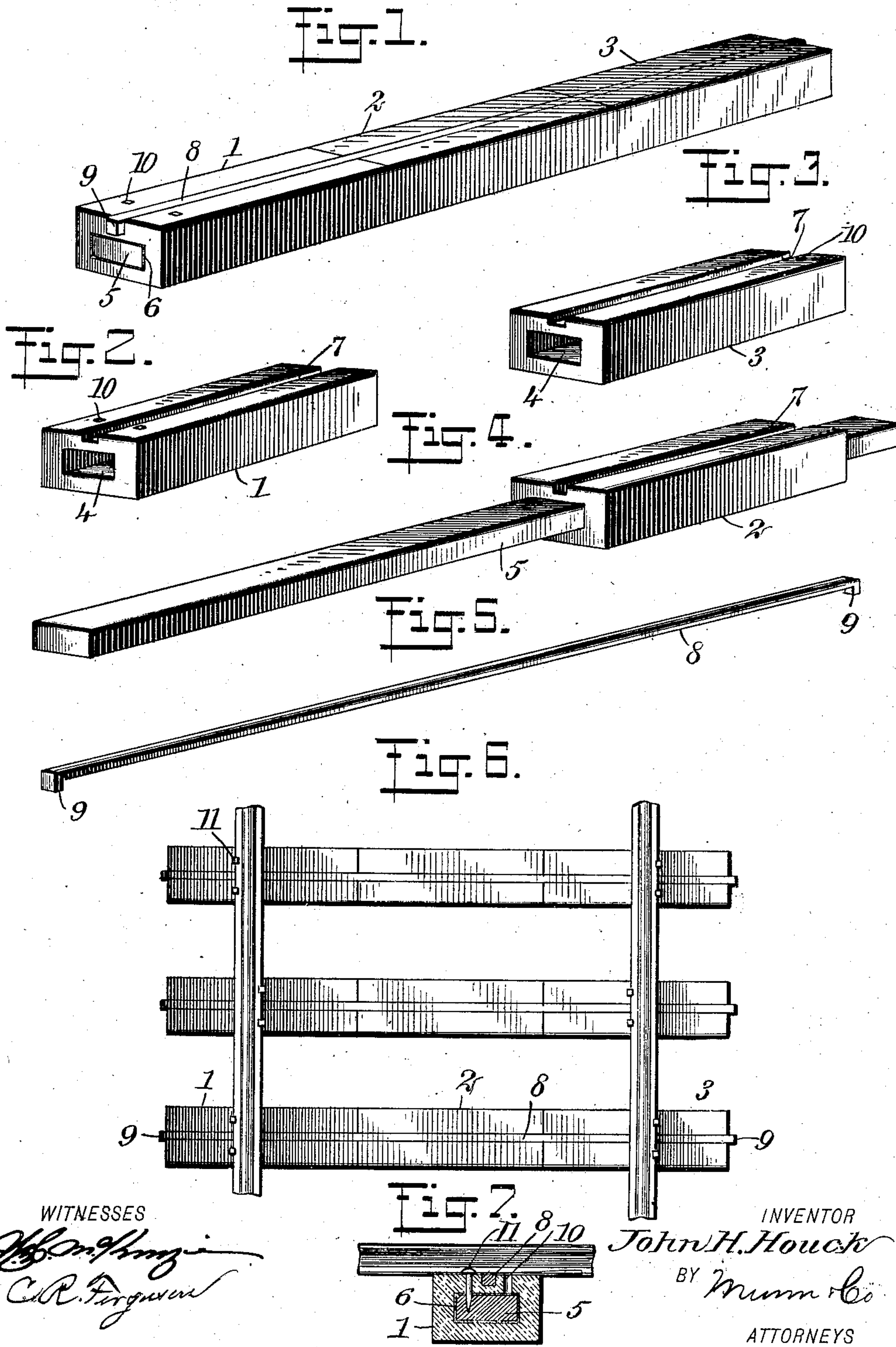


No. 889,687

PATENTED JUNE 2, 1908.

J. H. HOUCK.
RAILWAY TIE.

APPLICATION FILED SEPT. 14, 1906. RENEWED JULY 23, 1907.



WITNESSES
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JOHN H. HOUCK, OF SALISBURY, NORTH CAROLINA.

RAILWAY-TIE.

No. 889,687.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed September 14, 1906, Serial No. 334,623. Renewed July 23, 1907. Serial No. 385,141.

To all whom it may concern:

Be it known that I, JOHN H. HOUCK, a citizen of the United States, and a resident of Salisbury, in the county of Rowan and State of North Carolina, have invented a new and Improved Railway-Tie, of which the following is a full, clear, and exact description.

This invention relates to improvements in railway cross-ties, the object being to provide a tie of the composite type, that will be comparatively light to handle, yet will be strong and serviceable.

Further objects of the invention will appear in the general description.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

I will describe a railway tie embodying my invention and then point out the novel features in the appended claims.

Figure 1 is a perspective view of a railway tie embodying my invention; Fig. 2 is a perspective view of one section of the tie; Fig. 3 shows another section; Fig. 4 shows one of the sections with the core employed; Fig. 5 is a perspective view of a tie-rod employed; Fig. 6 is a plan; and Fig. 7 is a cross-section through one of the ties.

The tie consists of a plurality of sections designed to be joined together; I have here indicated sections 1, 2 and 3. The sections are made of concrete or vitrified material. The sections are longitudinally hollow as indicated at 4, for receiving a core 5 consisting of wood treated with a preserving material such for instance as creosote. Preferably, the core is slightly smaller than the openings through the sections, so that a packing of sulfur 6 may be placed around the core. The sections are longitudinally channeled at the top as indicated at 7 to receive a metal tie-rod 8 having its ends 9 turned downward to engage over the ends of the end sections of the tie. The outer sections of the tie are

provided with perforations 10 through which the rail spikes 11 may pass into the wooden core.

A tie embodying my invention it is obvious, may be readily handled, as the several sections or members may be carried to the place of use and then the sections of the tie assembled and secured together.

Having thus described my invention I claim as new and desire to secure by Letters Patent:

1. A railway cross tie consisting of a plurality of hollow sections consisting of concrete, a wooden core for engaging in the sections, and a metal tie rod extended along the sections and having its ends turned downward to engage with the ends of the tie.

2. A railway cross tie consisting of a plurality of separate tubular sections, a core for passing through the sections, the said core having a preserving material, and sulfur surrounding the core.

3. A railway tie consisting of a plurality of tubular sections of concrete, the said sections being longitudinally channeled at the top, a tie rod engaging in the channel and having its ends turned downward to engage the ends of the tie, the outer section of the tie being also provided with spike perforations, and a wooden core passing through the sections.

4. A railway cross tie consisting of a plurality of sections of concrete material, the said sections being tubular and longitudinally channeled at the top, a tie rod for engaging in the channels, a creosoted core of wood passing through the sections, and a packing of sulfur surrounding the core.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN H. HOUCK.

Witnesses:

W. C. MAUPIN,
W. A. SELLS.