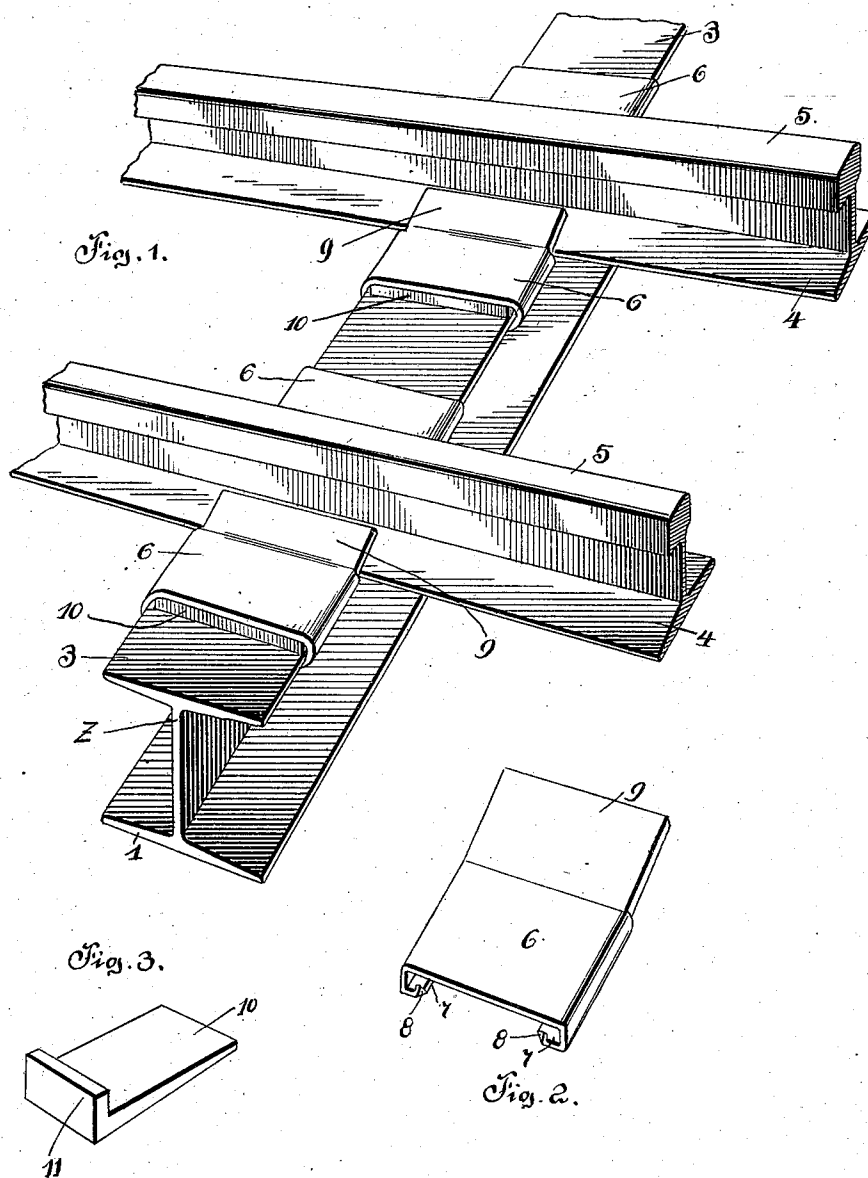


No. 853,869.

PATENTED MAY 14, 1907.

W. F. DURLER.
METALLIC TIE AND RAIL FASTENER.

APPLICATION FILED FEB. 16, 1907.



WITNESSES:
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WILLIAM F. DURLER, OF ALLEGHENY, PENNSYLVANIA.

METALLIC TIE AND RAIL-FASTENER.

No. 853,869.

Specification of Letters Patent.

Patented May 14, 1907.

Application filed February 16, 1907. Serial No. 357,681.

To all whom it may concern:

Be it known that I, WILLIAM F. DURLER, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Ties and Rail-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to metallic ties and rail fasteners, and the invention has for its object to provide a simple and inexpensive tie wherein positive and reliable means is employed for retaining rails thereon.

My invention aims to dispense with the use of nuts, bolts and spikes for fastening rails upon a tie, also to dispense with the ordinary wooden tie and provide a tie of greater durability and strength. To this end, I have devised a tie of the I-beam construction and in connection with the tie I employ fasteners which are adjustably mounted upon the tie and held in place by wedges.

The detail construction of my improved metallic tie and rail fastener will be hereinafter more fully described and then specifically pointed out in the appended claims, and referring to the drawing forming part of this specification, like numerals of reference designate corresponding parts throughout the several views, in which:—

Figure 1 is a perspective view of the metallic tie, illustrating rails secured thereon by my improved fasteners, and Fig. 2 is a perspective view of one of the fasteners. Fig. 3 is a perspective view of a wedge used in connection with the fastener.

To put my invention into practice, I construct my improved metallic tie of a beam of the I-beam construction, said beam having base flanges 1, a web 2 and top flanges 3 adapted to support the base flanges 4 of rails 5.

To retain the rails 5 upon the top flanges 3 of the tie, I employ fasteners, said fasteners consisting of sleeves 6 adapted to slide upon the top flanges 3 of the tie. The inwardly extending flanges 7 of the sleeve have their outer ends or corners bent upwardly, as at 8,

to provide prongs adapted to engage the under face of the top flanges 3. The sleeves 6 are provided with angular extensions 9 adapted to lie over the base flanges 4 of the rails 5 and retain said rails in position.

In connection with the sleeves 6, I employ wedge shaped plates 10, said plates being driven into the ends of said sleeves to hold said sleeves in a fixed position. The plates 10 are formed with flanges 11, whereby they can be easily removed from the fasteners, when the rails need renewing. The sleeves are therefore necessarily made of a greater depth than the top flanges 3, especially at their outer ends, whereby the wedge shaped plates can be inserted in the sleeve on the top of the flanges 3 and then driven inwardly. The wedging action of the plates 10, causes the prongs 8 to engage in the under faces of the top flanges 3 and firmly hold the sleeves in a fixed position, whereby a rail mounted between two of said sleeves cannot become laterally or vertically displaced.

From the foregoing description it will be observed that my improved fastener is applicable to the standard metallic tie at present used and in devising my improved fastener, I have dispensed with the cutting and shearing of the metallic ties and the use of nuts and bolts for securing the fasteners thereto. It is obvious that such changes in the size, proportion and minor details of construction, as are permissible by the appended claims, may be resorted to without departing from the spirit and scope of the invention.

What I claim and desire to secure by Letters Patent, is:—

1. The combination with rails, of a tie of the I-beam construction adapted to support said rails, fasteners slidably mounted upon the top flanges of said tie, said fasteners consisting of sleeves having angular extensions adapted to engage the base flanges of said rails, the inwardly projecting flanges of said sleeves being bent upwardly to provide prongs, and wedge-shaped plates interposed between said sleeves and the top flanges of said tie.

2. The combination with rails, and a tie of the I-beam construction for supporting said

rails, of fasteners slidably mounted upon said tie and having extensions adapted to engage said rails, prongs carried by said sleeves and adapted to engage in said tie, and wedge
5 shaped plates driven into said sleeves for holding said sleeves in a fixed position upon said tie.

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

WILLIAM F. DURLER.

Witnesses:

F. O. McCLEARY,
MAX H. SROLOVITZ.