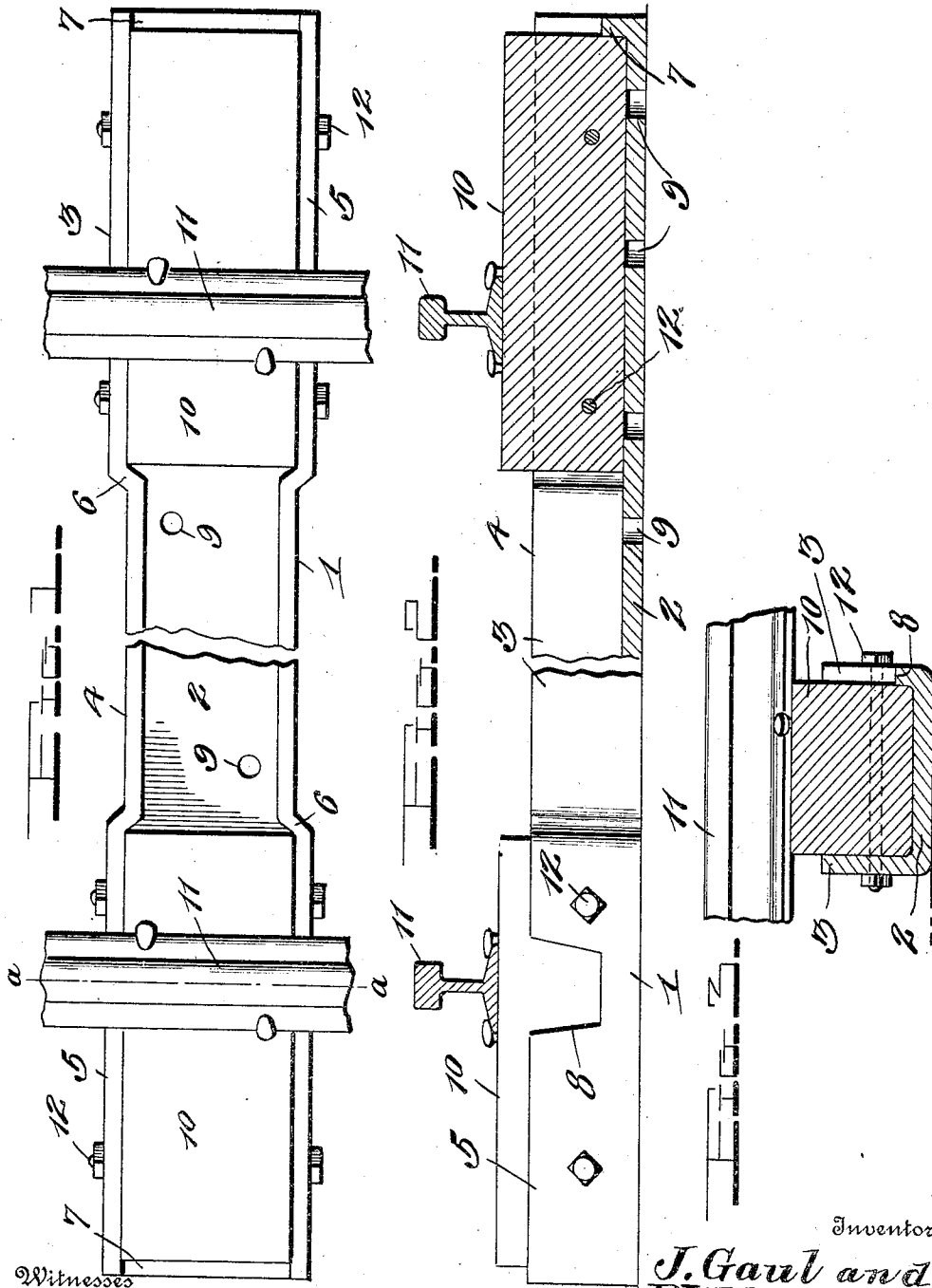


J. GAUL & R. W. VOSBURG.
RAILWAY TIE,
APPLICATION FILED NOV. 8, 1911.

1,018,755.

Patented Feb. 27, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN GAUL AND ROBERT W. VOSBURG, OF LACEYVILLE, PENNSYLVANIA.

RAILWAY-TIE.

1,018,755.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JOHN GAUL and ROBERT W. VOSBURG, citizens of the United States, residing at Laceyville, in the county of Wyoming and State of Pennsylvania, have invented certain new and useful Improvements in Railway-Ties, of which the following is a specification, reference being had to the accompanying drawings.

This invention is an improved railway tie comprising a hollow body made of pressed steel and wooden blocks secured in the ends of the body and on which the rails are secured, the invention consisting in the construction, combination and arrangement of devices hereinafter described and claimed.

The object of our invention is to provide an improved railway tie which is exceedingly simple, strong and durable, which enables the rail supporting blocks to be replaced without the necessity of disturbing or moving the body of the tie and which will not interfere with rail anchors, insulated joints or with the operation of automatic signals and to also provide a tie on which any desired rail splice or rail joint can be used.

In the accompanying drawings: Figure 1 is a plan of a railway tie constructed in accordance with our invention; Fig. 2 is partly an elevation and partly a longitudinal sectional view of the same; and Fig. 3 is a vertical transverse sectional view of the same on the plane indicated by the line *a-a* of Fig. 1.

The body 1 of our improved tie is made of metal, preferably of pressed steel or iron and comprises the bottom 2 and the opposed upturned side walls 3. The intermediate portion 4 of the tie body is of less width than the end portions 5 thereof so that the walls 3 are formed with offsets 6. The extreme ends of the bottom of the tie are provided with upturned stops or flanges 7 which extend across the bottom of the tie body and connect the outer ends of the side walls. One wall of each broadened end portion 5 of the tie body is provided with a recess 8 to afford clearance for a rail lock or creeper and to also enable any automatic signaling system to be installed. The bottom of the tie body is provided with openings 9, of which there may be any suitable number, these openings permitting of the drainage of rain water and water from melted snow from the tie body, as will be understood.

In connection with the metallic tie body, which is open on its upper side, we employ blocks 10 which are preferably wooden blocks. These blocks serve to support the rails of the track, here indicated at 11, and the rails may be secured on these blocks by any suitable means. The blocks, being of wood, form resilient or cushioning supports for the track rails so that our improved tie secures all the advantages of the ordinary wooden tie and the additional advantages of greatly increased strength and durability.

Another advantage of our improved tie is that the road bed does not need to be disturbed in order to effectually repair the ties as the metal body of the tie is practically indestructible and never requires renewing, and when it becomes necessary to replace either of the blocks, this may be done by simply removing the block or blocks without disturbing the body of the tie in the road bed. Moreover, the body of the tie needs never to be moved endwise when removing either or both of the blocks to enable the said blocks to be renewed and, owing to the short length of the blocks as compared with the extreme length of the tie, the blocks only need to be moved a short distance lengthwise when slipping them out from under the rails prior to their being replaced by new blocks.

In practice, a space of twelve inches is all that is required to replace the tie blocks which is very advantageous, especially in yards, tunnels, and at stations, where the space is necessarily limited. In order to prevent the blocks from moving outwardly in the ends of the tie body the stop flanges 7 are employed, which bear against the lower portions of the outer ends of the block. The shoulder 6 formed by the outset portions of the side walls of the tie body prevents the blocks from moving inwardly. The blocks are furthermore secured in place by means of bolts 12 which pass transversely there-through and also through openings in the side walls of the tie body.

Having thus described our invention we claim:

The herein described railway tie comprising integral bottom and upturned side walls, the side walls having offset portions spaced from the ends of the tie and forming a narrowed intermediate portion in the tie body, the bottom of the tie being formed with upturned stop flanges at the ends of the tie, in combination with blocks on the end portions

of the bottom of the tie, between the side walls thereof, bearing at their inner ends against the offset portions of the side walls and at their outer ends against the stop flanges, and bolts extending transversely through the said blocks and the side walls of the broadened end portions of the tie and detachably securing the blocks in place.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

JOHN GAUL.
ROBERT W. VOSBURG.

Witnesses:

RICHARD HALL,
ELMER KINCKINER.