## H. H. ASHLOCK. RAILWAY TIE. APPLICATION FILED FEB. 25, 1908.

916,964. Patented Apr. 6, 1909. Fig. 3. Witnesses

## UNITED STATES PATENT OFFICE.

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## RAILWAY-TIE.

No. 916,964.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed February 25, 1903. Serial No. 417,676.

To all whom it may concern:

Be it known that I, Henry H. Ashlock, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Railway-Tie, of which the following is a specification.

This invention relates to railway ties and its object is to provide an all-metal device of this character which is formed in a single piece and which is designed to firmly engage the roadbed so as to prevent creeping.

Another object is to provide a tie having simple and efficient means for fastening the rails thereto, said means being readily adjustable for the purpose of tightening the rails should they become loose from any cause.

A further object is to provide a tie formed in a single piece of metal, the entire device including the means for fastening the two rails thereto being formed of but three pieces.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown

30 the preferred form of the invention.

In said drawings: Figure 1 is a side elevation of the tie and showing the rails in position thereon, the middle portion of the tie being removed. Fig. 2 is a plan view of the parts shown in Fig. 1. Fig. 3 is a bottom plan view of the tie. Fig. 4 is an end elevation. Fig. 5 is a section on line x-x, Fig. 3. Fig. 6 is a detail view of a wedge key, the same being shown bent as when 40 upon the tie.

40 upon the tie. Referring to the figures by characters of reference, 1 designates the base of the tie, the same being of any desired proportions and having upstanding integral supports 2 45 thereon near its ends, said supports being hollow and having their lower portions intersected by longitudinal reinforcing bars 3, the plate, bar, and supports being all cast or otherwise formed in a single piece. 50 Retaining flanges 4 are formed along the longitudinal edges of the plate 1 and extend downward therefrom and end flanges 5 extend downward from the ends of the base and below the flanges 4. These flanges 4 55 and 5 are designed to promptly engage the roadbed to prevent the tie from creeping out

of the position in which it is placed. A longitudinal reinforcing web 6 is formed along the center of the base 1 and between the supports and additional reinforcing webs 7 are 60 also formed between these supports and the ends of the base. A rigid and durable con-

struction is therefore produced.

Each support 2 has rail engaging jaws 8 and 9 thereon, the inner or adjoining jaws 8 65 of the two supports being disposed along parallel lines while the outer jaws 9 are preferably inclined toward the jaws 8. The distance between the jaws of each support is such that the rails A to be fastened can 70 be readily inserted downward therebetween after which said rails may be shifted toward each other so that their inner base flanges will be overhung by the jaws 8. The outer base flanges of the rails are then engaged by 75 means of wedge-shaped keys 10 formed of malleable iron or other suitable material. Each key has a head 11 of any desired form at its large end and a rib 12 is formed longitudinally along one edge of the key. To 80 fasten a rail in place by means of one of these keys the small end of the key is inserted between the outer base flange of the rail and the jaw 9 and with the rib 12 overhanging the outer base flange. The key is 85 then driven longitudinally so as to wedge tightly beneath the jaw 9 after which the small end thereof, which projects beyond the support 2, is bent downward and then inward and upward against the base of the 90 rail as indicated at 13. It will thus be apparent that as the jaw 9 overhangs the key and the rib 12 overhangs the rail displacement of the rail will be absolutely prevented and the same will be firmly secured in place. 95 Should the rail work loose from any cause it can be readily tightened simply by driving the wedge farther into the space between the jaw 9 and the rail, after which the downwardly and inwardly turned end 13 can be 100 further bent so as to prevent the key from working backward and becoming loose.

It will be seen that by providing a tie and rail fasteners such as described rails can be quickly and securely placed in position and 105 it becomes unnecessary to utilize bolts, spikes or similar devices which are often unsafe.

What is claimed is:

1. A railway tie formed in a single piece and comprising a base, retaining flanges de- 110 pending therefrom, hollow upstanding supports upon the base, a reinforcing web interposed therebetween and extending longitudinally of the base, reinforcing bars extending across the bottom portions of the supports and integral with the base, reinforcing webs between the supports and the ends of the base, and means upon the supports for

engaging the rails.

2. A railway tie comprising a base, upstanding supports integral therewith, converging jaws upon each of the supports, one of said jaws being disposed to engage a rail, and a bendable wedge insertible between the other jaw and said rail, said wedge having a head at one end, the other end of the wedge extending beyond the support and bendable under the rail.

3. The combination with a tie having an

upstanding support and integral converging jaws upon the support, one of said jaws being disposed to engage a rail; of a fastener 20 for engagement with the other jaw and comprising a bendable wedge having an integral rail engaging rib, one end of said wedge being bendable upon an upstanding face of the support and under the rail engaging rail.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature

in the presence of two witnesses.

HENRY H. ASHLOCK.

Witnesses:
W. A. Medaris,
Sidney Silverman.