(No Model.)

W. S. TAYLOR.

MEANS FOR LOCKING NUTS ON BOLTS IN FISH PLATE RAILWAY JOINTS.

No. 304,043. Patented Aug. 26, 1884.

Fig. 1.

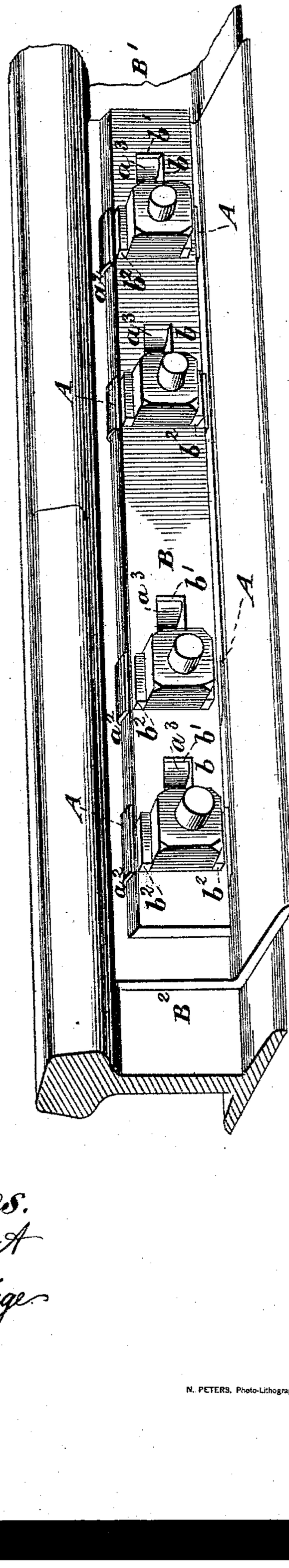


Fig. 2.

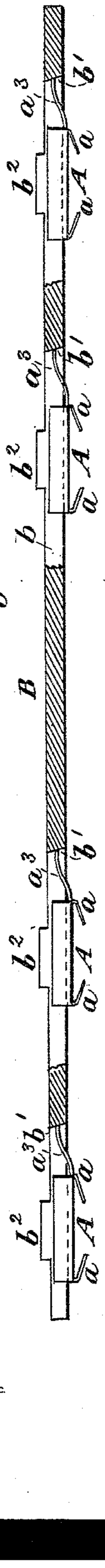
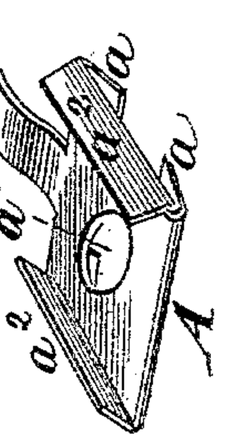


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM STITT TAYLOR, OF HUNTINGDON, PENNSYLVANIA, ASSIGNOR TO M. S. TAYLOR, OF SAME PLACE.

MEANS FOR LOCKING NUTS ON BOLTS IN FISH-PLATE RAILWAY-JOINTS.

SPECIFICATION forming part of Letters Patent No. 304,043, dated August 26, 1884.

Application filed April 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, W. S. TAYLOR, of Huntingdon, in the county of Huntingdon and State of Pennsylvania, have invented Means for Rigidly Fastening the Fish-Plates of Jointing Railroad-Rails, of which the following is a specification.

The special object of the invention is to lock securely the burrs or nuts on the bolts which hold the fish-plates and rails together; and the means which I employ to accomplish this object will first be described in connection with the drawings, and then pointed out in the claims.

Figure 1 of the drawings is an elevation showing my invention applied. Fig. 2 is a median longitudinal section showing the location of the chair or supporting-plate with respect to the sliding lock-bar. Fig. 3 is a detail view, in perspective, of the chair or supporting-plate of the locking-bar, showing its form and peculiarities of construction.

In the drawings, A represents the chair or plate by which the lock-bar B is supported, guided in its movements, and held so as to lock the nuts. The chair A has at its opposite ends the subjacent inwardly-bent elastic projections *a a*, which rest upon the outer face of the fish-plate and support the lock-bar B yieldingly, so as to hold said bar in close frictional contact with the nuts, and yet allow the bar to be driven in either direction. This chair has also a central hole, *a'*, through which the screw passes and two side projections, a^2 a^2, on its upper side, said side projections forming overhanging guides, in which are received the correspondingly-beveled edges of the locking-bar B. This chair is also provided with a spring-tongue, a^3, which is arranged to work in one of the slots *b* and against a beveled or undercut edge *b'*, as shown in Fig. 3 of the drawings. The locking-bar slots *b* are preferably rounded at one end and right angled at the other, so that the first may correspond to the shape of the screw and the other form a better bearing for the locking-tongue a^3. The locking-bar has side flanges, b^2 b^2, by which a nut between two of them is prevented from turning. The chairs A and locking-bar B are arranged on the fish-plate with the bolts protruding through the slots *b* at the angular end. In this position the nuts are screwed firmly down on the bolts and against the spring-supported locking-bar, which is then driven up from the end B^2, so that the flanges b^2 b^2 pass to opposite sides of each nut, and the spring-tongues a^3 fly up into the slots *b*, so as to bear against the undercut edges *b'* of the locking-bar B, which is thus effectually prevented from being jarred in a backward direction.

When it is desired to unscrew the nuts, the spring-tongues a^3 are pressed down and the bar driven from the end B^2 until the nuts shall be no longer between the flanges b^2 b^2. The elastic projections *a a* form a cushion, which holds the bar B up into intimate contact with the nuts, and yields when the bar is driven in either direction.

I have found by practical experiment that notwithstanding the jar which necessarily occurs in greater or less degree at each joint of the rails, my attachments are all held firmly in place, while if, for any cause, the nuts require to be detached, this can be quickly done, even by an unskilled workman.

I am aware that ratchets and pawls as well as bifurcated plates, hinged or sliding, are very old devices for locking-nuts; also, that it is not new to use a slotted sliding drive-bar having one or more end shoulders or side flanges, so that the nut may be locked or unlocked by moving the bar; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. A new article of manufacture consisting of the chair A, having the subjacent elastic projections *a a*, the central hole, *a'*, the upper guide-projections a^2 a^2, and the spring-tongue a^3, whereby it may be used substantially as described.

2. The combination, with a lock-nut slide-bar, of a supporting plate or chair having the subjacent elastic projections *a a*, arranged substantially as shown and described.

3. The combination, with a lock-nut slide-bar, B, having the undercut edges *b'*, of a supporting-chair provided with the spring-tongue a^3, for the purpose specified.

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Witnesses:

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