

No. 812,991

PATENTED FEB. 20, 1906.

S. N. GRIFFITH.
RAILROAD TIE.
APPLICATION FILED MAY 14, 1904.

Fig. 1.

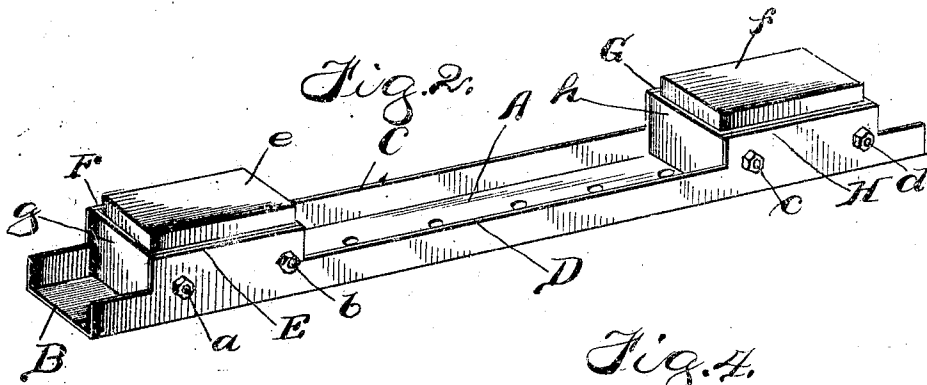
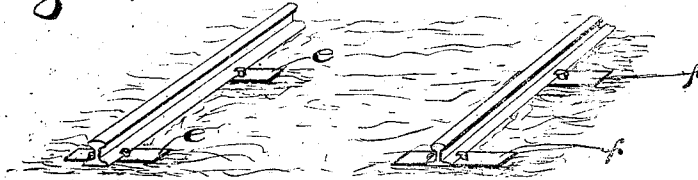


Fig. 3.

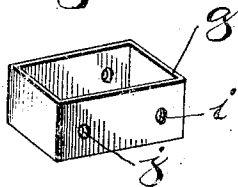


Fig. 4.

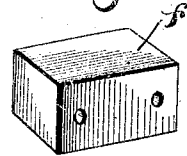
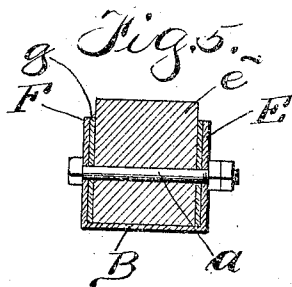
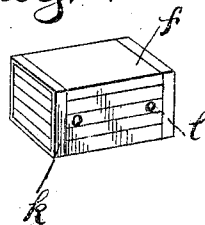


Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

SAMUEL N. GRIFFITH, OF CHICAGO, ILLINOIS.

RAILROAD-TIE.

No. 812,991.

Specification of Letters Patent.

Patented Feb. 20, 1906.

Application filed May 14, 1904. Serial No. 207,918.

To all whom it may concern:

Be it known that I, SAMUEL N. GRIFFITH, a citizen of the United States of America, and a resident of Chicago, Cook county, Illinois, have invented a certain new and useful Improvement in Railroad-Ties, of which the following is a specification.

My invention contemplates an improved railroad-tie of such character that although it contains, say, only about one-third as much lumber or other suitable material as the ordinary tie may, nevertheless, be readily and satisfactorily substituted for the wood tie, and whereby it presents many other advantages over ordinary ties and over metallic ties as heretofore constructed, as will hereinafter more fully appear.

In the accompanying drawings, Figure 1 is a perspective of a short section of railroad-track equipped with ties embodying the principle of my invention. Fig. 2 is a perspective of one of my improved railroad-ties. Fig. 3 shows one of the metallic bands which may be employed for holding the blocks of wood in place. Fig. 4 is a perspective of one of the said blocks of wood. Fig. 5 is a cross-section through one end portion of the tie shown in Fig. 2. Fig. 6 is a perspective of a compound or built-up block of wood.

As thus illustrated, my invention comprises a trough A, of any suitable material, but preferably of metal, provided with a bottom B and with upturned sides or flanges C and D. Preferably this trough is provided in its bottom with apertures whereby it may drain itself clear of water. Also, as will be observed, the said sides or flanges of the trough are provided near the ends of the trough with enlargements or vertical extensions E F and G H. The blocks of wood *e* and *f*, as illustrated, are preferably inclosed by the metal bands *g* and *h* and are seated between the ears or projections E F and G H, as shown more clearly in Figs. 2 and 5. Any suitable means can be employed for holding the said blocks in place—as, for example, bolts *a*, *b*, *c*, and *d*, inserted through registering openings formed in the trough and the blocks and also in the bands, may be employed for this purpose. It will be seen that

the said blocks of wood or other suitable material are located in position to serve as seats for the rail and are preferably of a length to suitably and effectively receive the spikes ordinarily employed in fastening rails to wood ties. If desired, the blocks of wood can be composed of superimposed pieces of wood *f*, as shown in Fig. 6, the different layers being tightly bound together by bands or hoops *k* and *l*.

From the foregoing it is obvious that I provide a simple and efficient railroad-tie which involves but little timber, but which is strong and durable and well adapted to stand the strains imposed upon it and which presents many advantages over railroad-ties as heretofore constructed, as it is adapted to have the rails spiked down upon it in the ordinary manner and is of a character to be economically and cheaply manufactured—that is to say, as compared with other metallic and like ties—and is, furthermore, of such nature as to be readily and easily repaired in case of breakage or impairment brought about by use and exposure to the weather.

What I claim as my invention is—

1. A railroad-tie comprising a metallic trough, and a pair of metal-bound blocks seated in said trough and adapted to receive the spikes employed in securing the rails in place, each block and its metal binding being removable as a unit from the balance of the structure.

2. A railroad-tie comprising a longitudinal member, and metal-bound blocks secured to the opposite end portions of the said member, said blocks being adapted to receive the spikes employed in securing the rails in place, each block and its metal binding being removable as a unit from the balance of the structure.

3. A railroad-tie comprising a metal trough, metal-bound blocks of wood seated in the opposite end portions of said trough and bolts extending through the trough and blocks to hold the latter in place, each block and its metal binding being removable as a unit from the balance of the structure.

4. A railroad-tie comprising a metal trough, metal bands seated in said trough, blocks of

wood inclosed by said bands, said blocks being in a position to receive the rails, and bolts extending through the trough, bands and blocks, to hold the latter in place.

5 5. A railroad-tie comprising a metal trough having its sides provided with ears, blocks seated in the trough between said ears, said blocks extending a suitable distance above

the ears, and bolts extending through the ears and blocks to hold the latter in place. 10

Signed by me at Chicago, Cook county, Illinois, this 3d day of May, 1904.

SAM'L N. GRIFFITH.

Witnesses:

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