of somewhat greater length than the width of the base or flange of the rail and when the plate is engaged with the rail one edge of the base fits into and engages the flange 5 and lip 6 at one end of the anchor, while between the opposite edge of the base of the rail and the angular or obliquely disposed flange 7 at the other end of the plate is formed a tapered space with which is adapted to be engaged a gripping member or wedge 12 which comprises a tapered bar 13 having on the inner edge of its upper side an upwardly and laterally projecting flange 14 the outer surface or edge of which above the upper side of the bar 13 has formed thereon a series of teeth 15 which are adapted to engage the teeth 10 on the adjacent edge of the lip 8 when the wedge is engaged with the space between the flange 7 and the adjacent edge of the base of the rail. When the wedge 12 is thus engaged with this space the laterally projecting portion of the flange 14 will fit over and engage the adjacent edge of the base of the rail as shown. The rail engaging surface of the flange is preferably provided with a series of teeth 16. In order to provide a tight engagement between the adjoining edges or

surfaces of the bar 12 and flange 7 and rib 8, as well as the engagement between the lower side of the bar and the adjacent upper side of the plate 2, I provide said adjoining
 5 or adjacent edge of the bar with series of teeth 17 which engage the teeth on the adjacent surfaces of the flange, rib and plate and thereby hold the wedge or gripping member 12 in operative engagement with the
 10 rail whereby any creeping movement of the latter is positively prevented.

In applying the device the body portion 1 is slipped over the base flanges of a rail as shown in Figs. 1 and 2, and the wedge member or bar 13 is then driven into position as shown. The enlarged teeth or serrations on the opposing bearing faces of the wedge member and the adjacent parts of the body member, are, of course, sufficiently small to
 20 permit the wedge member to be driven into very firm frictional engagement with the flange 7 and the adjacent base flange of the track rail and such teeth or serrations will effectually prevent the parts from working
 25 loose.

By referring more particularly to Fig. 1 of the drawings, it will be noted that the wedge or tapered locking bar has its upper outer corner cut away so that the bar may
 30 fit under and against the overhanging lip on the adjacent flange of the base plate and that the said tapered locking bar or wedge is provided on its opposite side with an overhanging lip which engages over the base or
 35 flange of the rail. The wedge or locking bar is thus prevented from twisting relative to the rail or the base plate and obtains an extended bearing both against the rail and the base plate. The accidental dislodgment of
 40 the tapered bar will be prevented and it cannot work loose under the jarring of passing trains inasmuch as the only movement it can have will be longitudinally and the releasing movement of the bar along its length will be
 45 prevented by the engagement of the several teeth shown and described. These teeth, furthermore, permit the wedge to be adjust-

ed approximately to its final locking position while the device is being placed in position so that it will not slip out of place
 50 while the parts are being assembled and after the base plate and the wedge have been brought into proper relation to the rail, a few light taps from a hammer or other tool will drive the wedge home so as
 55 to secure the exact locking engagement of the same between the rail and the base plate.

Various changes in the form, proportion and the minor details of construction may
 60 be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claim.

Having thus described my invention, what
 65 I claim is:

A rail anchor comprising a base plate having a depending tie engaging lug on one side at one end and provided at its opposite ends with upstanding flanges and overhang-
 70 ing lips at the upper edges of said flanges, one of said flanges being adapted to engage a rail base and the other of said flanges being provided with teeth on its side and on the inner edge and under side of its over-
 75 hanging lip, and a wedge adapted to fit between the rail base and the toothed flange and lip of the base plate, said web having one longitudinal corner cut away whereby it may fit under and against the lip and pro-
 80 vided on its opposite side with an overhanging lip adapted to fit over the rail base, the wedge being provided with teeth on the under side of said lip to engage the rail base and on its several outer faces to engage the
 85 teeth of the base plate.

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

CHARLES F. CLAWSON.

Witnesses:

J. W. BEERNOP,
 J. R. HUGHES.