

No. 618,403.

Patented Jan. 31, 1899.

W. M. EDGINGTON.  
NUT LOCK.

(Application filed Feb. 24, 1898.)

(No Model.)

Fig. 1.

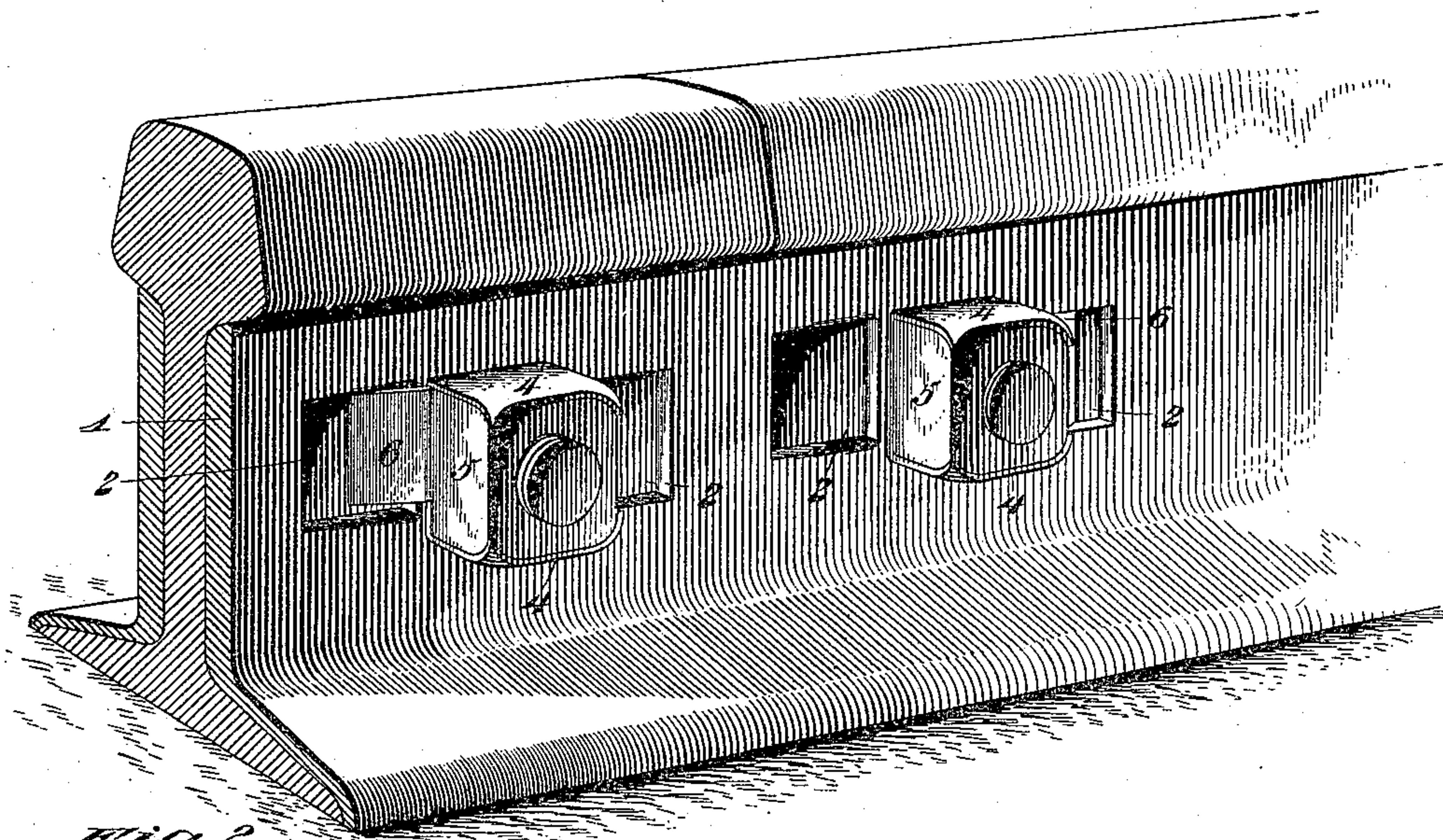


Fig. 2.

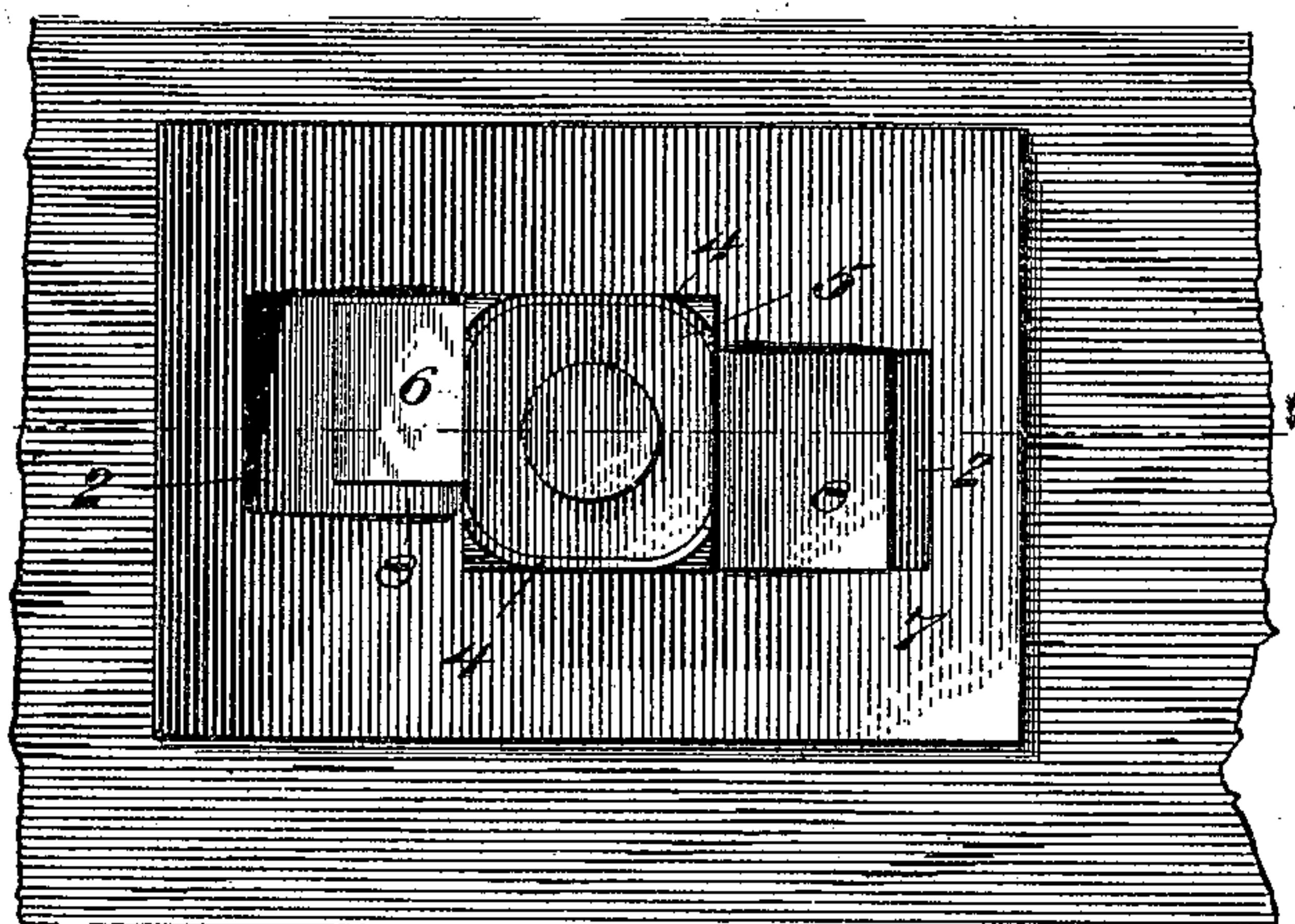


Fig. 4.

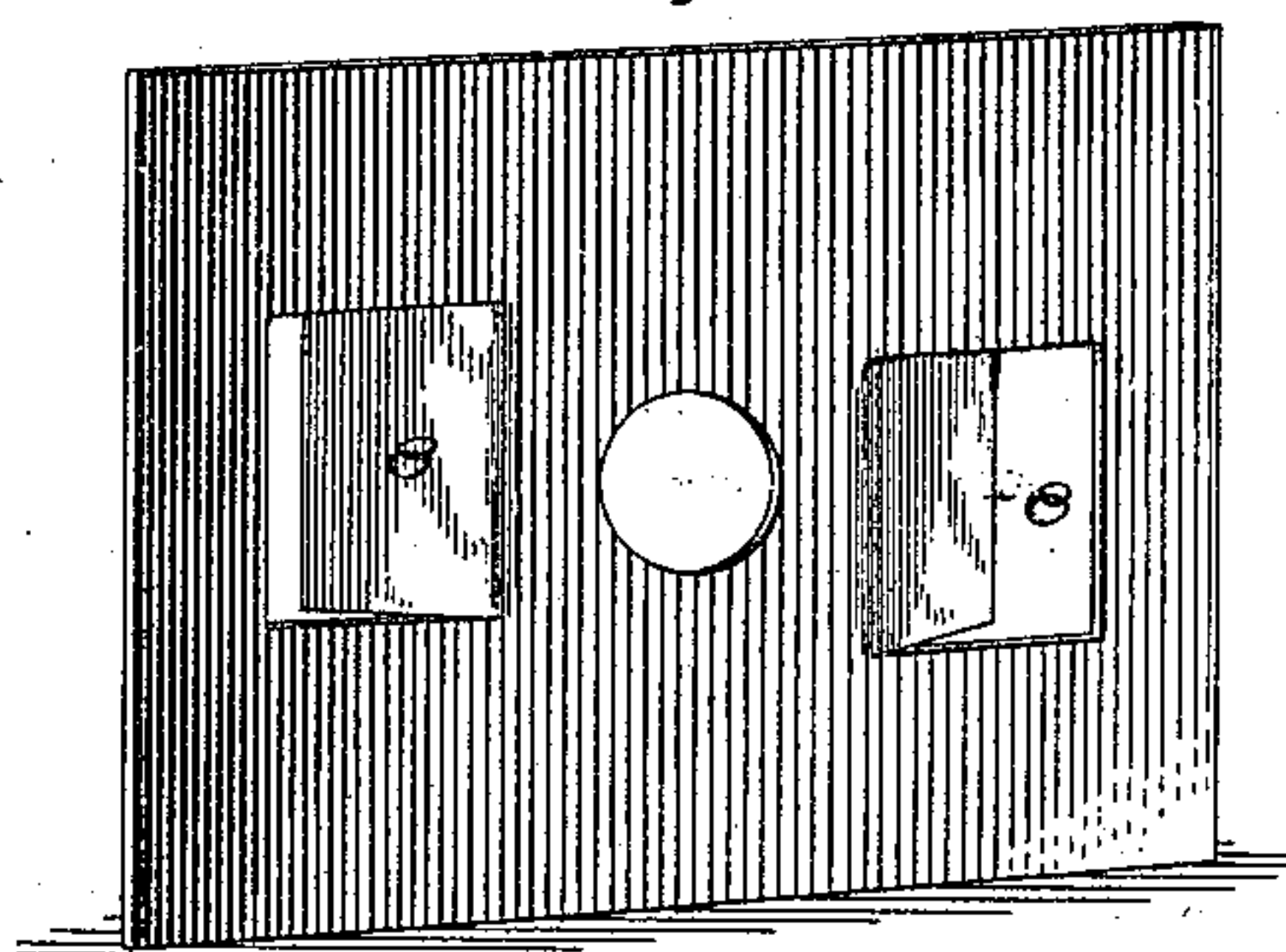
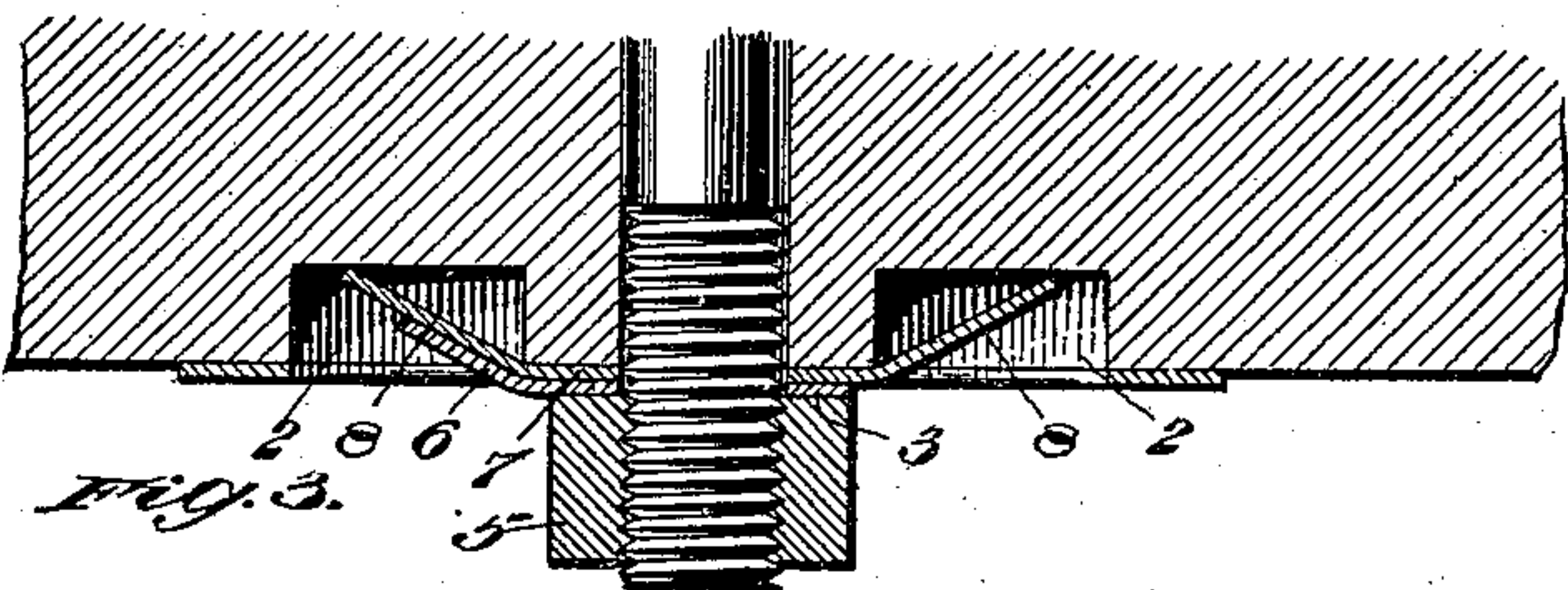
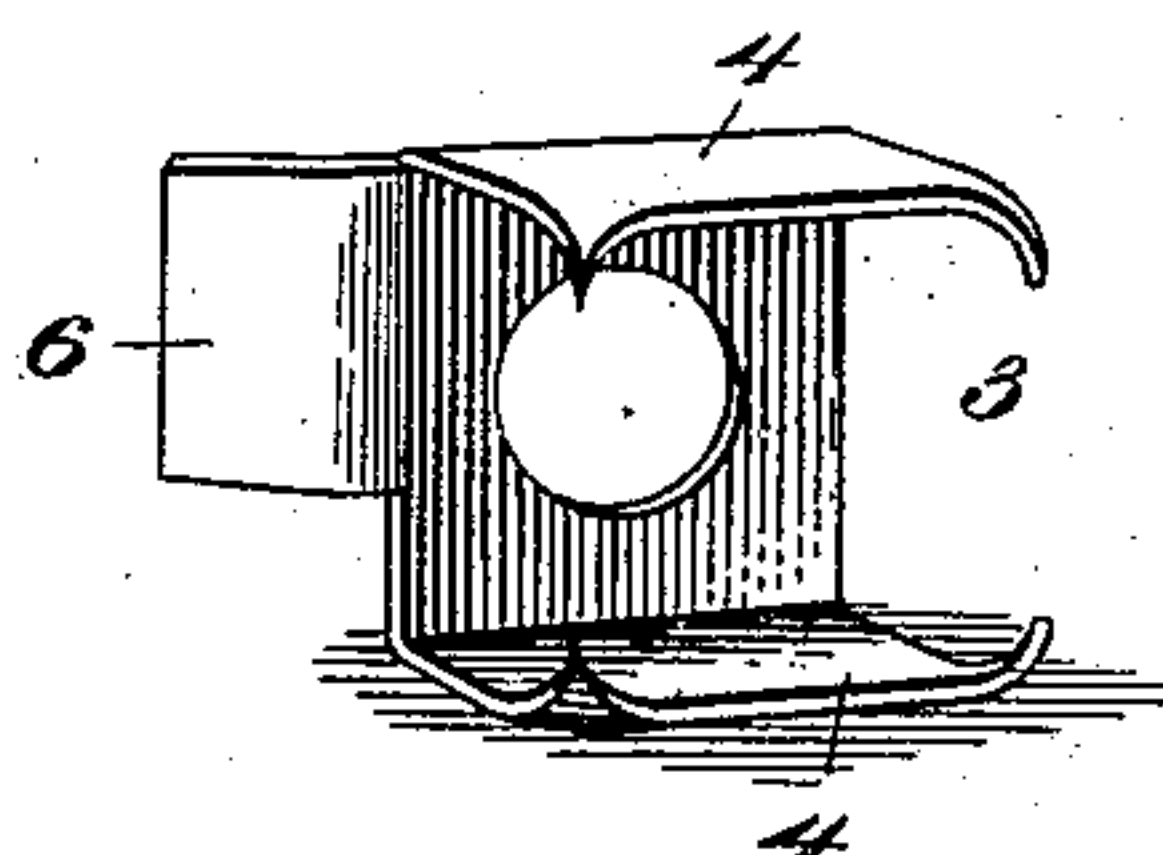


Fig. 5.



Witnesses

W. J. Doyle.

A. E. Shepard.

W. M. Edgington, Inventor

By his Attorneys,

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# UNITED STATES PATENT OFFICE.

WILLIAM MOORE EDGINGTON, OF ROOKSIDE, ILLINOIS.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 618,403, dated January 31, 1899.

Application filed February 24, 1898. Serial No. 671,493. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM MOORE EDGINGTON, a citizen of the United States, residing at Rookside, in the county of Livingston and State of Illinois, have invented a new and useful Nut-Lock, of which the following is a specification.

This invention relates to nut and bolt locks, and is especially designed for use in connection with railroad-rail joints.

The object of my invention is to effect certain new and useful improvements in a device of this character which will conveniently and effectively accomplish the locking of a nut against accidental displacement by the jarring of machinery and especially of rail-joints.

The essential features of my device consist in providing the usual fish-plate used in connection with rail-joints with a pair of notches or recesses disposed diametrically opposite each other with respect to the bolt-hole provided in the said fish-plate, and a lock-washer having a pair of ears engaging opposite sides of the nut and formed with a spring locking-tongue adapted to operate, in conjunction with the recesses in the fish-plate, to form a ratchet locking mechanism for the nut.

Other features and peculiar advantages of a nut-lock constructed in accordance with my improvements will be hereinafter more fully shown, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a rail-joint having my invention applied thereto. Fig. 2 is a plan view of my invention, showing the wear-plate in position. Fig. 3 is a horizontal sectional view thereof. Fig. 4 is an enlarged detail perspective view of the wear-plate. Fig. 5 is an enlarged detail perspective view of the locking-washer.

Corresponding parts in the several figures are denoted by like characters of reference.

Referring to the accompanying drawings, 1 designates an ordinary fish-plate, as is commonly used upon rail-joints, while 2 designates a pair of notches or recesses provided in the face of the fish-plate. These recesses are arranged diametrically opposite each other with respect to the bolt-hole provided through the

fish-plate and are preferably disposed out of a horizontal alinement, as shown in Fig. 1.

The locking-washer itself is formed from a single blank of metal, and consists of a flat body 3, preferably rectangular in shape, having ears 4 bent or struck up therefrom at opposite sides to hold the washer firmly upon the nut 5. As a means for locking the washer and thereby the nut against accidental displacement I provide the washer with a spring locking-tongue 6.

It will be readily understood that after the locking-washer has been placed upon the bolt and the ears 4 bent tightly against the edges of the nut the latter is screwed upon the bolt, carrying the washer with it, the spring locking-tongue 6 acting, in connection with the recesses in the fish-plate, as a ratchet mechanism, allowing the nut to be turned in either direction by the application of force, but preventing the accidental displacement thereof.

Should my invention be applied in connection with a wooden surface, the spring-tongue would soon wear the edges of the recesses 2, and I therefore provide a wear-plate 7, having an opening to receive the bolt and provided at opposite sides thereof with a pair of lugs or fingers 8. This wear-plate is preferably formed from a single blank of metal, having the fingers 8 struck up therefrom and bent into recesses 2, by which arrangement the wear-plate is fastened upon the face of the wood, receives the impact and wear of the washer and spring-tongue, and thus effectually protects the wooden surface against wearing away and destroying the effect of my invention.

A nut-lock provided in accordance with my improvements will constitute an exceedingly cheap and simple device which can be quickly and effectively applied to all bolts and nuts without special skill or the application of specially-constructed tools.

As changes in the form, proportion, and minor details may be made without departing from the spirit and scope or sacrificing any of the advantages of my invention I do not wish to be understood as limiting myself to the precise construction and arrangement as herein shown and described.

Having thus described my invention, I



claim and desire to secure by Letters Patent—

1. As an improvement in nut-locks, the combination with a bolt and the nut thereof, of  
5 recesses formed in the surface against which the nut is to be locked, a wear-plate having lugs or fingers formed thereon and openings provided therethrough, the lugs being adapted to engage the recesses and prevent the  
10 wear-plate from turning and the openings alining with and exposing the recesses, and the nut being provided with means engaging the recesses through the openings in the plate whereby the nut may be locked, substantially  
15 as set forth.

2. As an improvement in nut-locks, the combination with a bolt and the nut thereof, of recesses formed in the surface against which the nut is to be locked, a locking-washer, hav-  
20 ing ears engaging the sides of the nut and having a spring locking-tongue forming, in conjunction with the recesses, a ratchet mechanism, and a wear-plate interposed between the locking-washer and the surface against which  
25 the nut is to be locked, said wear-plate being provided with fingers or lugs engaging with the said recesses, to hold the wear-plate from turning, substantially as shown and described.

30 3. As an improvement in nut-locks, the combination with a bolt and the nut thereof, of recesses formed in the surface against which the nut is to be locked, said recesses being arranged on opposite sides of the bolt-hole  
35 and disposed out of alinement, a wear-plate having ears bent from the body of the plate and adapted to engage with the recesses, and

a locking-washer having ears normally engaging the nut and retaining the washer thereon, and provided with a spring-tongue  
40 arranged at one side and between the ears, substantially as shown and described.

4. As an improvement in nut-locks, the combination with a bolt and the nut thereof, the  
45 latter having a locking tongue or finger, of recesses formed in the surface against which the nut is to be locked, the tongue upon the nut being adapted to engage with the said recesses, and a wear-plate interposed between the nut and the surface against which the nut  
50 is to be locked, said wear-plate being provided with fingers or lugs engaging with the recesses to hold the wear-plate from turning, substantially as shown and described.

5. As an improvement in nut-locks, the combination with a bolt and the nut thereof, of recesses provided in the surface against which  
55 the nut is to be locked, a wear-plate having ears or lugs bent or struck therefrom and providing openings therethrough, the lugs being adapted to engage the recesses and prevent  
60 the plate from turning and the openings alining with and exposing said recesses, and the nut being provided with means engaging the recesses through the openings of the plate  
65 whereby the nut may be locked, substantially as set forth.

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

WILLIAM MOORE EDGINGTON.

Witnesses:

J. D. MILBOURN,  
O. H. BLUE.