

No. 789,644.

PATENTED MAY 9, 1905.

J. E. WILSON.
RAIL TIE.

APPLICATION FILED JAN. 16, 1905.

Fig 1

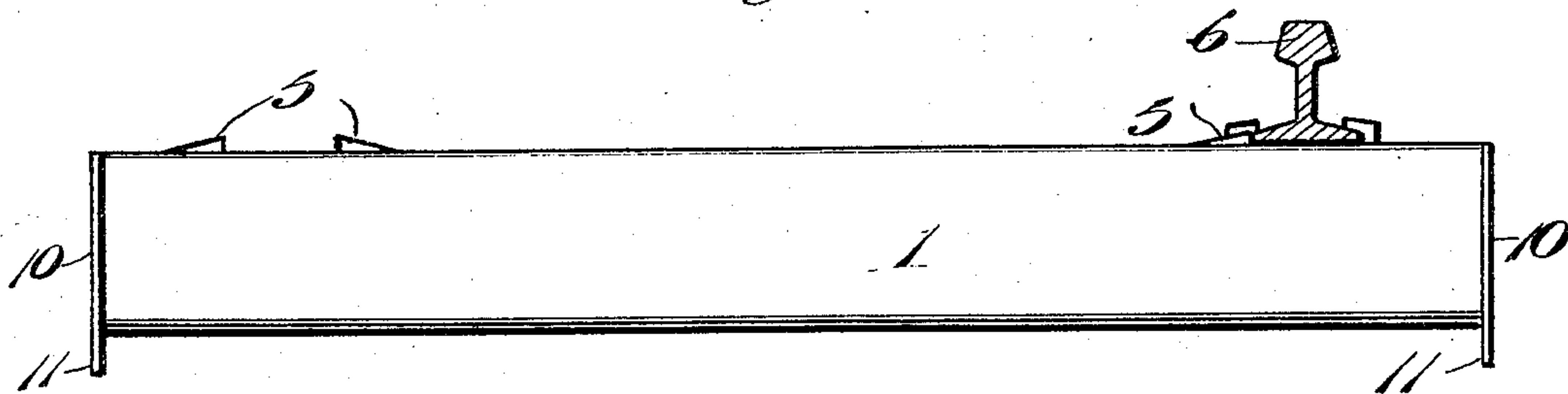


Fig 2.

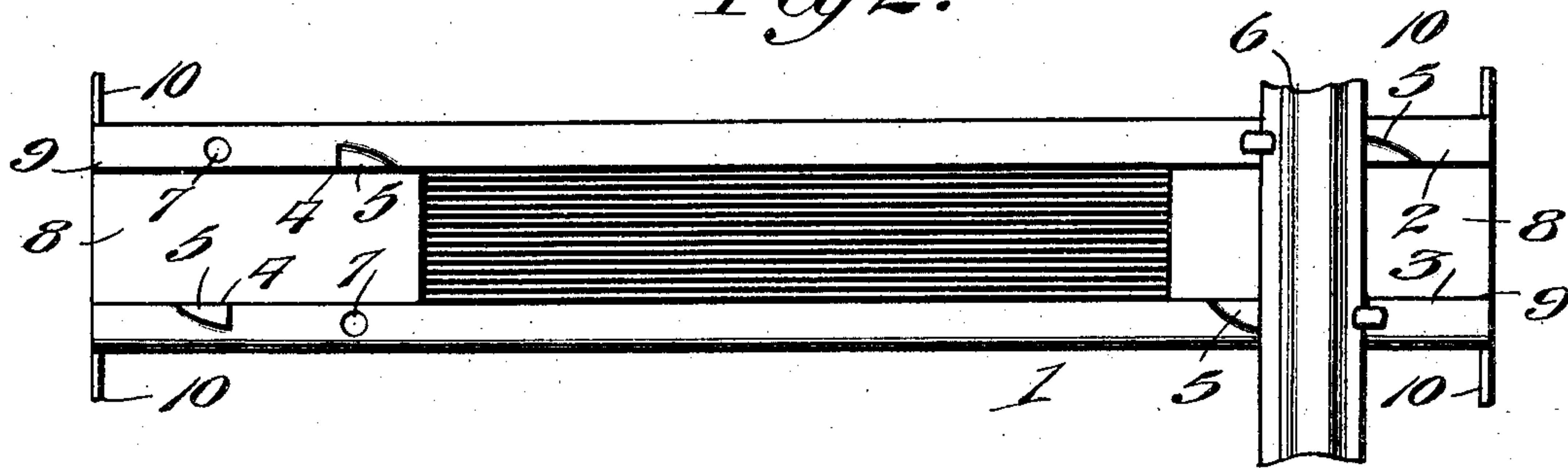
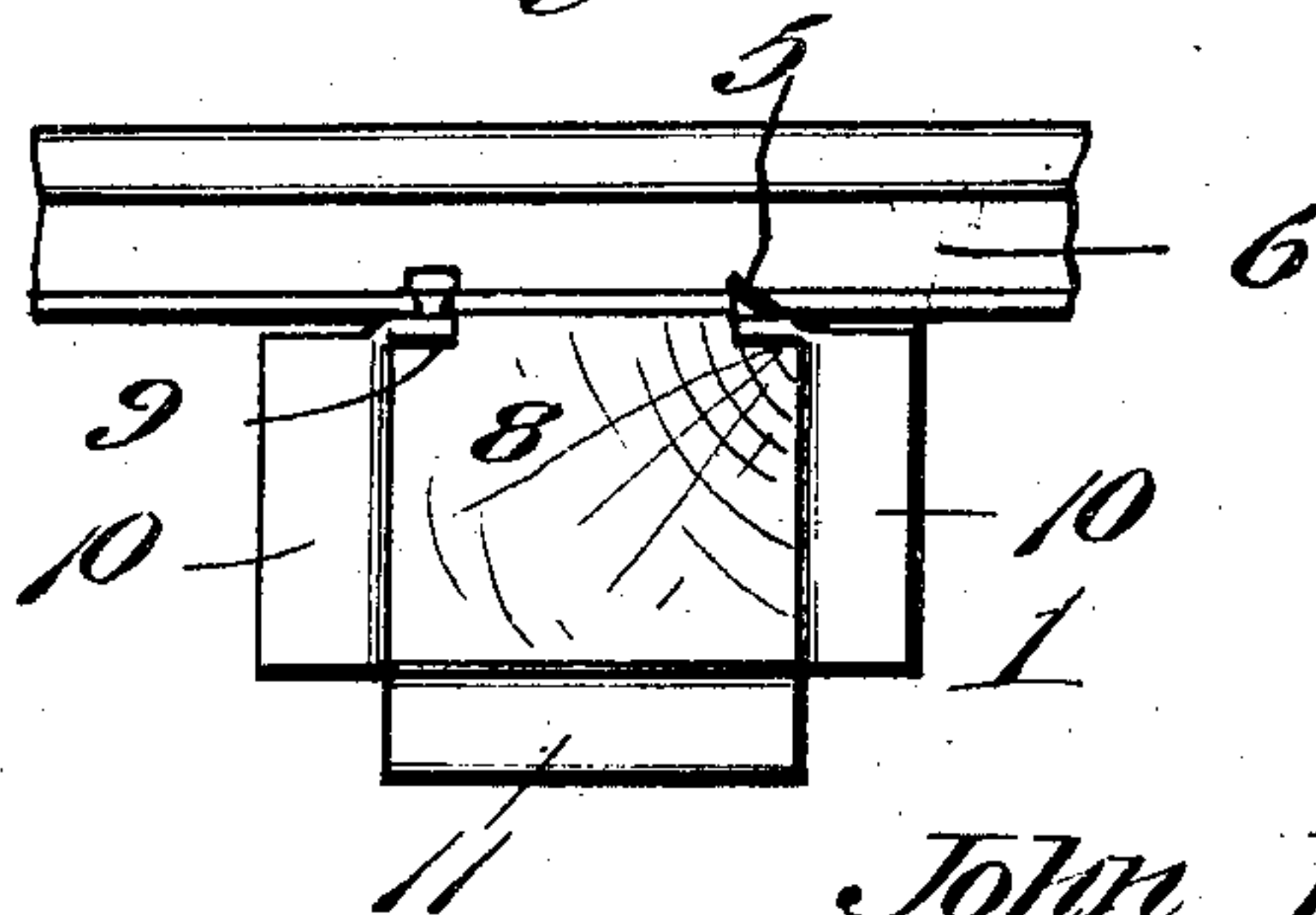


Fig 3.



Witnesses

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JOHN ELWOOD WILSON, OF LANCASTER, PENNSYLVANIA.

RAIL-TIE.

SPECIFICATION forming part of Letters Patent No. 789,644, dated May 9, 1905.

Application filed January 16, 1905. Serial No. 241,299.

To all whom it may concern:

Be it known that I, JOHN ELWOOD WILSON, a citizen of the United States, residing at 344 South Ann street, Lancaster, in the county of Lancaster and State of Pennsylvania, have invented new and useful Improvements in Rail-Ties, of which the following is a specification.

This invention relates to rail-ties.

The objects of the invention are to improve and simplify the construction of such devices; furthermore, to increase their durability and strength and to decrease the expense attending their manufacture.

With the foregoing and other objects in view, which appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment thereof.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a rail-tie constructed in accordance with the invention. Fig. 2 is a plan view thereof. Fig. 3 is an end elevation.

Like reference-numerals indicate corresponding parts in the different figures of the drawings.

The reference-numeral 1 indicates the casing of the improved rail-tie. While this improved casing may be constructed of any suitable material, it is preferably formed of sheet-steel rolled into the desired shape. As shown in the drawings, the casing 1 is open at its ends and top. Formed along the upper edges of the casing 1 are flanges 2 3, which project toward each other. Each of the flanges 2 and 3 is formed with a plurality of slits 4. Adjacent to each of the slits 4 the material of the flange is bent or twisted upward, as indicated at 5. As shown in Fig. 2, the bent portions 5 of the two flanges 2 and 3 are reversely disposed—that is to say, the bent portions of the flange 2 are formed on one side of the slits therein and the bent portions 5 of the flange 3 are formed on the opposite side of the slits therein. By means of this arrangement each of the rails 6 has the bent portion of one flange on one side thereof and the bent portion of the other flange on the opposite side thereof.

In addition to the bent portions 5, which serve as means for holding the rail in position upon the tie, each of the flanges 2 and 3 is formed with one or more perforations, such as 7, through which an ordinary railway-spike can be driven into a block 8 of wood or other suitable material, which is disposed adjacent to the end of the casing. As shown clearly in Fig. 2, two blocks 8 are employed, one adjacent to each end of the casing. Each of the blocks 8 preferably is cut away, as shown at 9, to receive the flanges 2 and 3, as indicated in Fig. 3, whereby the central portion of each block 8 is flush with the upper end of the casing. The central portion of the casing 1 between the blocks 8 is left empty, and after the tie has been placed in position upon the road-bed said central portion may be filled with any suitable ballast. If desired, cement may be used for this purpose.

Formed upon the ends of the casing 1 are outwardly-extending flanges 10 and downwardly-extending flanges 11. The flanges 10 and 11 serve as means for preventing the improved rail-tie from creeping or becoming longitudinally displaced.

The improved rail-tie of this invention is strong, simple, durable, and inexpensive in construction, as well as thoroughly practical and efficient in use. Whenever the blocks 8 become worn or rotten they can be removed from the casing and new blocks inserted. For this reason the improved rail-tie of the present invention combines in an inexpensive manner the advantages of a wooden and a metallic tie.

Minor changes in the precise embodiment of the invention illustrated and described may be made within the scope of the following claims without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new is—

1. A rail-tie comprising a casing having open ends and an open top, flanges on the upper edges of said casing projecting toward each other, said flanges being formed with slits and bent portions adjacent to said slits, outwardly

and downwardly extending flanges on the ends of said casing and blocks disposed in the ends of said casing.

2. A rail - tie comprising a casing having
5 open ends and an open top, flanges on the upper edges of said casing projecting toward each other and being formed with perforations, slits and bent portions adjacent to said slits, the bent portion of one flange being formed on
10 one side of the slits therein, and the bent portions of the other flange being formed on the

opposite sides of the slits therein, outwardly and downwardly extending integral flanges on the ends of said casing, and blocks in the ends of said casing.

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

JOHN ELWOOD WILSON.

Witnesses:

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