

J. W. BLOWER.
LOCKING DEVICE.
APPLICATION FILED SEPT. 3, 1910.

977,850.

Patented Dec. 6, 1910.

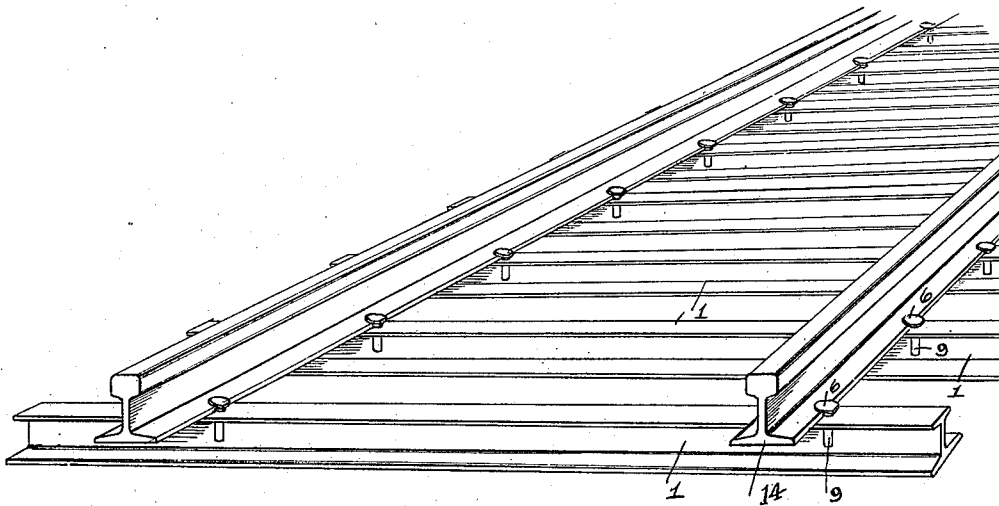


Fig. 1.

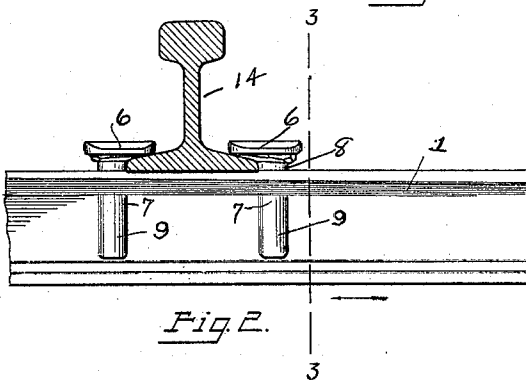


Fig. 2.

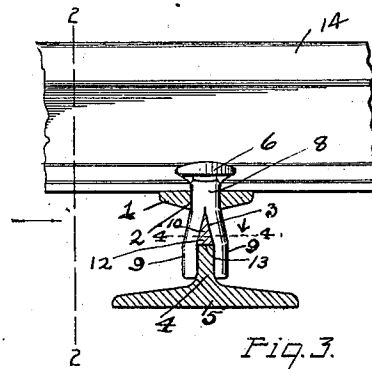


Fig. 3.

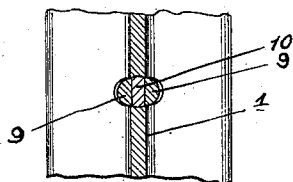


Fig. 4.

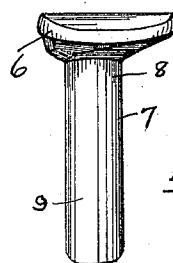


Fig. 5.

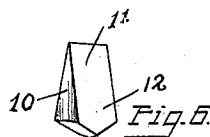


Fig. 6.

Inventor

Joseph W. Blower

Witnesses

E. B. Mauer.
A. L. Phelps

By

C. D. Shepherd

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH W. BLOWER, OF COLUMBUS, OHIO.

LOCKING DEVICE.

977,850.

Specification of Letters Patent.

Patented Dec. 6, 1910.

Application filed September 3, 1910. Serial No. 580,457.

To all whom it may concern:

Be it known that I, JOSEPH W. BLOWER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Locking Devices, of which the following is a specification.

This invention relates to certain novel and useful improvements in locking devices and has particular application to a device of the class described adapted to be employed in the locking or connection of metallic beams or bars.

In carrying out my invention, it is my purpose to provide a device of the character described, which will embrace in its construction the desired features of simplicity and durability.

Still a further object of my invention is to provide a connecting or locking device which may be readily and easily inserted in the alining bores or openings of the metallic bars or beams to be joined and yet which cannot be accidentally withdrawn, but will require considerable effort and labor directed to that purpose to remove the locking device from the parts which it connects.

A further object of my invention is to provide a locking spike or the like having a bifurcated shank, adapted to be inserted through the alining openings in the bars or beams and wedging means coacting with the bifurcated portion of the spike, whereby both the spike and wedge may be readily inserted, still when the former is driven home or into position, it will be difficult to remove the same.

A further object of my invention is to provide a device of the class described adapted particularly for connecting railway rails to metallic railroad ties and metallic I-beams such as are used in building construction, and for other similar purposes.

With the above recited objects and others of a similar nature in view, my invention consists in the construction, combination and arrangement of parts set forth in and falling within scope of the appended claim.

In the accompanying drawings: Figure 1 is a perspective view, in the present instance of a portion of a railway track, and showing my invention used in conjunction therewith, Fig. 2 is a cross sectional view taken on the line 2—2 of Fig. 3, Fig. 3 is a view partly in elevation and partly in sec-

tion on the line 3—3 of Fig. 2, Fig. 4 is a horizontal sectional view taken through the shank of the locking device on the line 4—4 of Fig. 3, Fig. 5 is a view in side elevation of a spike forming a part of my locking device, and, Fig. 6 is a detail perspective view of the locking wedge.

In the present instance I have shown and will describe my invention as employed in connection with railway tracks and as used in fastening the metallic rails to metallic cross ties. I wish it to be understood that my invention is not limited in its useful application, to the particular purpose which by way of illustration, is herein set forth.

Referring now to the accompanying drawings in detail, the numeral 1 designates a metallic cross bar, which may be in the form of a railway track tie, or in the form of an ordinary T or double channel bar. In the center of the width of the enlarged head or horizontal top member of the tie 1, is the vertical opening 2, which extends downwardly through said bar head and communicates at its lower end with a transverse bore or opening 3 in the web 4 of the bar 1, while the numeral 5 designates the base of the tie or bar. My improved locking pin comprises the enlarged spike head 6 and the shank 7, the upper portion 8 of said shank being integral, while the lower portion is bifurcated to form the members 9—9. This spike is adapted to be inserted through the vertical opening and have the bifurcated members 9—9 pass out through the transverse or horizontal opening in the web, so that the members lie on opposite sides of said web and in order to securely lock the spike to the rail 14 and prevent the withdrawal of the same, I provide a wedge 10, comprising a sharpened or acute end portion 11 adapted to fit into the terminal of the bifurcated portion of the spike, while the relatively widened or broadened part 12 of the wedge, spreads the bifurcated members so that the spike will be held firmly in position.

In carrying out my invention, the wedge is first inserted within the bifurcated portion of the spike, the two members 9—9 of the latter being close together, so that the shank may be readily inserted through the alining openings of the rail and tie. By striking the head of the spike, the latter will be driven down through the openings until the broadened or widened portion 12 of the

wedge abuts against the lower wall 13 of the horizontal opening in the web. As the wedge can be driven no farther, the continued striking on top of the head of the spike, will cause the wedge to force the members apart until the spike is completely driven home and the members are spread and clamp opposite sides of the rail, as is clearly shown in Fig. 3. It will be noted that by thus spreading the shank of the spike, it will be impossible to withdraw the same until the wedge is cut or drilled away.

It will be noted that I have provided an exceedingly simple and efficient means, whereby two rails may be firmly and securely united, and whereby the ready withdrawal of the locking means is prevented.

What I claim, is—
In a locking device, the combination with

a bar comprising an enlarged head portion and a central web, said head portion having a vertical opening therethrough communicating at its lower end with a transverse opening in said web, of a pin comprising an enlarged head portion and a split shank portion, and means for spreading the members of the shank into locking position at each side of the web, said means comprising a wedge fitted within the split or bifurcated portion of the shank and adapted to have its broadened end bear against the lower wall of the transverse opening in the web when the pin is driven into locking position.

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

JOSEPH W. BLOWER.

Witnesses:

C. C. SHEPHERD,
J. P. EAGLESON.