

(No Model.)

M. W. TUCKER.

NUT LOCK.

No. 338,624.

Patented Mar. 23, 1886.

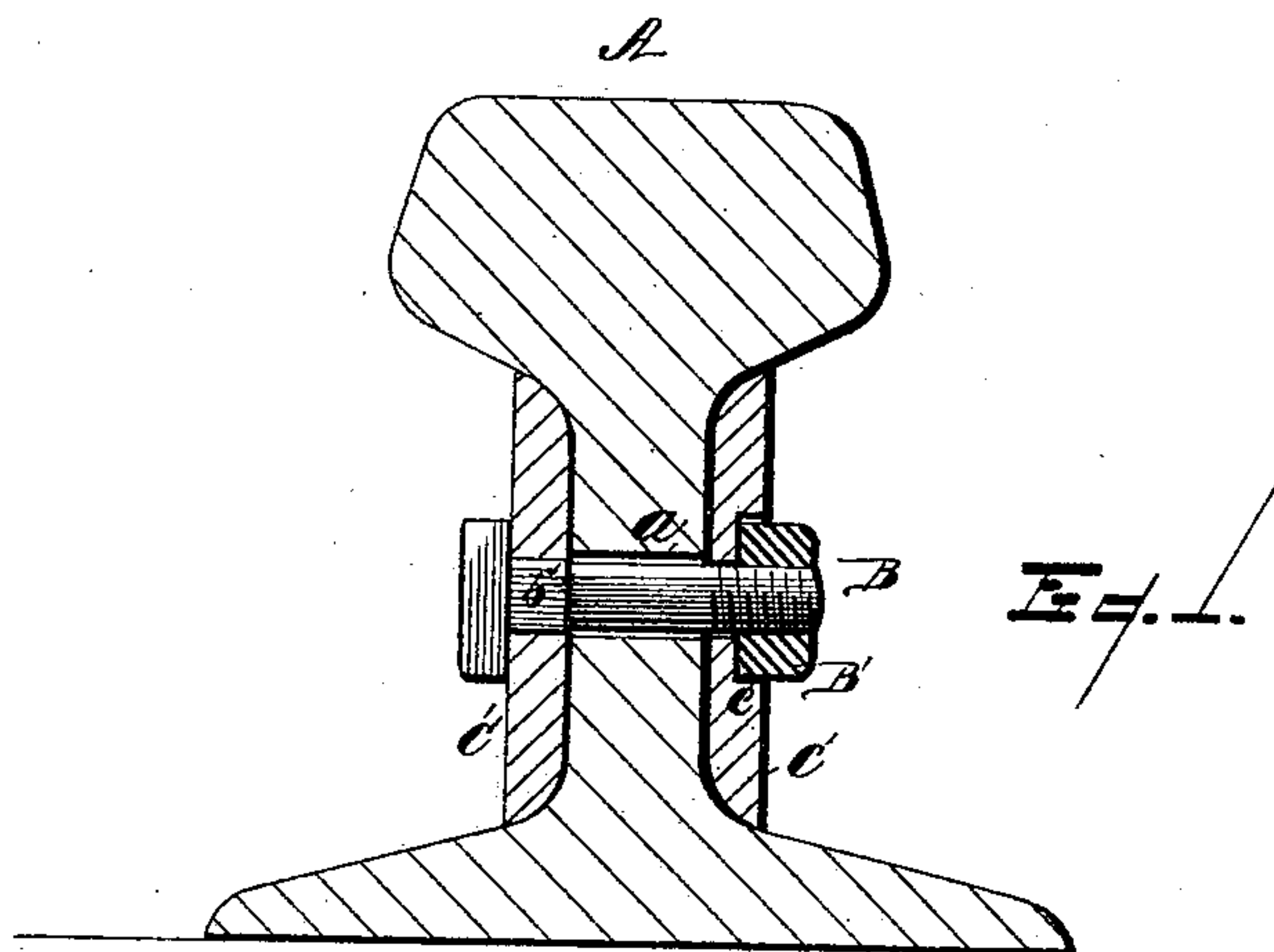
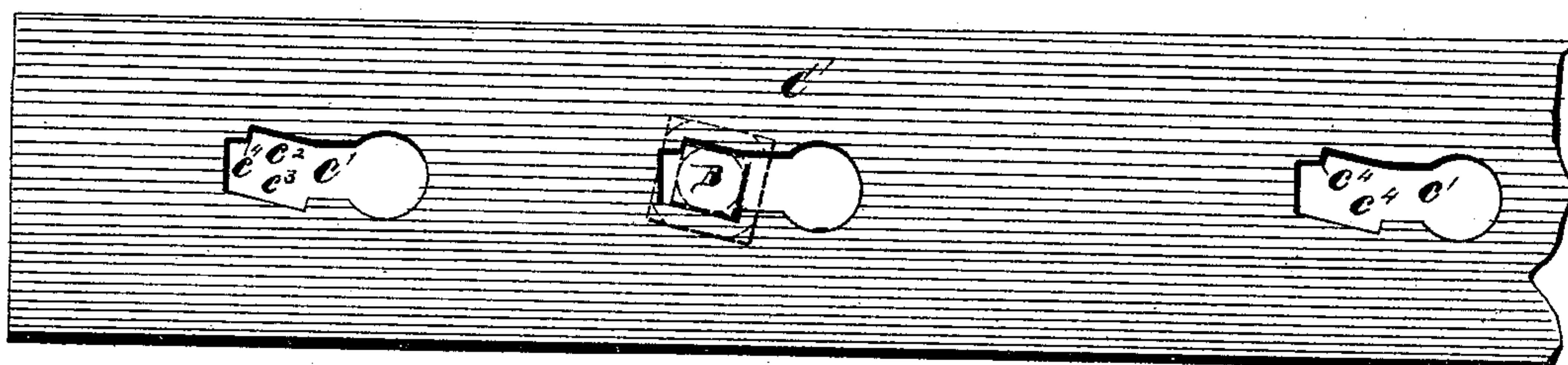


Fig. 2.



WITNESSES

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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 338,624, dated March 23, 1886.

Application filed August 15, 1885. Serial No. 174,496. (No model.)

To all whom it may concern:

Be it known that I, MORRIS W. TUCKER, of Sumner, county of Gratiot, State of Michigan, have invented a new and useful Improvement in Nut-Locks for Railway Fish-Plates; 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 pertains to make and use the it, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to nut-locks for railway fish-plates; and it consists in the novel construction and combination of devices hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a vertical cross-section of a device embodying my invention; Fig. 2, a separate view of one of the plates, showing the position of the bolts in dotted lines when the device has been applied.

My invention chiefly pertains to the construction of the fish-plates themselves, the same being adapted to receive an ordinary bolt and nut, the bolt being locked by the position it occupies relative to said plates when the operation of applying the same has been completed.

I carry out my invention as follows: A represents a rail, perforated, as shown at *a*, to receive the bolts by which the plates are engaged therewith.

B represents an ordinary bolt, squared adjacent to the head, as shown at *b'*.

B' is a nut.

C represents a fish-plate, countersunk, as shown at *c*, to correspond with the shape of the nuts, and in which they are held from turning.

C' represents the corresponding plate, provided with elongated slots, as shown at *c'*. These slots are constructed, preferably, as shown in Fig. 2, one extremity being rounded, so that the squared end of the bolt may rotate therein as the bolt is being tightened in place. Toward the opposite end of the slot the plate is cut away slightly above and below, as shown at *c''* and *c'''*, leaving a shoulder at *c''*.

The plates are secured in place and the

bolt locked in connection therewith in the following manner: It is obvious that the plate C being countersunk to correspond to the shape of the nut, there can be no turning of the nut itself.

In the application of the plates the bolt is inserted in the rounded end of the slot *c'* in the plate *C'*. The bolt is then rotated, and thereby the plates are tightened upon the rail. When this has been accomplished, the plate *C'* is driven, so as to bring the bolt toward the opposite end of the slot *c'*, adjacent to the cut-away parts of said slot and beyond the shoulder *c''*. Then, by a slight turning of the bolt in the proper direction, one of the corners of the squared end will engage behind said shoulder, to effectually prevent the plate from working, forming an effectual lock, as it is evident that the bolt can only be turned when brought into the rounded end of the slot in the fish-plate *C'*. This cannot be done in any accidental manner, it being prevented by driving the plate, as described, in the proper direction and turning the bolt so that one of its corners falls behind the shoulder *c''*. It is evident that this constitutes a very simple device, and is easily applied. It may be constructed in an economical manner.

Should there be any occasion for the removal of the fish-plates, the bolt can be turned back so that the plate *C'* may be forced back on the bolt, so that the bolt shall occupy the rounded end of the slot, when it may be unloosed.

It is evident that this invention involves no extra parts or pieces whatever, and may be constructed without additional expense.

What I claim is—

1. A nut-lock for railway fish-plates, consisting of a plate perforated to receive a bolt and countersunk to receive a burr upon the end of said bolt and a plate constructed with an elongated slot rounded at one end and provided with a shoulder toward the opposite end, and constructed to permit a partial rotation of the bolt adjacent to said shoulder, said plates united by a bolt squared at one end and a nut located in said countersunk plate, substantially as described.

2. The combination, with a railway-rail, of

a fish-plate constructed to receive a nut, a
plate provided with an elongated orifice
rounded at one end and constructed toward
the opposite end to hold the squared end of the
5 bolt to prevent its turning, and a bolt squared
at one end, provided with a nut, and uniting
said plates, the construction being such that
the bolt may be tightened in said nut, and one
of the plates forced along said bolt and the
bolt be thereby prevented from turning, sub- 10
stantially as described.

In testimony whereof I sign this specifica-
tion in the presence of two witnesses.

MORRIS W. TUCKER.

Witnesses:

WM. S. TURCK,
G. S. WARD.