

No. 859,094.

PATENTED JULY 2, 1907.

W. C. MATTESON.

NUT LOCK.

APPLICATION FILED DEC. 27, 1906.

Fig. 1

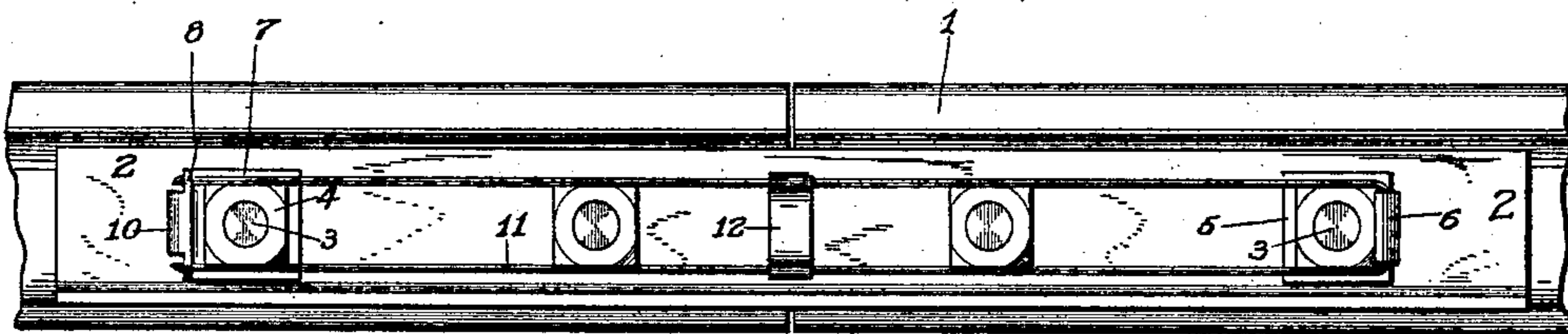


Fig. 2

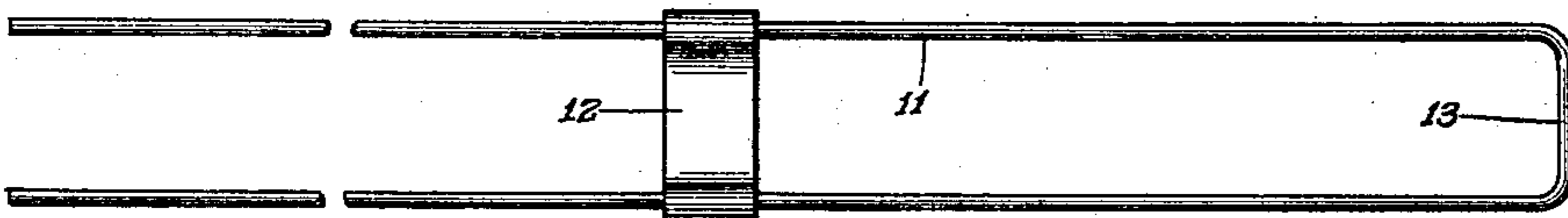


Fig. 3

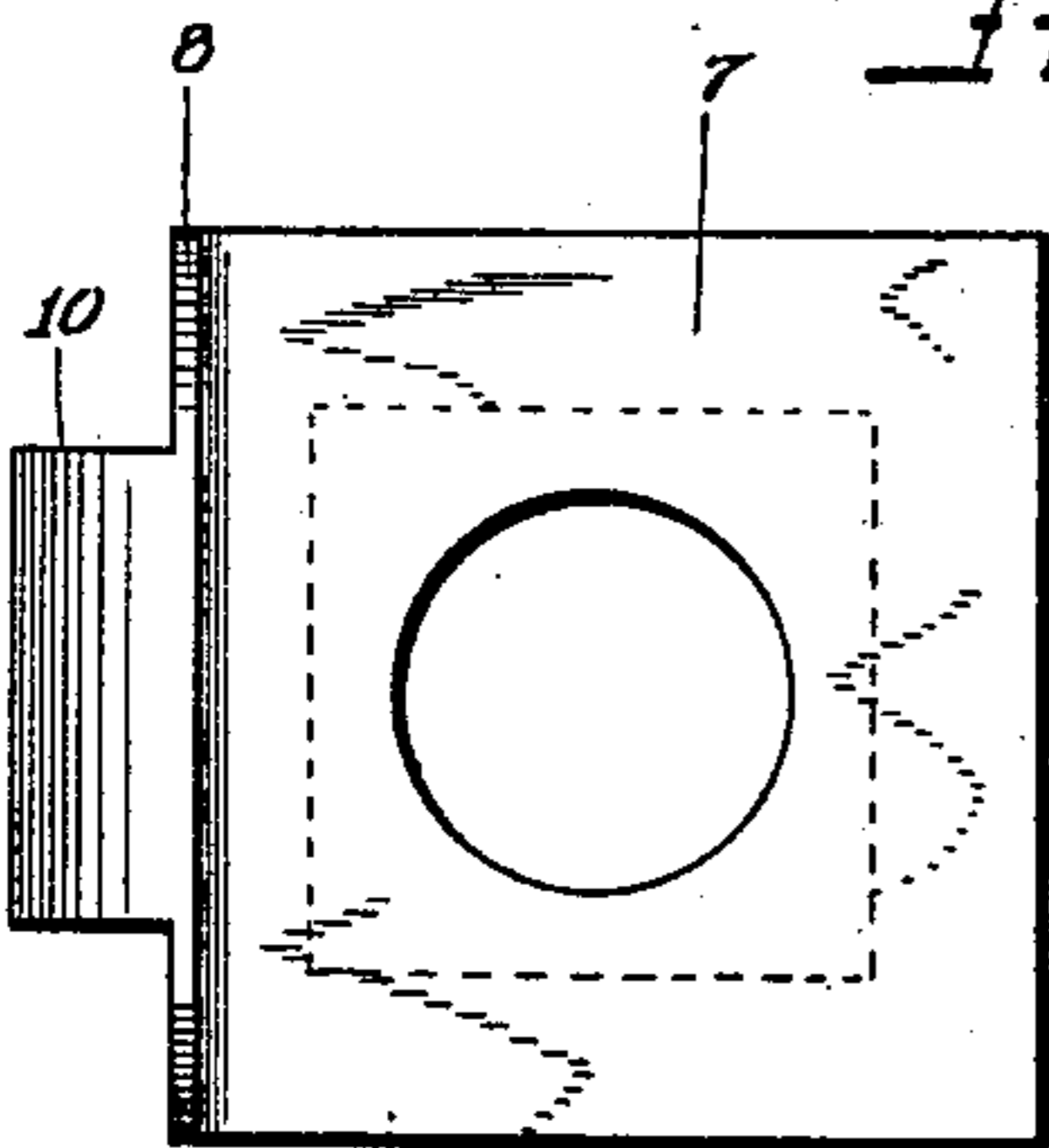


Fig. 4

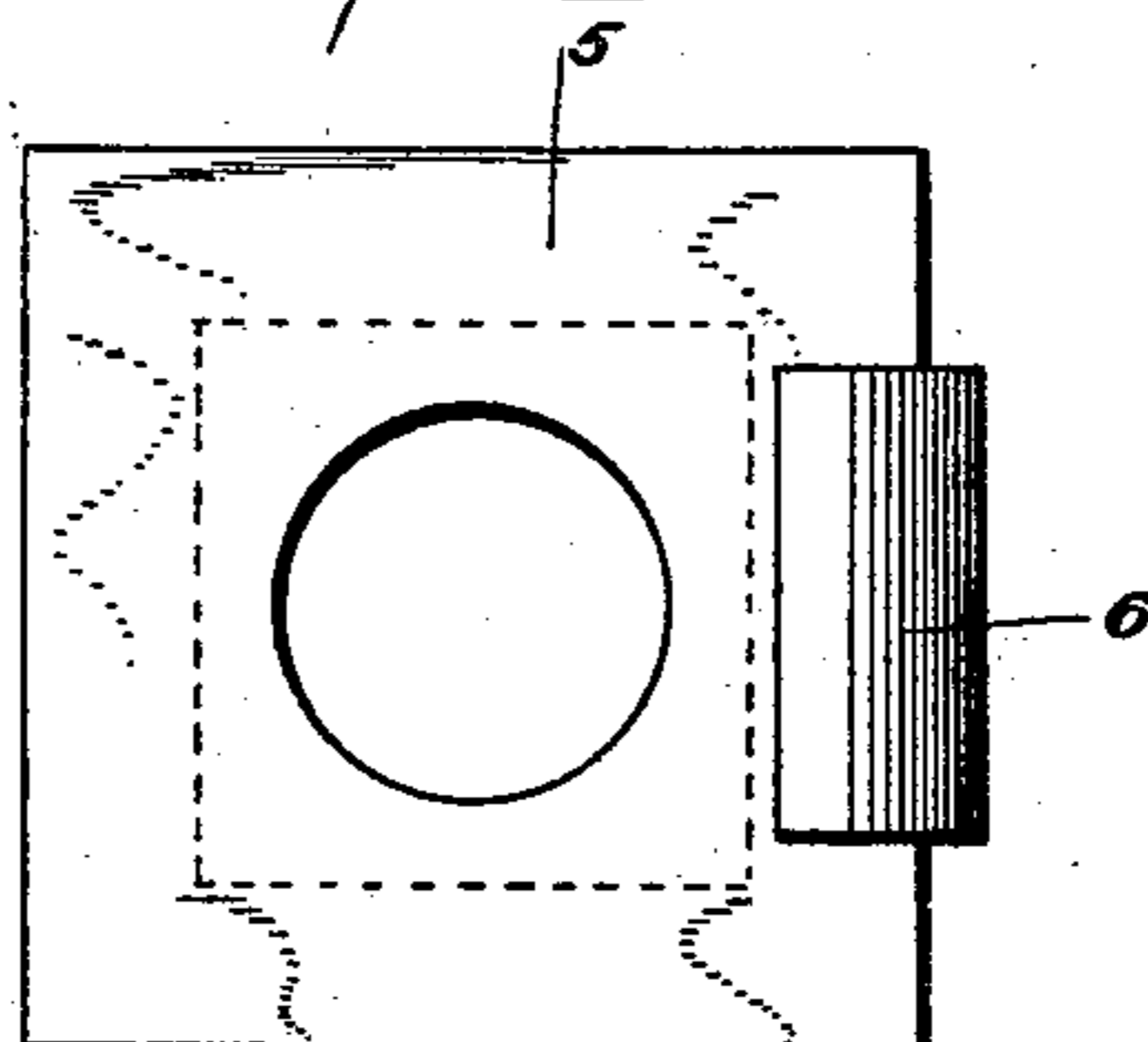


Fig. 5

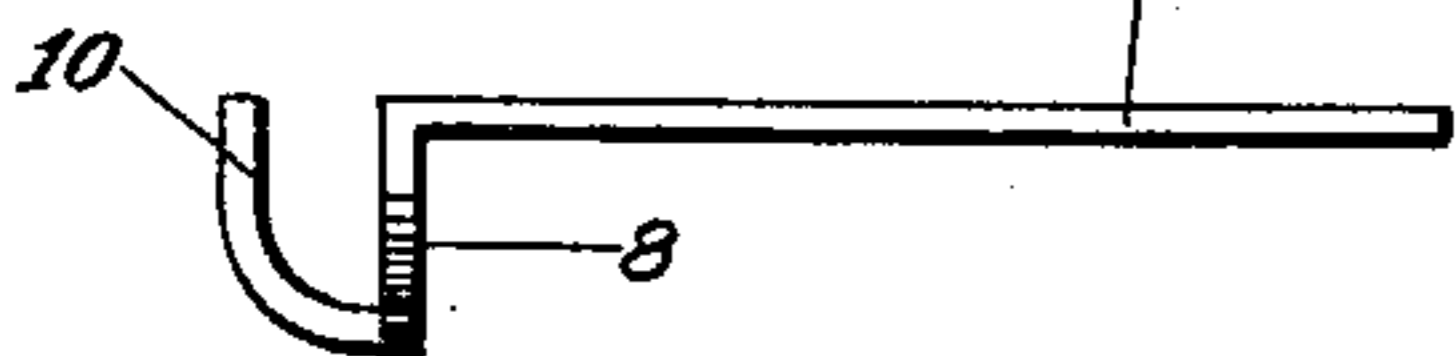


Fig. 7

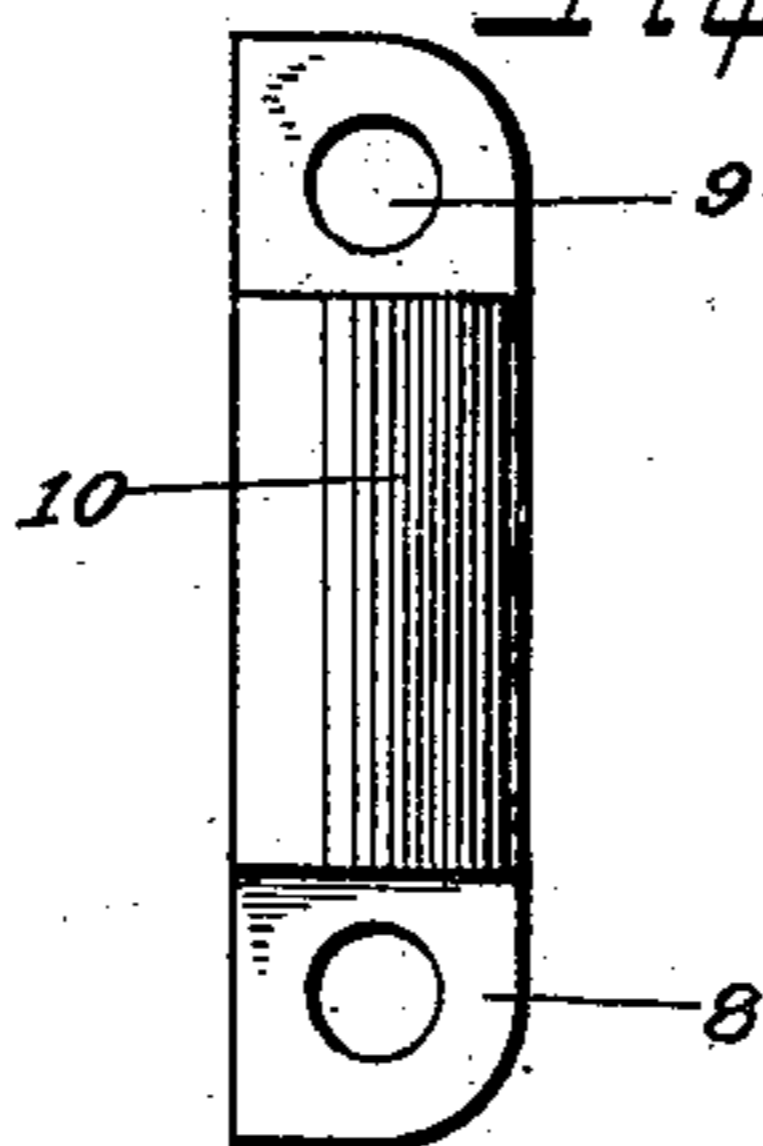
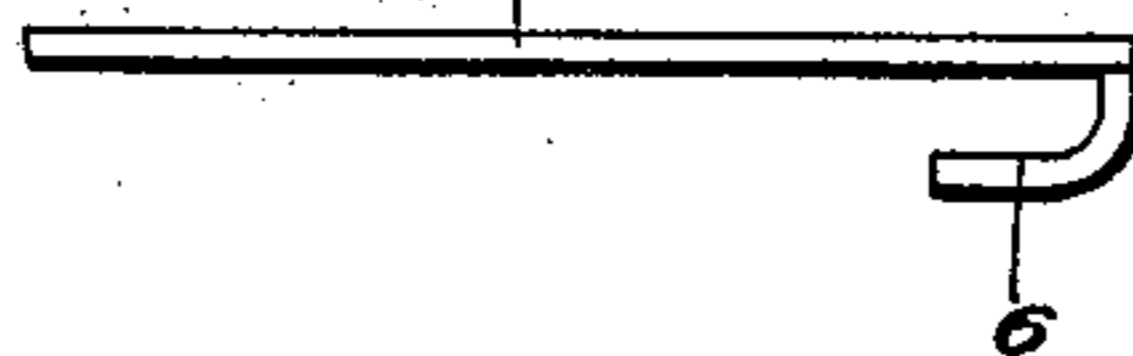


Fig. 6



Witnesses

Frank H. Carter
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Inventor

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UNITED STATES PATENT OFFICE.

WALTER C. MATTESON, OF STOCKTON, CALIFORNIA, ASSIGNOR OF ONE-HALF TO E. J. MATTESON, OF STOCKTON, CALIFORNIA.

NUT-LOCK.

No. 859,094.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed December 27, 1906. Serial No. 349,644.

To all whom it may concern:

Be it known that I, WALTER C. MATTESON, a citizen of the United States, and a resident of Stockton, county of San Joaquin, State of California, have invented certain new and useful Improvements in Nut-Locks; and I do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and the characters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in nut-locks and is particularly directed to the nuts used in railway construction, the main object of the invention being to produce a simple and positive lock for all the nuts on each fish plate joint in the building of rail-roads.

The objects of the invention are accomplished by means of a tension spring wire adapted to be so arranged over the nuts after they are screwed up in such manner as to lock said nuts in position. Also a means whereby the same may easily be unlocked when desired. Further, by such other construction as will appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a side elevation of a rail joint showing the complete device installed thereon. Fig. 2 is a view of a tension spring wire. Fig. 3 is a plan view of a metal plate used as will appear. Fig. 4 is a view of another metal plate used in the device. Fig. 5 is an end elevation of the plate shown in Fig. 3. Fig. 6 is an end elevation of the plate shown in Fig. 4. Fig. 7 is a side elevation of the plate shown in Fig. 3.

1 designates a rail and 2 the usual fish plate.

3 designates the usual bolts and 4 the nuts mounted thereon.

Encircling one of the end bolts 3 is a plate 5 provided at its outer end with a lip 6 curving inwardly over the plate, as shown for the purpose as will appear. Encircling the other end bolt is a similar plate 7 provided at its outer end with an upwardly extending tongue 8 provided with two holes 9 disposed in a line with the upper and lower sides of the nuts 4. Said tongue 8 is also provided with an outwardly curved lip 10 adapted to rest by its free edge against the fish plate 2 and thus act as a brace and preventing the tongue 8 from being bent outwardly for the purpose as will appear.

11 is a substantially U-shaped tension spring wire provided with a center cross brace 12, the closed end of the said spring wire being designated on the drawing as 13.

In practice the plates 5 and 7 are placed in their respective positions and when the nuts 4 are screwed up to the required position the open ends of the spring wire 11 are inserted in the holes 9 and the closed end inserted under the lip 6, which is sufficiently yieldable to permit this action. The sides of said spring wire when thus arranged are in alinement with the tops and bottoms of the said nuts. The lip 6 is then closed by any suitable implement over the closed end 13 of the wire member thus locking the said spring wire in position, and incidental thereto, as is apparent, the nuts 4 are locked in position and prevented from moving laterally in respect to the bolts 3. The lip 10 serves as a brace and effectually prevents the tongue 8 from being bent outwardly, and releasing the open ends of the spring wire 11 which, as is apparent, would render the device ineffectual and inoperative. Thus it will be seen I have invented a new locking device for nuts which is exceedingly effectual in all respects and invaluable when used on nuts used in connection with fish plate joints.

While this description sets forth in detail the present construction of the device modifications within the scope of the appended claims may be made therein without departing from the spirit of the invention.

Having thus described the device, what I claim as new and useful, and desire to secure by Letters Patent is:—

1. A nut lock comprising two plates having apertures to bear over bolts spaced apart, one of said plates having a yieldable lip extending from one side and curving inwardly over the plate and the other plate provided with a lateral projection having spaced transverse apertures and with a lip extending from the projection outwardly and bent to cause its free edge to come flush with the inner face of the plate, to bear against the structure which supports the said plate and to form a brace to the projection, and a U-shaped locking device adapted to be inserted by its free ends through the apertures of the projection of one of said plates and with its closed end inserted beneath the inwardly extending yieldable lip of the other plate and secured thereto by bending the yieldable lip over the locking device, said locking device adapted to bear by its spaced sides against the sides of the nuts carried by said bolts.

2. The combination with a railway rail joint including the abutting ends of the rails, a fish plate and a plurality of spaced transverse clamp bolts having nuts thereon, of a locking means for the nuts comprising two plates having

5 apertures and bearing over the outer bolts, one of said plates having a lip projecting from one side and curving inwardly over the plate, and the other plate having a lateral projection provided with spaced transverse apertures and with a lip extending outwardly therefrom and bearing by its free edge against the fish plate, and a locking device comprising a U-shaped member adapted to bear by its spaced sides against the sides of the several nuts and with its free ends inserted through the apertures in the

projection and with its closed end inserted beneath the 10 inwardly curving lip of the other plate and secured in place by bending the lip against the adjacent nut.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER C. MATTESON.

Witnesses:

PERCY S. WEBSTER,

JOSHUA B. WEBSTER.