

No. 745,429.

PATENTED DEC. 1, 1903.

L. N. EVERETT.

NUT LOCK.

APPLICATION FILED FEB. 21, 1903.

NO MODEL.

Fig. 1.

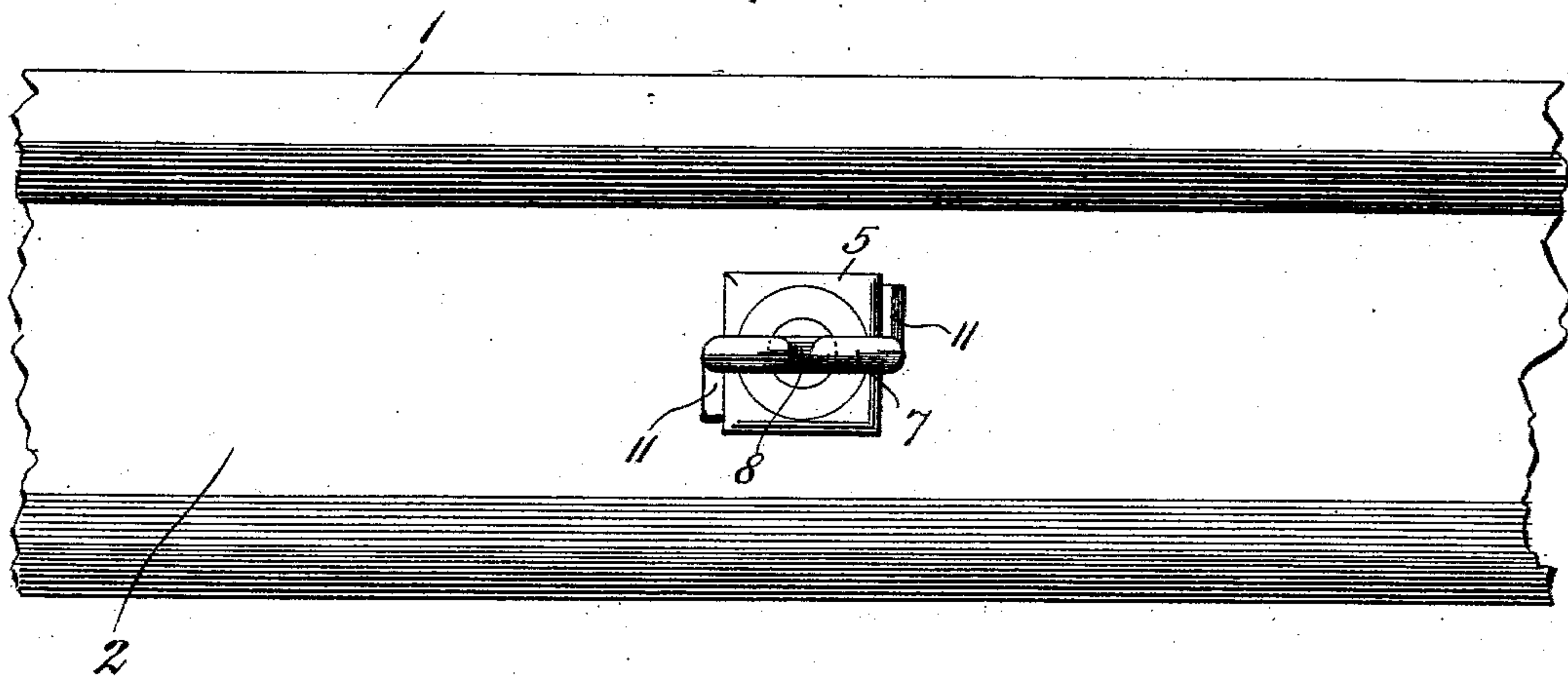


Fig. 2.

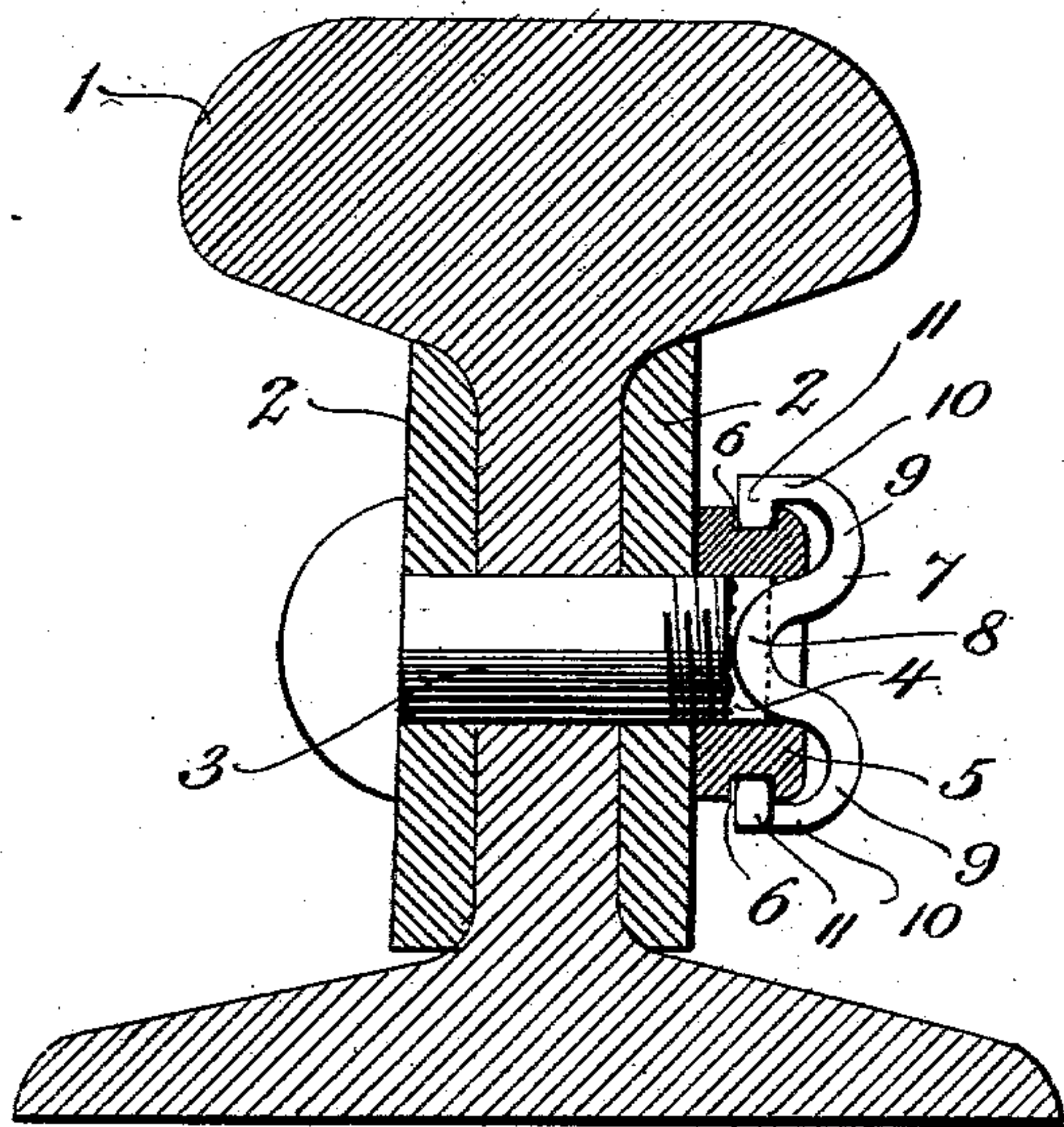


Fig. 3.

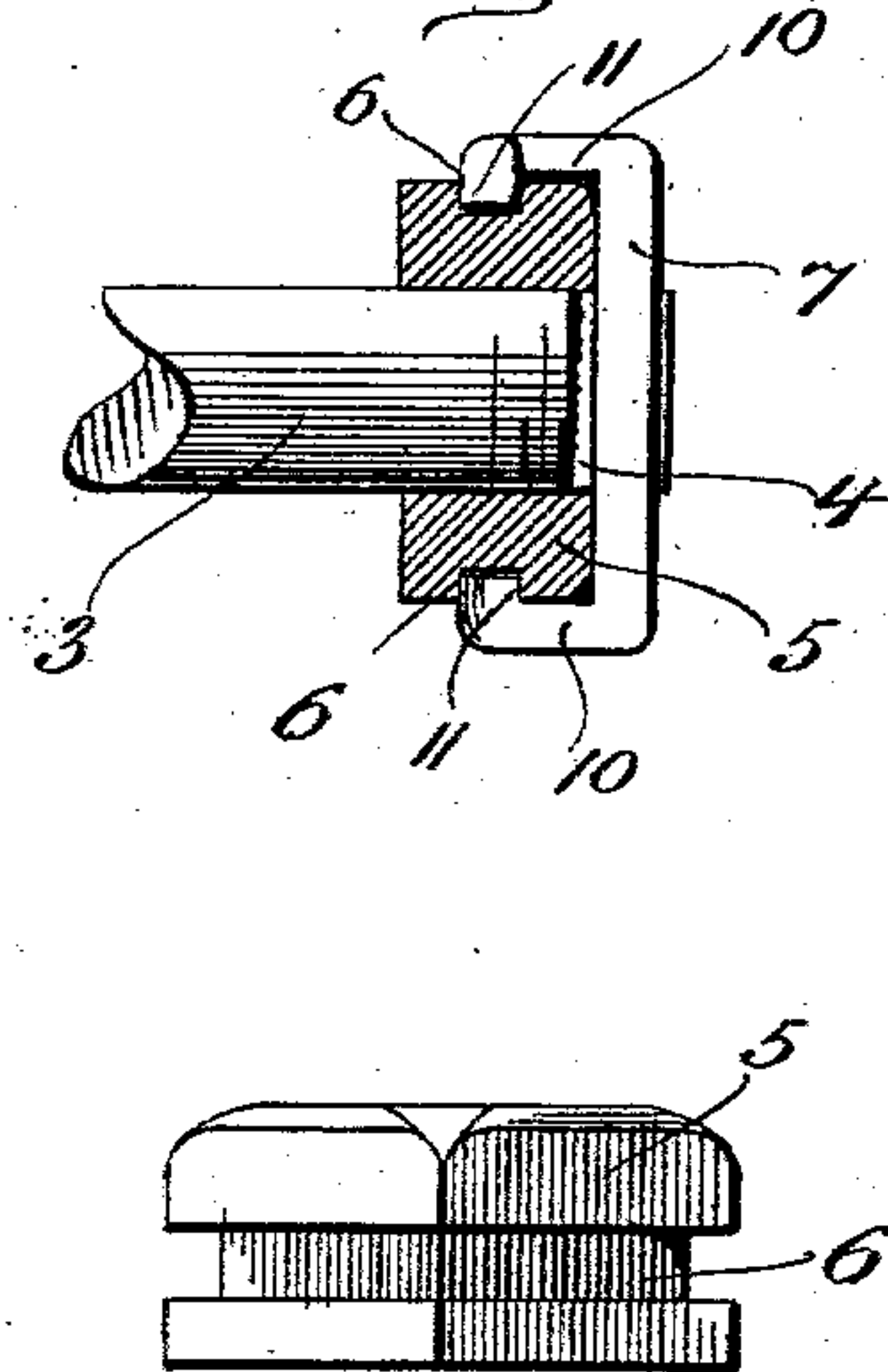


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

LOONEY N. EVERETT, OF EVERETT, LOUISIANA, ASSIGNOR OF TWO-THIRDS TO D. B. PATE, OF HORNBECK, LOUISIANA, AND S. J. HUFFMAN, OF EVERETT, LOUISIANA.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 745,429, dated December 1, 1903.

Application filed February 21, 1903. Serial No. 144,389. (No model.)

To all whom it may concern:

Be it known that I, LOONEY N. EVERETT, a citizen of the United States, residing at Everett, in the parish of Vernon and State of Louisiana, have invented new and useful Improvements in Nut-Locks, of which the following is a specification.

This invention relates to improvements in nut-locks.

10 The objects of the invention are to produce a cheap, simple, and easily-applied device or locking-key designed to immovably secure the nut upon the bolt and hence effectually prevent the former from jarring off, my in-
15 vention being especially useful in railroad and other construction wherein great vibration occurs.

20 With these general objects in view the invention consists in a bolt the end of which is slotted to produce a key-seat, a nut the faces of which are grooved, and a key of peculiar shape, preferably formed of heavy spring-wire and adapted at its ends to be sprung into opposite grooves of the nut and between
25 its ends to engage or fit somewhat snugly in the key-seat of the bolt.

Referring to the drawings, Figure 1 shows in elevation a portion of a rail-joint, the same having its bolt and nut adapted for and
30 provided with a fastening-key in accordance with my invention. Fig. 2 is an enlarged transverse vertical section through the rail, fish-plates, and nut, a portion of the bolt being shown in section and the fastening-key in elevation. Fig. 3 is a similar view to Fig. 2, illustrating the key slightly modified. Fig. 4 is an edge view of the nut.

Similar numerals of reference indicate similar parts in all the figures of the drawings.

40 It will of course be understood that I have merely shown the invention in connection with a rail-joint as an instance of its use and that therefore the invention is not limited to this or any other particular application.

45 The rail 1 and fish-plates 2 are of the usual construction and through them is passed the bolt 3. The bolt 3 is of the conventional form, with the exception that its outer end is provided with the radial key-seat 4.

50 The nut 5 is provided on each of its faces

with a circumferentially-disposed groove 6, preferably angular.

7 designates the locking-key, the same being preferably formed of heavy spring-wire and of suitable length. 55

As best shown in Fig. 2, the key may be depressed at its center for a short distance corresponding with the diameter of the bolt, as indicated at 8, and at each side thereof formed with reverse bends or kinks 9 and
60 finally terminating in rearwardly-disposed spring-arms 10, one of which is in advance of its end abruptly bent at a right angle in one direction and the other similarly bent in a reverse direction, thus forming opposite par-
65 allel locking-shoulders. If desired, these shoulders may be similarly disposed. The shoulders 11 at their adjacent or inner sides are slightly offset or extended beyond the planes of the arms, as shown. 70

The key in the form shown and described is placed so as to straddle the nut after the latter has been tightened, it being understood that the diameter of the nut is slightly greater than the distance between the shoulders 11. At
75 this point of the operation a few light taps of the hammer is given, when the arms 10 will spring or yield sufficiently to permit the shoulders to slip over the usual rounded corners of the nut and spring into locking engage-
80 ment with the opposite grooves of the nut. Thus it will be obvious that the nut and bolt will become firmly connected or locked together. The kinks or reverse bends 9 lend elasticity to the key and also constitute suit-
85 able points for contact with the hammer.

The construction in Fig. 3 is the same as hereinbefore described except that the kink 8 is omitted, whereby the key is especially adapted for bolts the outer ends of which are
90 flush with the faces of the nuts in which they are threaded.

The shoulders of course are best made to conform to the grooves in the nut, and these may be angular, as shown, or rounded. 95

What I claim is—

1. The combination with a bolt having a radially-slotted end, and a nut having circumferential grooves on its several faces and projecting beyond the end of the bolt, of a 100

key formed of spring-wire and having its intermediate portion kinked and resting in the slot of the bolt and at each side of the same bent at an angle to form spring-terminals, the latter provided with shoulders engaging opposite circumferential grooves of the nut.

2. The combination with a bolt having a radially-slotted end, and a nut having circumferential grooves on its several faces, of a key formed of spring-wire and having its intermediate portion resting in the slot of the bolt and at each side of the same bent at an angle to form spring-terminals, the latter provided with laterally-elongated reversely-disposed offset shoulders engaging opposite circumferential grooves of the nut.

3. The combination with a bolt having a

radially-slotted end, and a nut having circumferential grooves on its several faces, of a key formed of spring-wire and having its intermediate portion kinked and inserted in said radial slot of the bolt, at each side of said kink reversely bent and beyond the bends disposed to form spring-terminals reversely disposed near their ends and having offset shoulders engaging the circumferential grooves of the nut.

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

LOONEY N. EVERETT.

Witnesses:

GEO. KAY,
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