

M. G. MEDEIROS.
RAIL FASTENER.
APPLICATION FILED MAY 2, 1911.

1,014,891.

Patented Jan. 16, 1912.

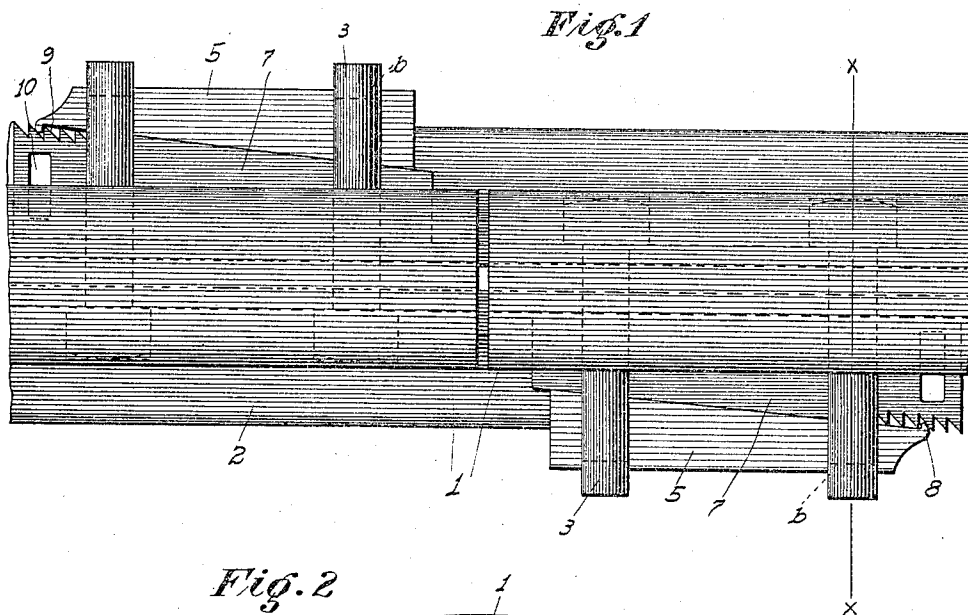


Fig. 2

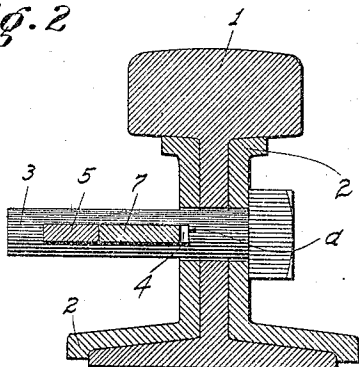


Fig. 3

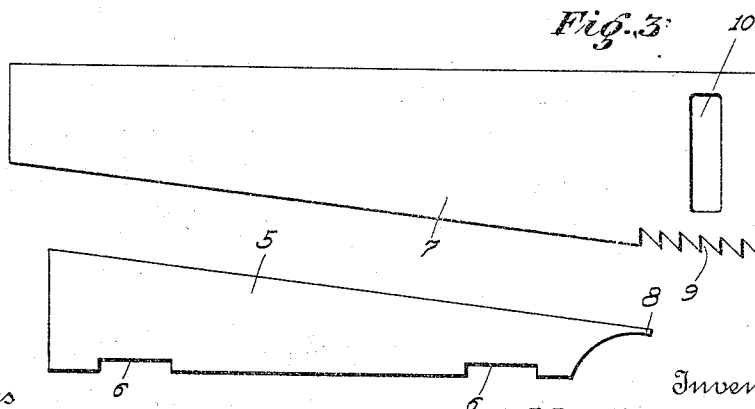


Fig. 4

Witnesses
Frank A. Carter
J. B. Webster

Inventor
M. G. Medeiros
Carmy J. Webster
Attorney

UNITED STATES PATENT OFFICE.

MANUEL G. MEDEIROS, OF IRVINGTON, CALIFORNIA.

RAIL-FASTENER.

1,014,891.

Specification of Letters Patent.

Patented Jan. 16, 1912.

Application filed May 2, 1911. Serial No. 624,612.

To all whom it may concern:

Be it known that I, MANUEL G. MEDEIROS, a citizen of the United States, residing at Irvington, in the county of Alameda, State of California, have invented certain new and useful Improvements in Rail-Fasteners; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in railway equipments and particularly to the rails thereof, the object of the invention being to produce a rail fastener which will do away with the necessity of using threaded bolts and nuts and provide a positive locking means for joining the rails together whereby they will not become unfastened and permit of wrecks, etc., from spreading rails.

A further object of the invention is to produce a simple and inexpensive device, and yet one which will be exceedingly effective for the purposes for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a top plan view of the joint of two rails showing my improved means installed thereon. Fig. 2 is a sectional view taken on a line X—X of Fig. 1. Fig. 3 is a top plan view of a locking key. Fig. 4 is a similar view of another locking key.

Referring now more particularly to the characters of reference on the drawings, 1 designates the usual rails and 2 the usual fish plates used at the joint of the rails.

The numeral 3 designates unthreaded bolts provided with longitudinal slots 4, such slots being of such length that the inner ends normally extend within the outside contour of the fish plates 2, as at "a". In practice the slotted bolts 3 are projected

through the fish plates and rails and a wedge shaped key 5 inserted through two of said bolts, such key 5 having recesses 6 which receive the outer sides of the slots 4 as at "b", which structure holds these keys 5 in position. Another wedge shaped key 7 is then inserted through the slots 4 from the opposite direction, which key 7 wedges tightly between the key 5 and one of the fish plates 2, thus holding the bolts 3 securely in position and likewise holding the fish plates 2 and rails 1 together. In order to prevent the wedge shaped keys 5 and 7 from becoming loose, the key 5 is provided with a projecting point or lug 8 on its outer end adapted to be bent into any one of teeth 9 on the corresponding end of the key 7, and this locks the key 7 against being shaken loose from its position in the slots 4; and since the key 5 is held in position by means of the slots 6 receiving the bolts 3 at the end of the slots 4, it likewise is prevented from shaking loose and hence all the parts are held together until it is desired to take them apart, and then a suitable tool is inserted into the cross slot 10 in the end of the key 7, and this used to drive the key 7 outward which bends the point 8 free from the teeth 9, thus permitting the parts to be dissociated for the purpose of taking off the fish plates or rails as may be desired.

From the foregoing description it will readily appear that the structure herein shown and described will form a positive locking means for rail fasteners and at the same time by doing away with the threaded bolts and nuts, will not add any expense to the cost of construction.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

A device of the character described comprising unthreaded bolts provided with longitudinal slots, two wedge shaped keys adapted to project through said slots and

engage each other, teeth on the side of one
of said keys at one end thereof, a lug pro-
jecting horizontally from one end of the
other key and adapted to be bent into an
5 engagement with said teeth, and said key
having said teeth being provided with a
transverse slot in its end which is provided
with said teeth, said slot being adapted to

receive an instrument adapted to pull said
key to disengage said teeth from said lug. 10

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

MANUEL G. MEDEIROS.

Witnesses:

PERCY S. WEBSTER,
JOSHUA B. WEBSTER.