B. F. BLESSING.

RAILROAD TIE.

APPLICATION FILED OCT. 28, 1913.

1,094,635.

Patented Apr. 28, 1914.

2 SHEETS—SHEET 1.

Fig. 1.

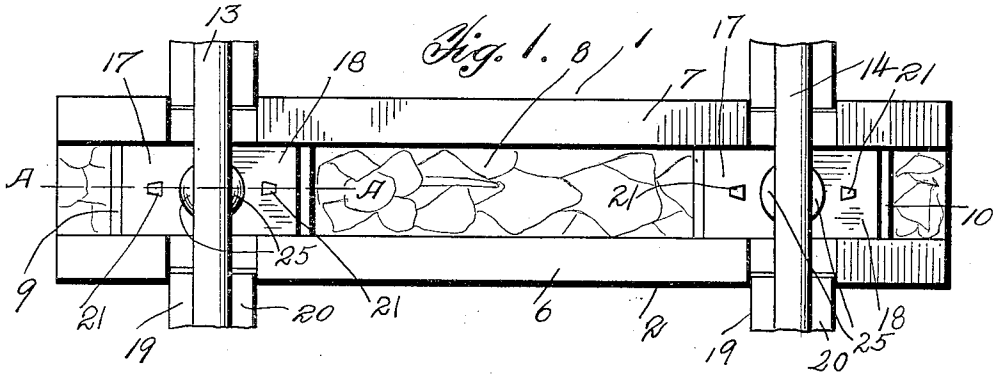


Fig. 2.

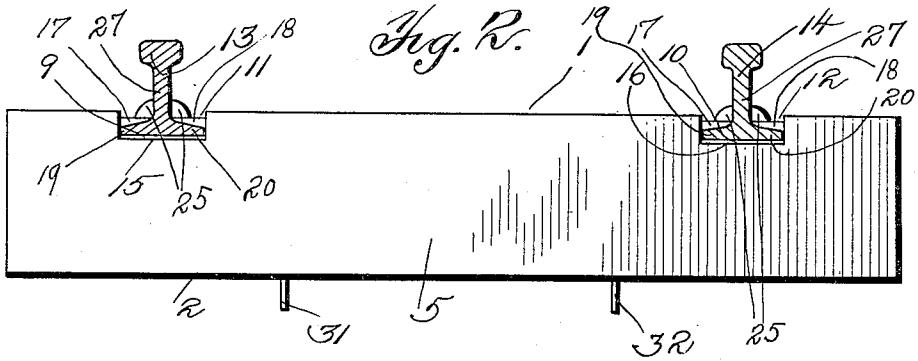
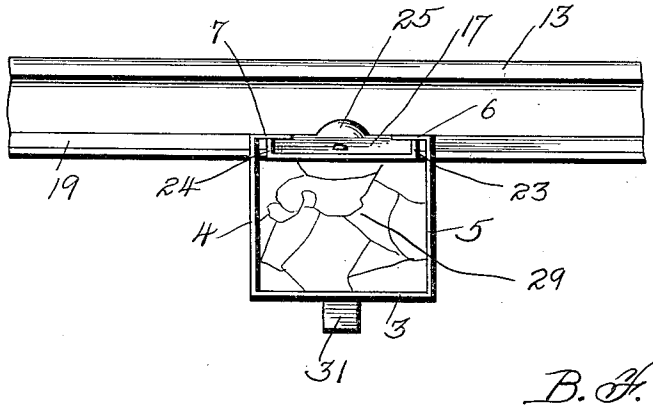


Fig. 3.



Witnesses

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2 SHEETS—SHEET 2.

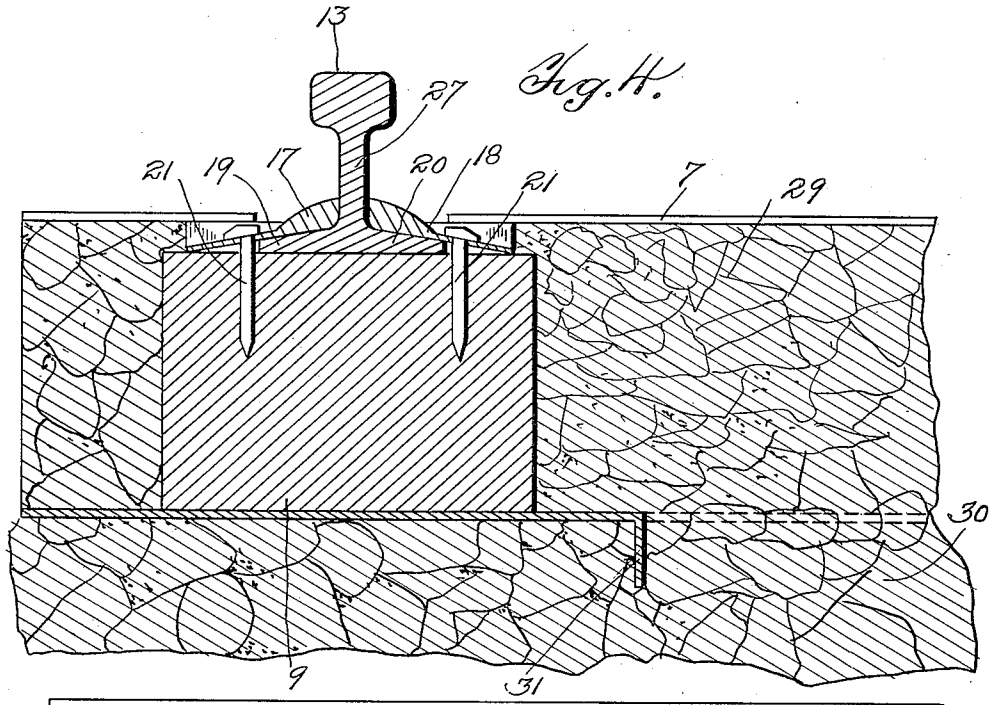


Fig. 4.

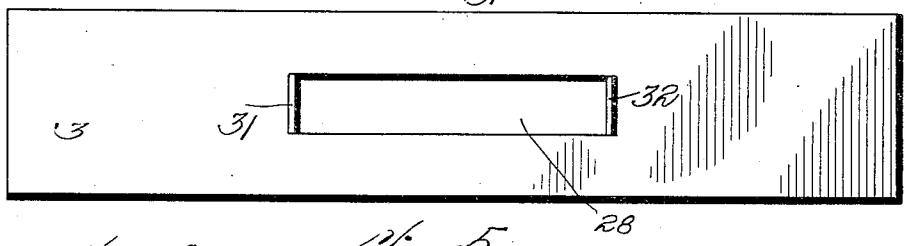


Fig. 5.

Fig. 6.

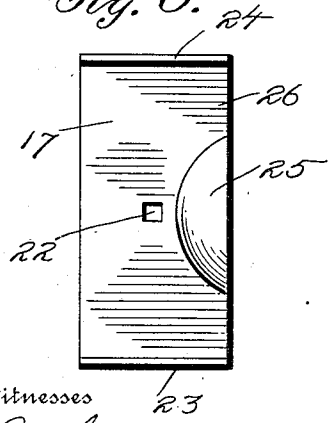
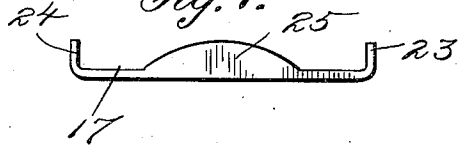


Fig. 7.



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UNITED STATES PATENT OFFICE.

BENJAMIN FRANKLIN BLESSING, OF WAYNESBORO, PENNSYLVANIA.

RAILROAD-TIE.

1,094,635. Specification of Letters Patent. Patented Apr. 28, 1914.

Application filed October 28, 1913. Serial No. 797,784.

To all whom it may concern:

Be it known that I, BENJAMIN F. BLESSING, a citizen of the United States, residing at Waynesboro, in the county of Franklin and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Ties, of which the following is a specification.

This invention relates to improvements in railroad ties and has for its object to provide an inexpensive yet very durable tie having all of the advantages of the common wood tie.

Another object of the invention is to provide a non-shifting tie.

Another object of the invention is to provide a railroad tie in combination with a rail fastening device.

With the above and other objects in view which will be more fully explained in the following specification, I have invented the device illustrated in the accompanying drawings in which—

Figure 1 is a top plan view of my improved tie and rail fastening device, Fig. 2 is a side elevation of Fig. 1, Fig. 3 is an end elevation of Fig. 1, Fig. 4 is an enlarged sectional view taken on line A—A of Fig. 1, Fig. 5 is a bottom plan view of Fig. 2, Fig. 6 is an enlarged detail top plan view of a rail fastening device, and Fig. 7 is an end view of Fig. 6.

Like reference characters indicate like parts throughout the specification and in the several views in the drawings in which—

1 indicates a rail tie consisting preferably of a pressed steel shell 2, having a bottom 3, side walls 4 and 5, which at their upper ends are turned at right angles to form opposing parallel flanges 6 and 7 having an open space 8 therebetween the entire length of the tie 1.

Seated within the shell near each of its opposing ends are wooden blocks 9 and 10, which are somewhat shorter than the depth of said shell. Recesses 11 and 12 are cut through the upper portions of the side walls of said shells to form slots in which are seated the rails 13 and 14, said rails being seated directly upon the blocks 9 and 10 which extend slightly above the edges 15 and 16 of said slots. Rail fastening devices 17 and 18 are seated upon said blocks and the flanges 19 and 20 of said rails, spikes 21 passing through the opening 22 into said blocks 9 and 10 are adapted to prevent the members 17 and 18 from moving from their proper positions. The opposing edges 23 and 24 of said members 17 and 18 are turned upwardly at right angles to said members and wedge under the flanges 7 and 8 whereby said members are held in fixed vertical position upon the flanges 19 and 20. Enlargements 25 are provided in the central part of said members on the edges 26 thereof so as to form bearing surfaces against the web 27 of said rails.

The bottom wall 3 of the shell 1 is provided with a longitudinal opening 28 whereby the filler 29 which may be sand, clay, cement, gravel, cinders or any other suitable material may project through said opening and cohere with the material of the road-bed 30 whereby the tie will be held in a solid immovable position. To further this end, portions 31 and 32 are struck down at right angles to the wall 3 and adapted to project down into said road-bed 30.

Having now described my invention, that which I claim to be new and desire to procure by Letters Patent is:—

1. The described tie consisting of a trough formed of metal having a horizontal bottom with a relatively large opening therein, vertical side walls with overlapping flat horizontal flanges extending the entire length of said tie, and recesses formed in the opposing ends of said tie to receive rails.

2. The described tie consisting of a trough formed of metal having a horizontal bottom with a relatively large opening therein, vertical side walls with overlapping flat horizontal flanges extending the entire length of said tie, recesses formed in the opposing ends of said tie to receive rails, and wood blocks seated in said tie adapted to receive said rails.

3. The described tie consisting of a trough formed of metal having a horizontal bottom with a relatively large opening therein, vertical side walls with overlapping flat horizontal flanges extending the entire length of said tie, recesses formed in the opposing ends of said tie to receive rails, wood blocks seated in said tie adapted to receive said rails, and a filler adapted to completely fill said tie.

4. The described tie consisting of a trough formed of metal having a horizontal bottom with a relatively large opening therein, vertical side walls with overlapping flat horizontal flanges extending the entire length of said tie, recesses formed in the op-

posing ends of said tie to receive rails, wood blocks seated in said tie adapted to receive said rails, and a filler adapted to completely fill said tie and cohere with a roadbed.

5. The described tie consisting of a trough formed of metal having a horizontal bottom with a relatively large opening therein, vertical side walls with overlapping flat horizontal flanges extending the entire length of said tie, recesses formed in the opposing ends of said tie to receive rails, wood blocks seated in said tie adapted to receive said rails, a filler adapted to completely fill said tie and cohere with a roadbed, and rail holding plates adapted to be fixed to said blocks.

6. The described tie consisting of a trough formed of metal having a horizontal bottom with a relatively large opening therein, vertical side walls with overlapping flat horizontal flanges extending the entire length of said tie, recesses formed in the opposing ends of said tie to receive rails, wood blocks seated in said tie adapted to receive said rails, a filler adapted to completely fill said tie and cohere with a roadbed, rail holding plates adapted to be fixed to said blocks, and enlargements on said plates adapted to engage the webs of said rails.

7. The described device consisting of a tie formed of a shell having bottom and side walls, blocks seated within said shell, rail receiving recesses formed in said shell adjacent said blocks, said shell having horizontally disposed flanges, rail plates seated on said blocks, and flanges on said plates projecting upwardly and contacting said first-named flanges, said plates having enlarged web engaging surfaces.

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

BENJAMIN FRANKLIN BLESSING.

Witnesses:
HOOPER WASHABAUGH,
CHAS. F. KOONS.