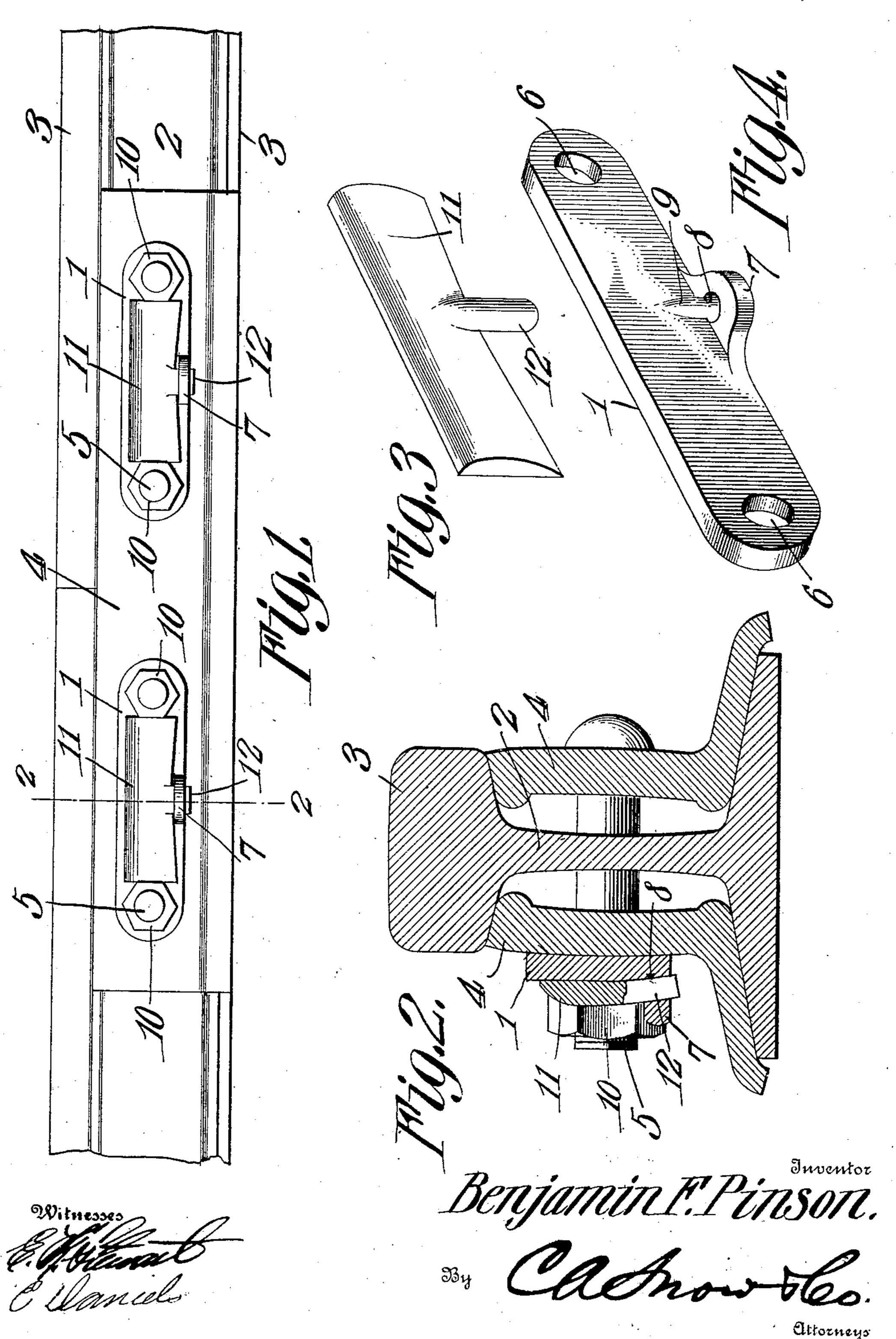
B. F. PINSON.

NUT LOCK.

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912,407.

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RE NORRIS PETERS CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

BENJAMIN F. PINSON, OF SKIATOOK, OKLAHOMA, ASSIGNOR OF ONE-HALF TO WALDEN G. KEIFFER, OF SKIATOOK, OKLAHOMA.

## NUT-LOCK.

No. 912,407.

Specification of Letters Patent.

Patented Feb. 16, 1909.

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To all whom it may concern:

Be it known that I, Benjamin F. Pinson, a citizen of the United States, residing at Skiatook, in the county of Tulsa and State 5 of Oklahoma, have invented a new and useful Nut-Lock, of which the following is a specification.

This invention relates to nut locks and more particularly to those adapted to be em-10 ployed at railroad rail joints in connection

with the fish plates.

It has for its object to provide a locking means simple in construction and comparatively inexpensive to manufacture and such | 15 as can be readily applied to most any rail joint now in use.

Another object is to provide a locking plate that can be readily operated to unlock the nut and having no parts that will be-20 come inoperative by exposure to the ele-

ments.

With these and other objects in view as will more fully hereinafter appear the present invention consists in certain novel de-25 tails of construction and arrangement of parts hereinafter fully described illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the 30 form proportion, size and minor details may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 35 1 illustrates, a side elevation of a rail joint | with my lock applied thereto. Fig. 2 is a transverse sectional view taken on line 2—2 Fig. 1. Fig. 3 is a detached perspective view of the locking plate. Fig. 4 is a similar

40 view of the base plate.

In the construction illustrated in Figs. 1 to 2 and 4, a base plate 1 preferably formed of metal is of approximately rectangular shape and of a length a trifle greater than 45 the distance between the opening formed in the web 2 of the rail 3, said openings registering with similar openings formed in the fish plates 4 for the reception of bolts 5 by means of which the fish plates are secured to 50 opposed ends of the rail in a well known manner. Adjacent the opposed ends of the base plate 1 are openings 6 adapted to register with the openings in the fish plates 4 and web 2, and of a size sufficient to accom-55 modate the threaded end of the bolts 5.

With this construction it is obvious that one feature of the base plate is to dispense with the usual washers generally employed on the threaded end of the bolts, since the inner face of the base plate lying against the web 60 of the rail, will perform the function of the usual metallic washer. Formed on the outer face and at the lower side of the base plate 1 and approximately intermediate the openings 6 is a lug 7 extending at right angles 65 to the outer face of the base plate and centrally provided with an opening 8 parallel to the outer face of the base plate. The inner side of the opening 8 is provided with a groove 9 extending upwardly and into the 70 outer face of the base plate 1, the function.

of which will presently appear.

With the construction thus far described it is obvious that when the fish plates 4 have been adjusted and the opposed faces of the 75 web 2, the bolts 5 are then inserted in the openings and over the threaded ends of said bolts is placed the openings of the base plate 1. The nuts 10 are then threaded on the bolts in the usual manner, the inner faces 80 of the nuts contacting with the outer face of the base plate. A locking plate 11 in the present instance is illustrated as being formed of a single piece of metal or other suitable material, and of approximately rec- 85 tangular shape and of a length to snugly fit between the opposed inner faces of the nuts 10, when the said faces are perpendicular to the top 3 of the rail. On the lower side of the locking plate 11 and projecting down- 90 wardly and slightly inwardly is a keeper 12 of a diameter adapted to snugly fit within the opening 8 of the lug 7 and groove 9. With this construction it is obvious that when the keeper has entered the opening 95 the groove 9 by increasing the area thereof will permit the inner face of the locking plate to contact with the outer face of the base plate and the slight inward curve of the keeper insures that one edge of the ter- 100 minal thereof will be in contact with the lower end of the groove decreasing any tendency of the locking plate to be accidentally jarred from its position as shown in Fig. 1.

What is claimed is:—

1. In a nut lock, a base plate having an unbroken contour and a groove in the same, a lug extending at right angles from said base plate provided with an opening lead- 110

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ing from said groove; in combination with a locking plate of such length as to engage a pair of bolts and provided with a downwardly extending inwardly bent keeper ar-5 ranged to fit closely within the opening of

said lug.

2. In a nut lock, a base plate having an unbroken contour and plane back and a groove in the face, a lug extending at right 10 angles from said base plate provided with an opening leading from said groove; in combination with a locking plate of such length as to engage a pair of bolts and provided with a downwardly extending in-15 wardly bent keeper arranged to fit closely

within the opening of said lug.

3. A nut lock of the class described embodying a base plate centrally provided with a groove a lug on the outer face and ad-20 jacent the lower edge of said base plate provided with an opening terminating in said groove, a locking plate having a keeper

on the lower side thereof adapted to engage the walls of said groove and lug opening.

4. A nut lock of the class described em- 25 bodying a base plate having a perforated lug adjacent the lower edge thereof, and a locking plate centrally provided with a transversely curved keeper adapted to en-

gage said perforated lug.

5. A nut lock of the class described embodying a base plate having a perforated lugadjacent the lower edge thereof, and a locking plate centrally provided on the lower edge with a downwardly and inwardly 35 curved keeper adapted to engage said perforated lug.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses. BENJAMIN F. PINSON.

Witnesses:

G. C. SMYTH, FRANK McGINNY.