

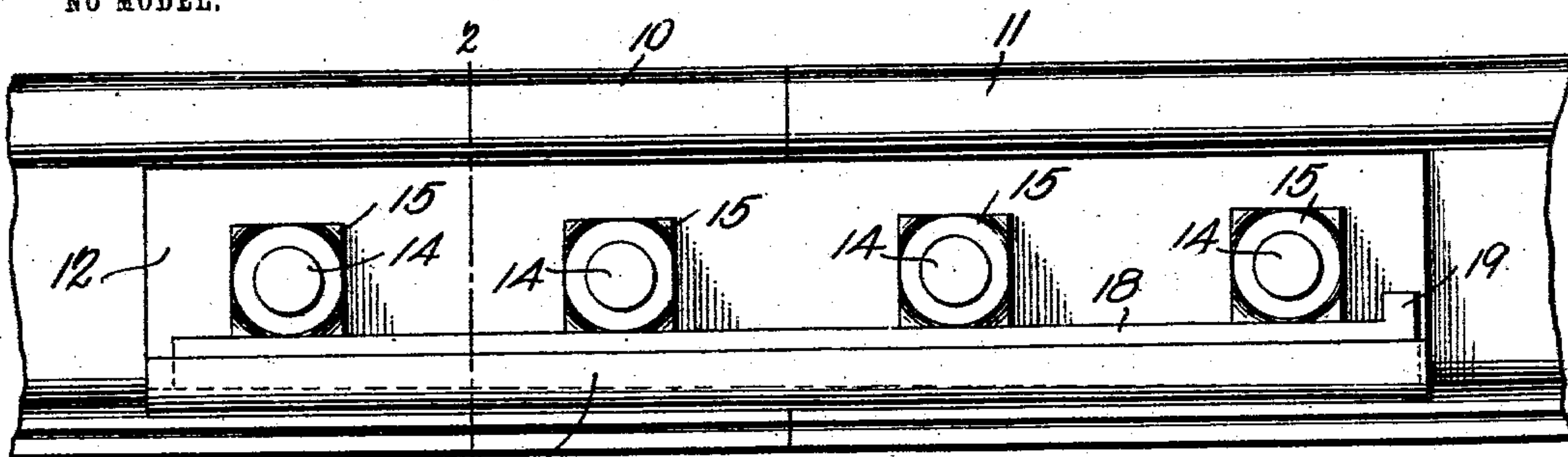
No. 740,510.

PATENTED OCT. 6, 1903.

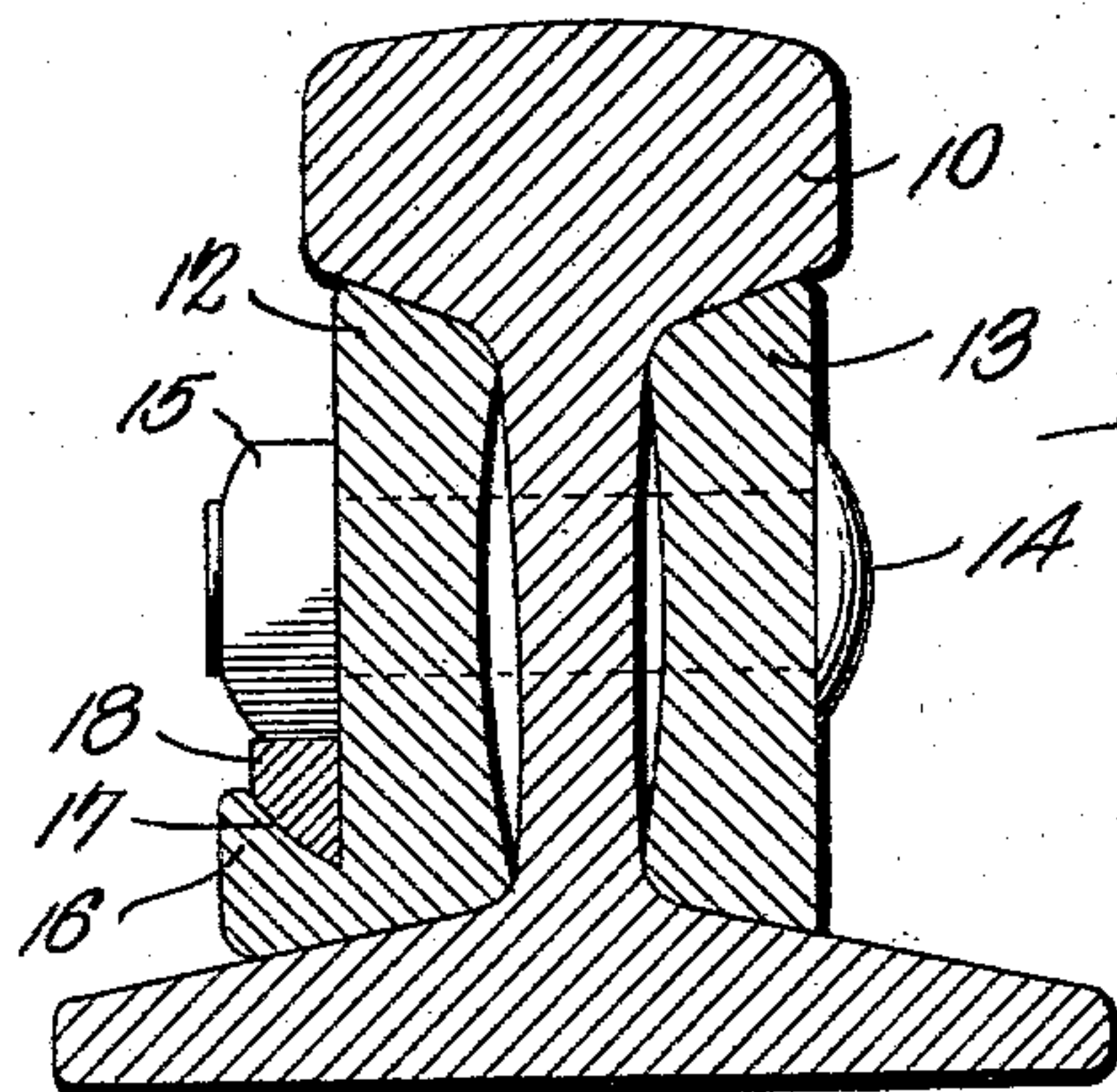
W. A. YOUNG.  
NUT LOCK.

APPLICATION FILED MAY 27, 1903.

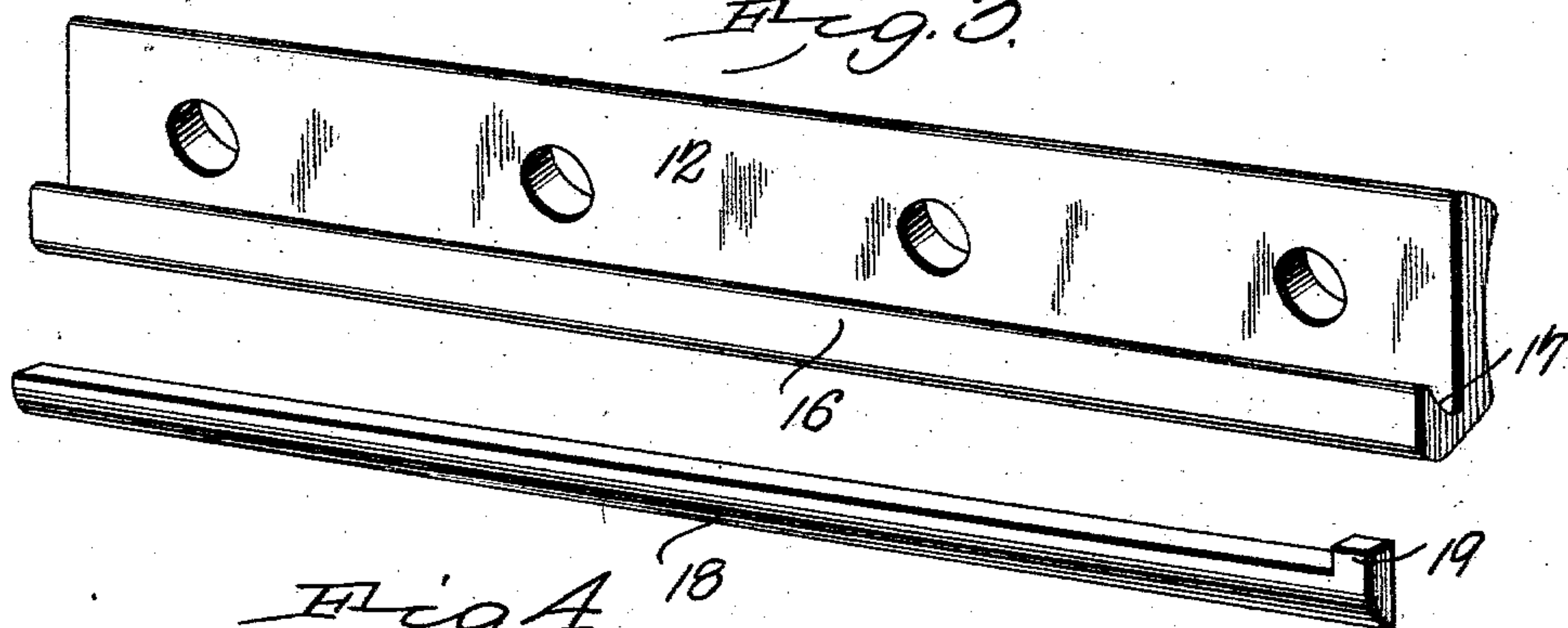
NO MODEL.



*Fig. 1.*



*Fig. 2.*



*Fig. 3.*

Witnesses  
*E. O. Stewart*  
*C. H. Woodward*

*William H. Young*, Inventor.  
by *C. A. Snow*  
Attorneys



# UNITED STATES PATENT OFFICE.

WILLIAM A. YOUNG, OF COTTONWOOD POINT, MISSOURI, ASSIGNOR OF  
ONE-HALF TO SAMUEL L. FORSYTH, OF COTTONWOOD POINT, MIS-  
SOURI.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 740,510, dated October 6, 1903.

Application filed May 27, 1903. Serial No. 158,997. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. YOUNG, a citizen of the United States, residing at Cottonwood Point, in the county of Pemiscot and State of Missouri, have invented a new and useful Nut-Lock, of which the following is a specification.

My invention relates to nut-locks, and is especially designed for the purpose of locking the nuts upon the attaching-bolts which secure the fish-plates to railway-rails, and has for its objects to produce a device of this character of simple construction which will be efficient in operation, one which will necessitate no structural change in the nuts, and one which in practice may be applied or released as often as needful without injury to any of the parts.

To these ends the invention comprises the novel details of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation showing my improved device applied in use. Fig. 2 is a vertical transverse section on the line 2-2 of Fig. 1. Fig. 3 is a perspective view of the fish-plate constituting one of the members of my improved device. Fig. 4 is a similar view of the locking-key.

Referring to the drawings, 10 11 indicate the adjacent meeting ends of a pair of railway-rails, to the opposite sides of which and overlapping the joint is applied a pair of fish-plates 12 13, secured in place by transverse bolts 14, having nuts 15 applied to their ends. These parts, with the exception of the fish-plate 12, may all be of the usual or any desired construction.

The plate 12 is in accordance with my invention provided upon its lower edge with a laterally-extending rib or flange 16. This flange, which underlies the nuts 15, extends longitudinally of the fish-plate and is provided in its upper edge with a longitudinally-disposed upwardly-opening groove 17 of substantially V shape in cross-section, the outer wall of the groove being downwardly and inwardly inclined.

The groove in practice receives a locking key or bar 18, the lower portion of the outer

side wall of which is downwardly beveled or inclined to correspond to the inclination of the adjacent wall of the groove when the parts are assembled, at which time the upper edge of the key will bear against the lower edges of all of the nuts. The lower edge of the key is slightly inclined longitudinally from end to end, and the bottom of the groove 17 is correspondingly inclined. Attention is here especially directed to the fact that the key, which in the assemblage of the parts is inserted endwise into the groove, will, owing to this inclination of its lower edge and bottom of the groove, be forced upward against the overlying nuts with a wedging action and will at the same time, owing to the downward inclination of its outer side face and the corresponding inclination of the adjacent wall of the groove, be forced laterally inward with a wedging action against the adjacent face of the fish-plate. Thus it will be seen that there is, through the peculiar construction of the key and groove, a double wedging action attendant upon the driving home of the key, which will cause the latter to bind tightly against the nuts and fish-plate, whereby the parts will be maintained in secure engagement and the nuts firmly locked.

The key is provided at its rear or widest end with a laterally-extended lug 19, designed to receive the impact of a hammer or the like for driving the key into place, the lug serving also to facilitate removal of the key when circumstances require.

From the foregoing it will be seen that I produce a device of simple construction which will be efficient in operation, and one which is admirably adapted for the attainment of the ends in view, and one in which the key may be inserted or removed as circumstances required without injury to any of the parts, which latter are entirely free from interlocking devices.

Having thus described my invention, what I claim is—

The combination with a railway-rail, of a fish-plate, bolts securing the plate to the rail, nuts applied to the bolts, a laterally-projecting rib carried by and extending longitudinally of the fish-plate beneath the nuts and

having an upwardly-opening groove, the outer wall of the groove being downwardly and inwardly inclined, and a key inserted longitudinally into the groove and having its outer  
5 side face beveled to conform to the adjacent wall of the groove and its upper edge bearing against the nuts, the lower edge of the key being inclined longitudinally from end to end and the bottom of the groove correspondingly inclined, whereby a wedging ac-

tion of the key will result and the latter be securely maintained in place.

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

WILLIAM A. YOUNG.

Witnesses:

VINCENT LOUIS GREATHOUSE,  
ED. O. FORSYTH.