June 19, 1923.

1,458,970

B. B. BETTS

RAIL ANTICREEPER

Filed Sept. 23, 1921 3 Sheets-Sheet 1

Fig 1

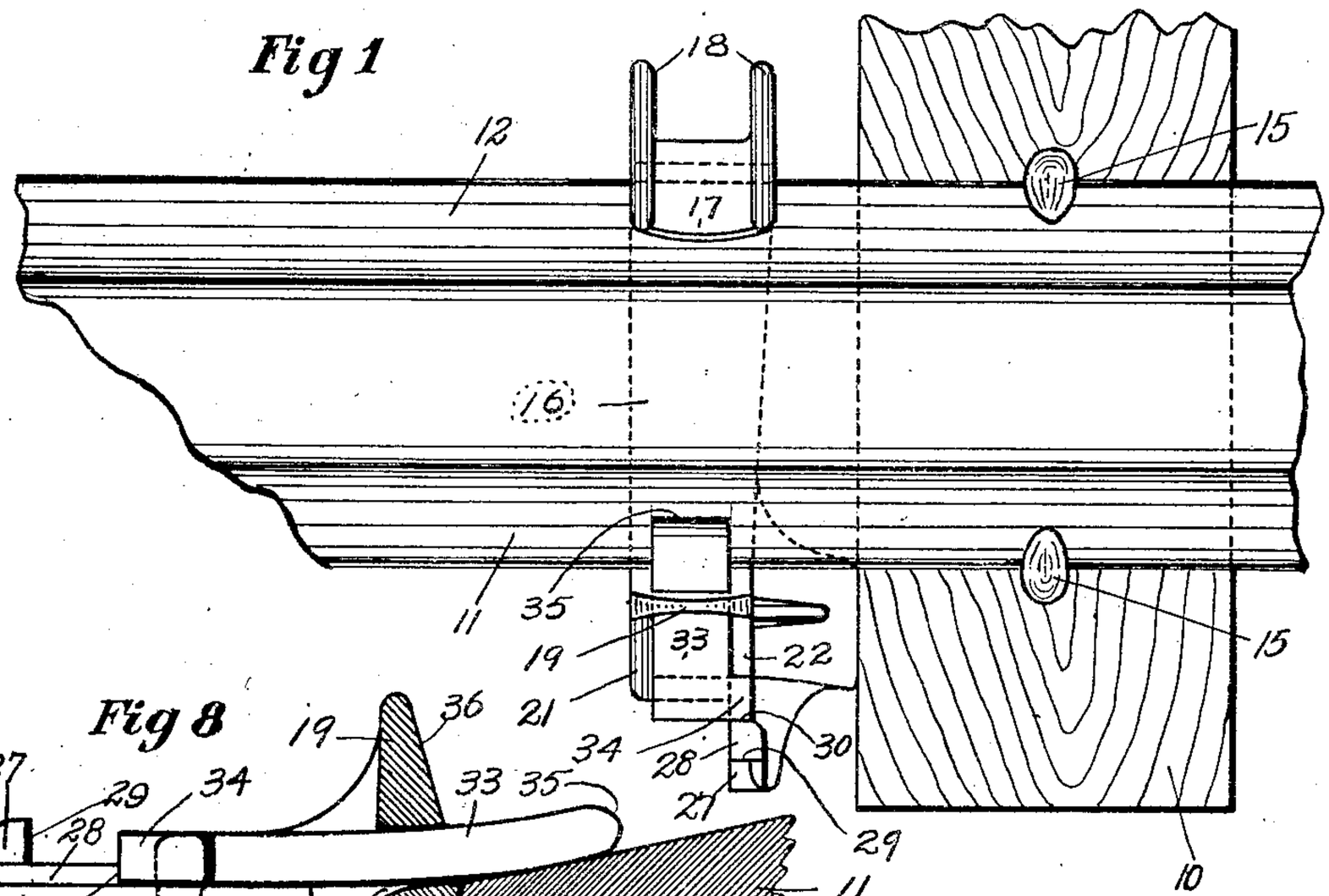


Fig 8

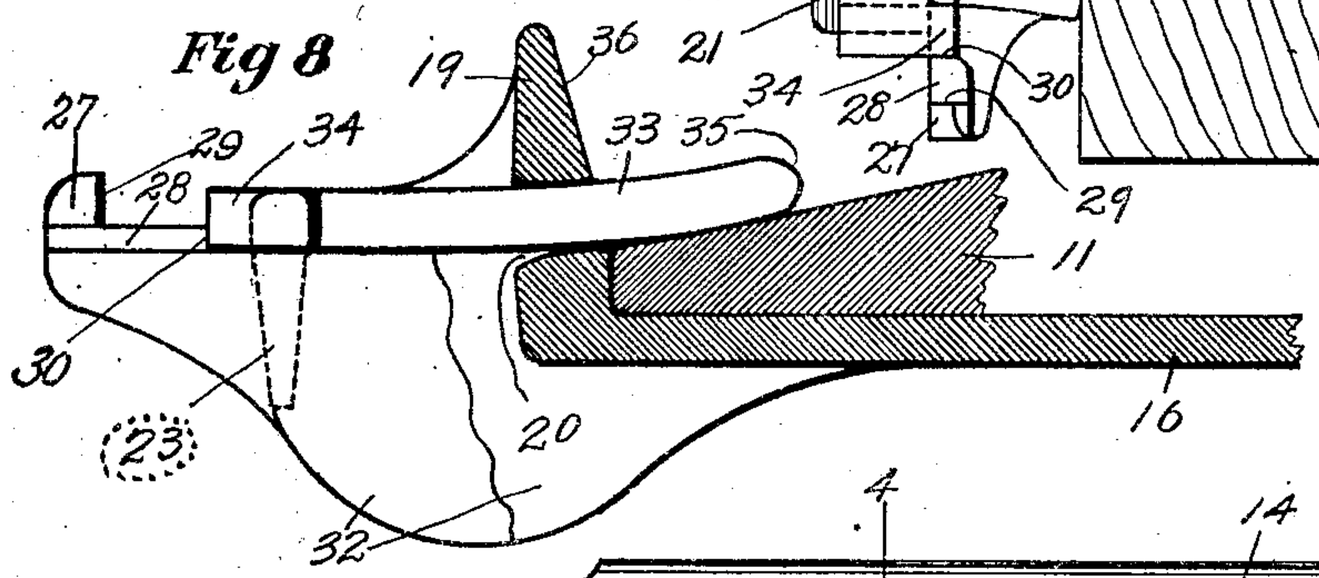
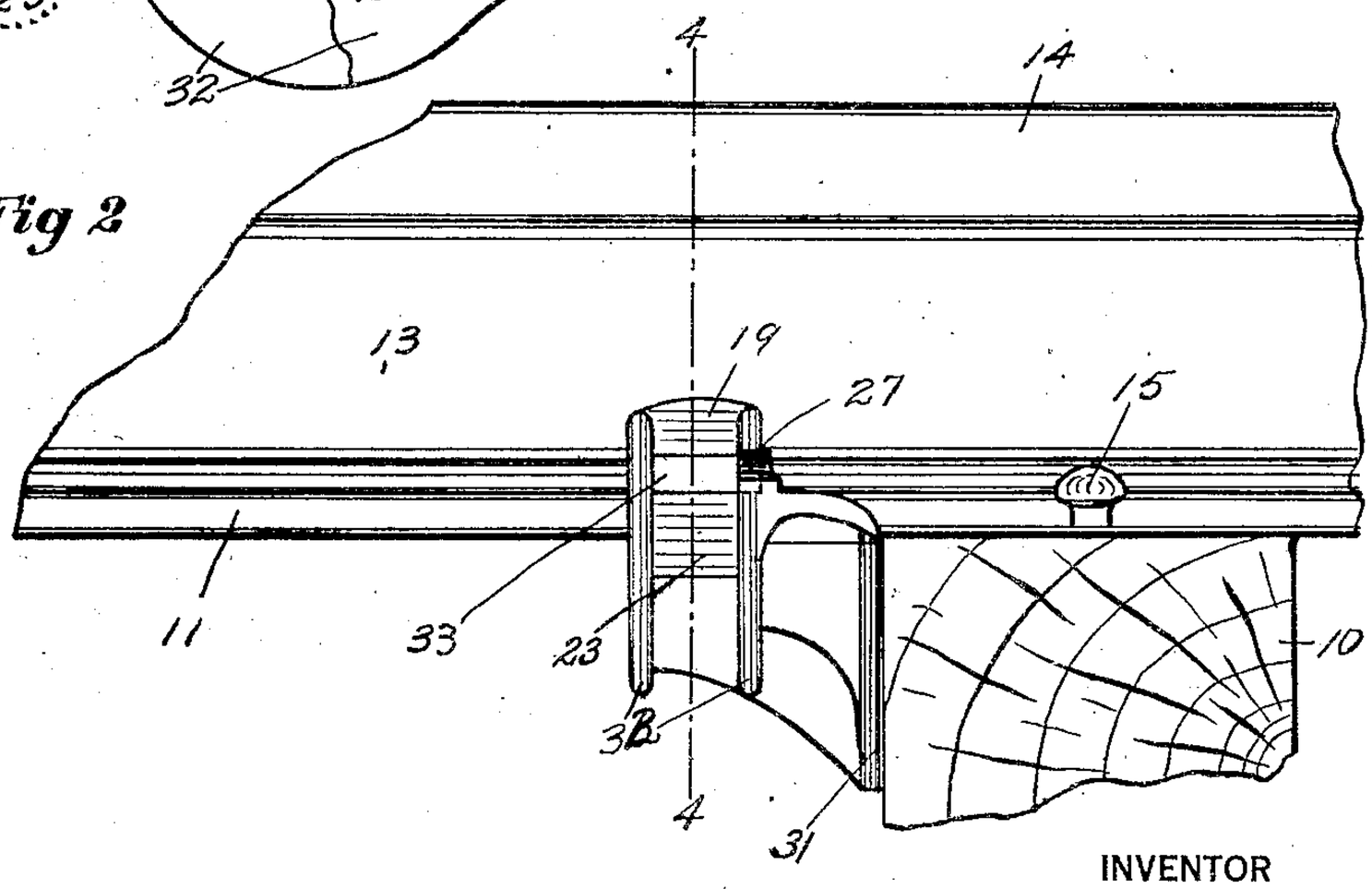


Fig 2



INVENTOR

BENJAMIN B. BETTS.

BY Edwards & Luyster

ATTORNEY

June 19, 1923.

B. B. BETTS

1,458,970

RAIL ANTICREEPER

Filed Sept. 23, 1921 3 Sheets-Sheet 2

Fig 3

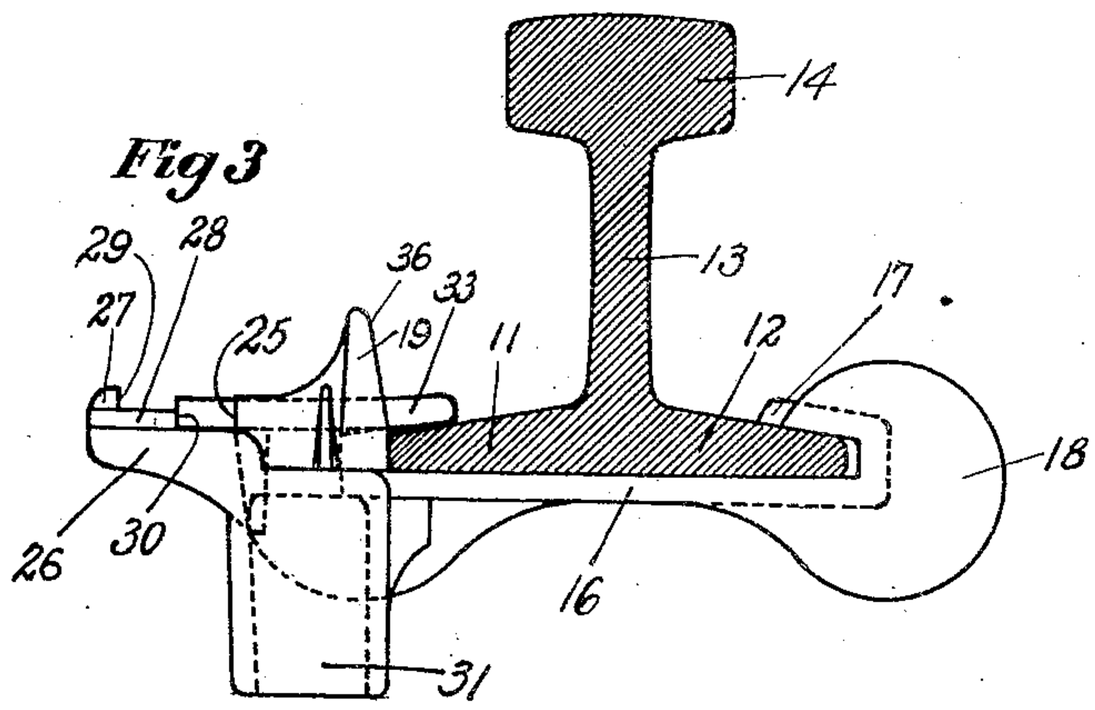


Fig 4

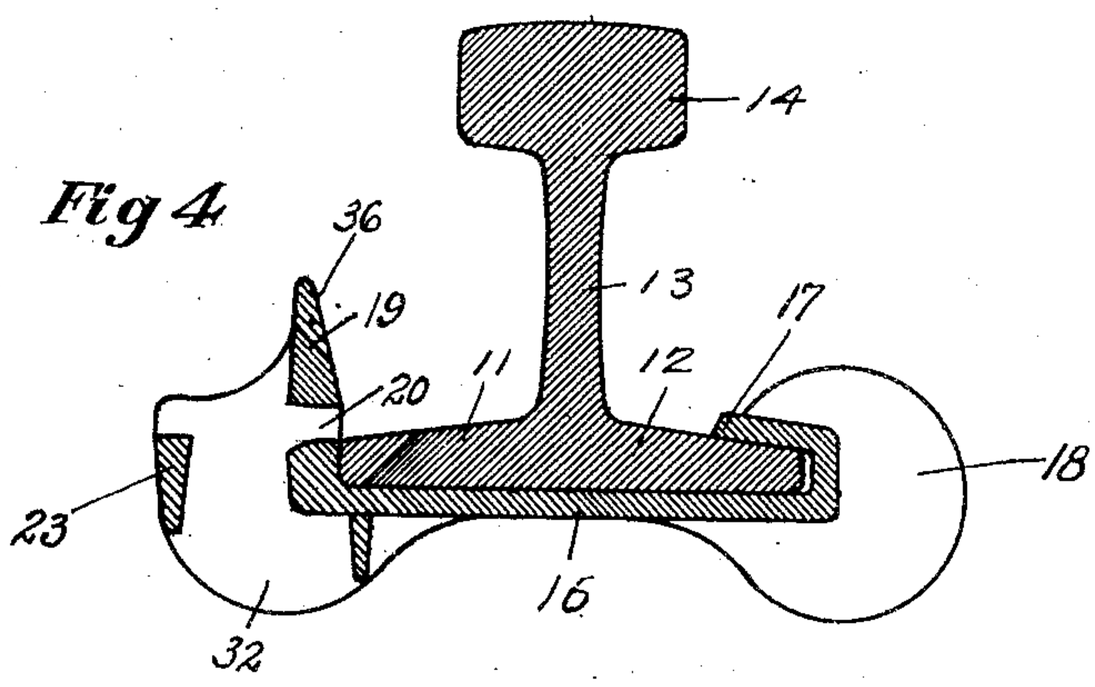


Fig 9

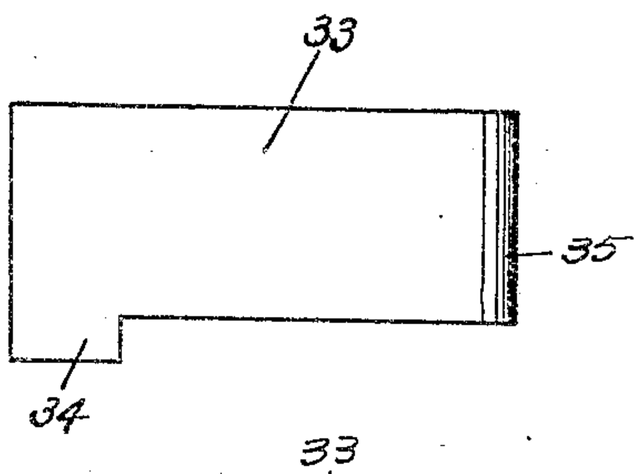
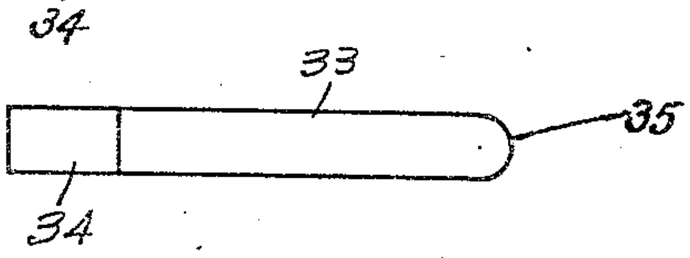


Fig 10



INVENTOR
BENJAMIN B. BETTS.
BY Edmund E Lyon
ATTORNEY

June 19, 1923.

1,458,970

B. B. BETTS

RAIL ANTICREEPER

Filed Sept. 23, 1921 3 Sheets-Sheet 3

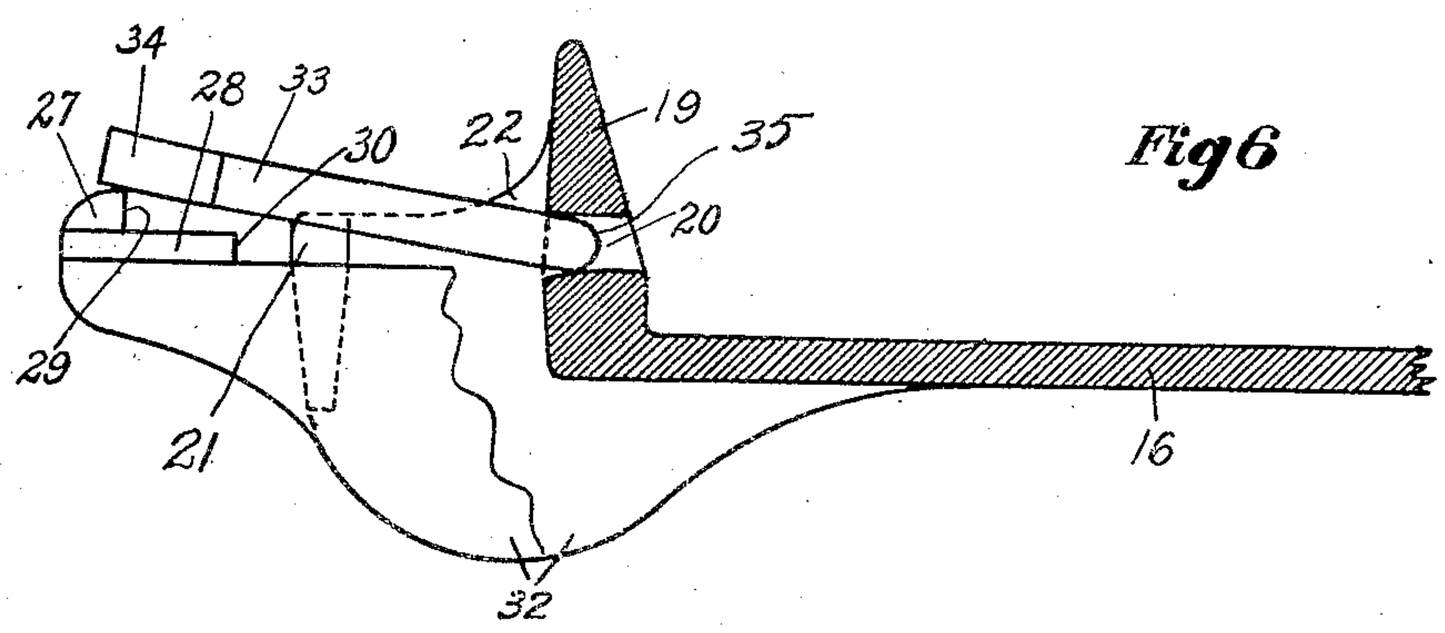


Fig 6

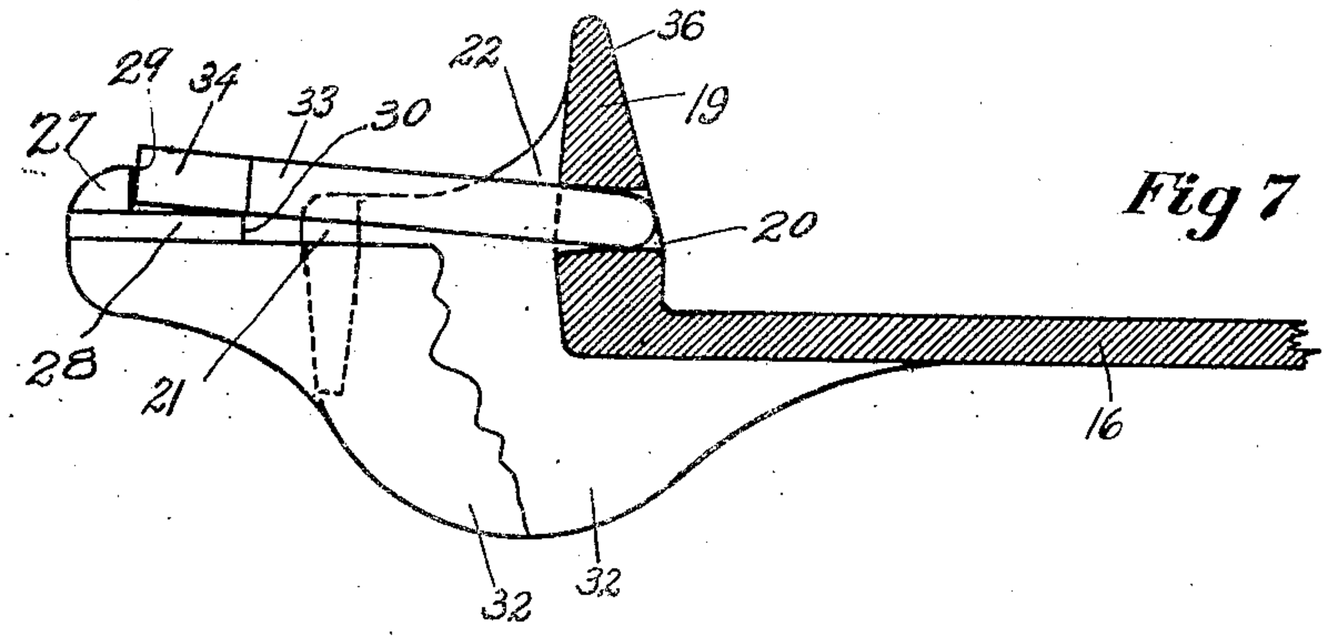


Fig 7

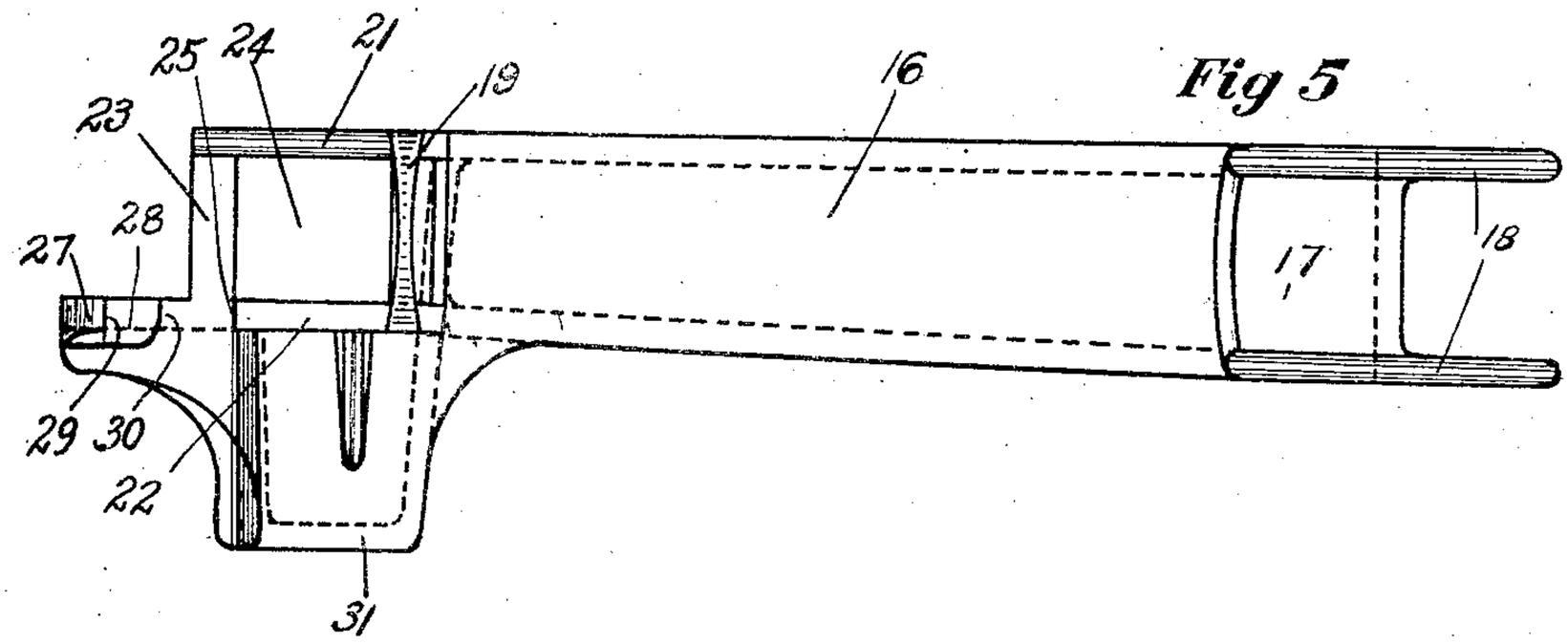


Fig 5

INVENTOR
BENJAMIN B. BETTS
BY Edward C. Lingan
ATTORNEY

Patented June 19, 1923. 1,458,970.

UNITED STATES PATENT OFFICE.

BENJAMIN B. BETTS, OF ST. LOUIS, MISSOURI.

RAIL ANTICREEPER.

Application filed September 23, 1921. Serial No. 502,681.

To all whom it may concern:

Be it known that I, BENJAMIN B. BETTS, a citizen of the United States, and resident of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Rail Anticreepers, of which the following is a specification, containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in rail anti-creepers, and has for its primary object an anti-creeper which is adapted to be attached to the base flanges of a rail, by means of a key, the key being readily removable from the base flange of the rail and from the anti-creeper.

A further object is to construct an anti-creeper for railroad ties having a key for locking the device to a rail, the key being so constructed as to form a part of the anti-creeper when it is shipped, thus obviating the necessity of shipping the keys separate or wiring them to the individual anti-creeper. This device is an improvement on the anti-creeper disclosed in my application for rail anti-creepers filed May 9, 1921, Serial No. 367,787, allowed June 30, 1921.

In the drawings,

Fig. 1 is a portion of the rail showing my device in position thereon.

Fig. 2 an end elevation of the same.

Fig. 3 a side elevation of my anti-creeper showing the same locked on the rail.

Fig. 4 a sectional view taken on the line 4—4 of Fig. 2, with the key removed.

Fig. 5 an enlarged top plan view of the anti-creeper.

Fig. 6 an enlarged fragmental section showing the method of inserting the key.

Fig. 7 a similar view showing the key in place, and as the device appears for shipment.

Fig. 8 a similar view showing the key driven home and securing the anti-creeper to a rail.

Fig. 9 a top plan view of the key.

Fig. 10 a side elevation of the same.

In the construction of my device, 10 indicates a railway tie, to which is secured a rail having base flanges 11 and 12, and a web 13 and ball 14. The base flanges are secured to the ties by spikes 15. Secured to the base flanges of the rail and passing on their underside is my improved anti-creeper which consists of a base portion 16 having on its one end a hook portion 17 which is adapted to be hooked over the base flange 12, and in order to prevent the hook 17 from becoming broken when forced on the flange 12, I provide stiffening ribs 18, the hook portion 17 and stiffening ribs 18 being commonly termed the jaw. Opposite the jaw is an upwardly extending projection 19 which is provided with an opening or passage way 20. This passage way is so arranged as to have its lower wall substantially on a line with the upper face of one of the base flanges. Formed integral with the vertical projection 19 are ribs 21 and 22. These ribs extending outward or away from the rail are connected at their free ends by a rib 23, thus leaving an open space 24 between the wall 19 and the ribs 21, 22 and 23. The rib 22 has a portion thereof cut away so as to form an abrupt shoulder 25. This abrupt shoulder limits the inward movement of the key. The base 16 is also provided with a rearward projection 26, this rearward projection being in turn provided with upwardly extending projections 27 and 28, forming shoulders 29 and 30. The purpose of the shoulder 29 is to retain the key within the anti-creeper so that it will not become lost during shipment, while the shoulder 30 retains the key in locking position on the base flange 11. (See Fig. 3.) The base 16 is provided with an abutment plate 31 which is designed to contact with the tie 10, (see Figs. 1 and 2), and prevent creeping of the rail. The projecting portion 26 is also provided with stiffening ribs 32 which prevent it from being broken when the key is driven home. The key made use of consists of a substantially rectangular plate 33 which is formed preferably of spring material and having along one of its side edges a projection 34. This projection is adapted to come in contact with the shoulders 29 and 30, for the purpose of holding the key within the anti-creeper during shipment, so that it cannot become lost or separated therefrom, and also to prevent the accidental removal from the flange of the rail after it has been driven home, and, in order to facilitate the insertion of the key within the passage way 20 and its driving over the base flange of a rail, the forward end is rounded as at 35. In assembling my device for shipment, the key 33 is placed in the

position as shown in Fig. 6. This causes the projection 34 to rest on the projection 27. It is then tapped forward with a hammer, and, due to its being constructed of spring steel, it can bend sufficiently to allow the projection 34 to pass over the projection 27 and bear against the shoulder 29. (See Fig. 7.) In this position the device is ready to be attached to the rail. The hook 17 is placed over one of the base flanges and driven tight thereon; a crow-bar or similar instrument is then placed under the opposite end, and, due to the inclined face 36 of the projection 19, the device can be raised against the base flanges of the rail, assuming the position shown in Fig. 4. When this has been done, the key 33 is driven forward and rides up on the base flange of the rail. (See Fig. 8.) This forward driving is continued until the projection 34 rides past the projection 28 and drops downward past the shoulder 30. In this position the key 33 is locked on the base flange of a rail and the accidental movement of jarring out cannot take place as it is held by the shoulder 30. When in this position the resiliency of the key allows it to assume the position shown in Fig. 8, that is, the portion of the key above the opening or recess 24 will be curved slightly downward, this action causing the key to bind tightly on the upper face of the base flange. When it is desired to remove the anti-creeper for any reason, the point of a crow-bar can be inserted underneath the rear end of the key, and that portion of the key sprung up sufficiently to allow it to pass over the shoulder 30, and then by tapping the front edge 35 of the key, the anti-creeper can be unlocked and removed from the rail. By the use of my device it is possible to ship the anti-creepers and keys assembled and ready for use, as there is no danger of the keys dropping out and becoming lost—neither is it necessary to ship keys separately from the anti-creeper or to wire them to the anti-creeper for shipping purposes, both of the last mentioned methods resulting in loss of time as well as loss of keys.

Having fully described my invention, what I claim is:

1. A rail anti-creeper comprising a base, a jaw formed integral therewith, a projection having an opening formed on said base, a key of spring material adapted to be inserted through said opening for securing the anti-creeper to a rail, means for preventing the accidental removal of said key when in locked position, and means for holding the key and anti-creeper together.

2. A rail anti-creeper comprising a rail having rigid base flanges, a base having a jaw to grip one of said flanges, a projection having an opening formed integral with said base and adapted to contact with the opposite flange, a resilient key adapted to be inserted through said opening for locking said base to a rail, shoulders for securing said key against accidental removal, and an abutment plate formed integral with said base, said abutment plate adapted to contact with the tie to which the rail is secured to prevent its creeping.

3. A rail anti-creeper comprising a base, a projection having an inner inclined wall formed on one end of said base, said projection being provided with an opening extending in the direction of the longitudinal axis of said base, shoulders formed adjacent said projection, a bendable key provided with a projection adapted to be inserted through said opening, said projection adapted to contact with the shoulders and prevent the accidental removal of the key from its locked position and from the rail anti-creeper.

4. A rail anti-creeper comprising a base answering as a rail receiving seat, a jaw formed integral with one end of said base, an upwardly extending projection formed adjacent the opposite end of said base, said projection being provided with an inclined inner wall, and an opening having a bottom wall positioned above the rail receiving seat and in alinement with the upper face of the base flange of a rail, a bendable key adapted to be inserted through said opening, and means carried by the base and key to prevent accidental removal of the key from the projection when in locked or unlocked position.

5. A rail anti-creeper comprising a base provided with a rail receiving seat, a jaw formed integral with one end thereof, a key, a projection provided with a key opening formed on the opposite end of said base, and a shoulder formed on the base for holding the key in locked position when in use and a second shoulder formed on the base for holding the key in assembled position when not in use.

6. A rail anti-creeper comprising a base provided with a rail receiving seat, a jaw formed integral with one end thereof, a key provided with a rounded front end, a projection provided with a key opening formed on the opposite end of said base, a shoulder formed on the base for holding the key in locked position when in use and a second shoulder formed on the base for holding the key in said base when in unlocked position.

7. A rail anti-creeper comprising a base provided with a rail receiving seat, a jaw formed integral with one end thereof, a projection provided with a key opening formed on the opposite end of said base, a key provided with a rounded front end and a lateral projection seated in said opening, and a shoulder formed on the base for engaging with the lateral projection for hold-

ing the key in locked position when in use, and a second shoulder formed on said base for holding the key in assembled position when not in use.

8. A rail anti-creeper comprising a base provided with a rail receiving seat, a jaw formed integral with one end thereof, a projection provided with a key opening formed on the opposite end of said base, a key having a rounded front end and an integral projection seated in said opening, and spaced apart shoulders formed on the base for engaging said projection to hold the key within the opening, and also to hold the key in locked position when in use.

In testimony whereof, I have signed my name to this specification.

BENJAMIN B. BETTS.