(No Model.)

A. C. DEAL.

NUT LOCK.

No. 457,772. Patented Aug. 18, 1891.

Fig. 1.

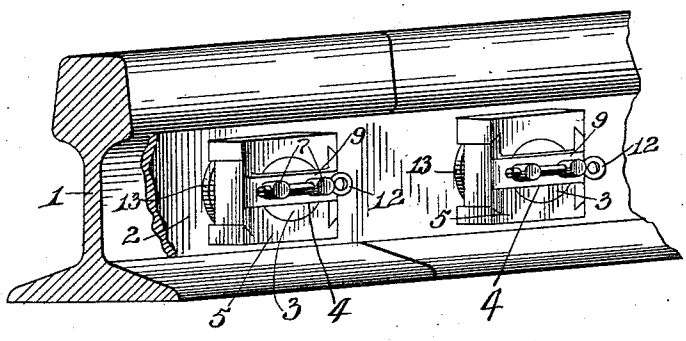


Fig. 2

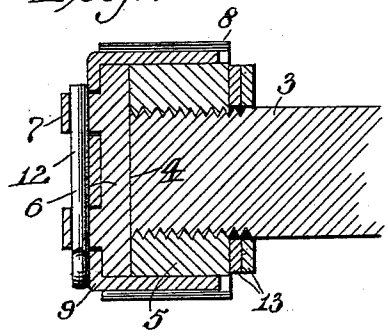


Fig. 3

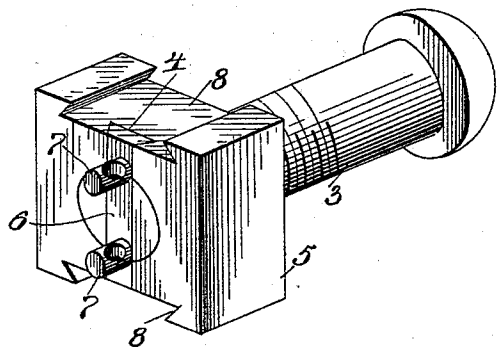


Fig. 4.

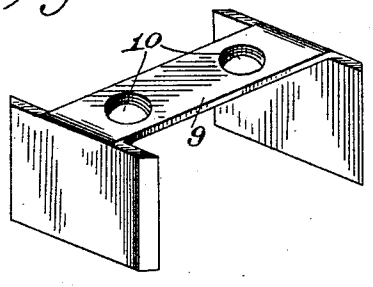
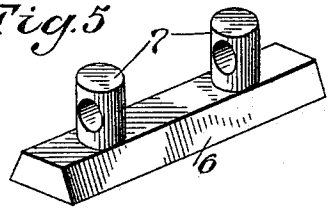


Fig. 5



Witnesses

Inventor

Alonzo C. Deal.

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALONZO C. DEAL, OF GLENWOOD, WEST VIRGINIA.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 457,772, dated August 18, 1891.

Application filed December 18, 1890. Serial No. 375,153. (No model.)

To all whom it may concern:

Be it known that I, ALONZO C. DEAL, a citizen of the United States, residing at Glenwood, in the county of Mason and State of West Virginia, have invented a new and useful Nut-Lock, of which the following is a specification.

This invention has relation to improvements in nut-locks; and the objects in view are to provide a cheap, simple, and efficient lock for the nuts of bolts.

With the above general objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a railway-joint, the nuts of which are locked in accordance with my invention. Fig. 2 is a transverse section through one of the bolts. Fig. 3 is a perspective of the nut, bolt, and locking-bar, the yoke removed. Fig. 4 is a detail in perspective of the yoke. Fig. 5 is a detail in perspective of the locking-bar.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the rail-sections, the ends of which abut in the usual manner, and are overlapped by the fish-plates 2, through which and the webs of the rails are passed the bolts 3, which are of the usual construction, with the exception that the outer ends of the bolts are provided with transverse dovetailed grooves 4, which are continued at each side of the bolt in the nut 5.

6 designates a dovetailed locking-bar, which is mounted in the dovetailed recesses 4 of the bolt and nut, and is provided with a pair of outwardly-disposed perforated lugs 7.

The opposite faces or sides of the nut 5 are provided with dovetailed recesses 8, and in the same rest the opposite terminals of a U-shaped plate 9, the edges of which are dovetailed to fit the recesses 8, and the connecting-bar of said terminals is provided with openings 10, through which project the outer ends of the perforated lugs 7, and through the perforations are passed split keys 12.

In applying the nut and lock I prefer to employ one or more yielding washers 13, after which I apply the nut and screw the same down upon the bolt until the dovetailed recesses 4 of the nut align with the dovetailed recess 4 of the bolt, after which the locking-bar is inserted in the recesses of the bolt and nut, so that the nut is locked against any movement whatever independent of the bolt. The U-shaped locking plate or bar is now mounted in position, after which the split pins are inserted and their ends spread.

From the above it will be apparent that I have provided a lock for nuts, which when in position renders the position upon the bolt absolutely safe and devoid of any possibility of the nut loosening.

Having described my invention, what I claim is—

1. The combination, with the bolt and nut, each provided with an aligning dovetailed recess across its end and top, respectively, said nut being also provided with opposite side recesses, of a locking-bar having dovetailed sides mounted in the dovetailed recesses of the bolt and nut and provided with forwardly-disposed perforated studs, a U-shaped yoke having its terminals inserted in the recesses in the sides of the nut and having perforations for the reception of the studs, and locking-pins inserted in the perforations of the studs, substantially as specified.

2. The combination, with the bolt having the transverse recess at its outer end, the walls of which are dovetailed, the yielding washers mounted on the bolt, the nut mounted on the bolt and provided at opposite sides of its opening across the top with dovetailed recesses aligning with that of the bolt and at its opposite side walls with dovetailed recesses, of a transversely-disposed dovetailed locking-bar mounted in the recesses of the bolt and nut and having forwardly-disposed perforated studs, a U-shaped locking-yoke having dovetailed terminals inserted in the side recesses of the nut and having an intermediate perforated connecting portion for the reception of the studs, and split keys or pins passed through the perforations of the studs, substantially as specified.

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

ALONZO C. DEAL.

Witnesses:

S. H. KEISTER,

JOHN SAYRE.