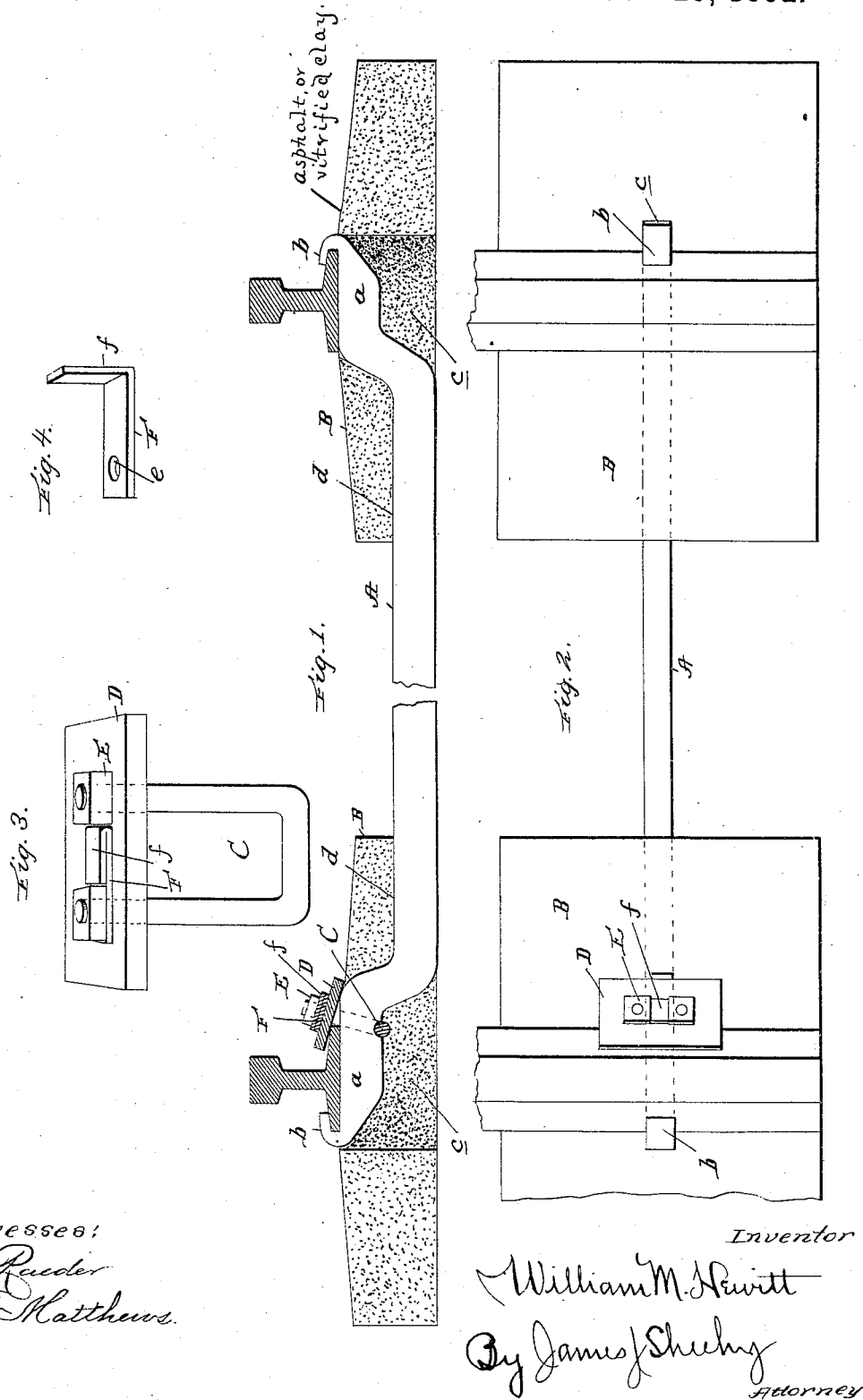


(No Model.)

W. M. HEWITT.
RAILROAD CROSS TIE.

No. 484,855.

Patented Oct. 25, 1892.



Witnesses:
C. H. Reeder
W. F. Matthews.

Inventor
William M. Hewitt
By James J. Shuey
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM M. HEWITT, OF CHATTANOOGA, TENNESSEE.

RAILROAD CROSS-TIE.

SPECIFICATION forming part of Letters Patent No. 484,855, dated October 25, 1892.

Application filed January 23, 1892. Serial No. 419,051. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. HEWITT, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Railroad Cross-Ties; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to an improvement in railway cross-ties and devices for securing the rails thereto, and the novelty will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1 is a side view of my improved tie, partly broken away, with the bearing-blocks and fastening devices in section. Fig. 2 is a plan view of the same with parts broken away. Fig. 3 is a perspective view of the devices for securing a rail to the tie and its bearing-blocks, and Fig. 4 is a perspective view of one of the devices for locking the securing-nuts in position.

Referring by letter to said drawings, A indicates the cross-bar, which may be made of iron, steel, or other suitable material. This tie is bent upward and outward at opposite ends so as to form a horizontal seat *a* for the rails, and the extreme opposite ends terminate in inwardly and oppositely directed hooks *b* to receive and embrace the outer base-flanges of the rails, as shown.

B indicates bearing-blocks for the ends of the tie. These blocks are composed of asphalt, vitrified clay, or the like and are sufficiently large to furnish a substantial bearing for the tie and preserve the level of the road. These blocks have a central opening *c*, through which the elevated or bent ends of the ties are designed to enter, and these openings, which extend downwardly through the center of the blocks, communicate with transverse under-cuts or openings *d*, through which the straight portion of the tie is designed to pass and be snugly received.

C indicates a rod, which is bent to form a yoke or loop. This rod has its opposite ends threaded and receives the bent portions of

the tie within the loop, as better shown in Fig. 1 of the drawings, and over the threaded ends of the yoke or loop C is placed a plate D, which is designed to bear upon the upper side of the blocks B and also upon the base-flange of the rails, where they are secured in position by means of screw-tapped nuts E.

F indicates a plate for locking the nuts on the ends of the yoke or loop and consequently the plate D thereon. This locking device comprises a strip or plate of metal capable of being bent, and in its original shape is of an angular form, as shown in Fig. 4 of the drawings, having an eye *e* at one end and a locking branch *f* at its opposite end. In applying this locking device one of the nuts should be first screwed home on one branch of the yoke or loop over the plate B. The strip F is then placed so that the remaining branch of the yoke will receive the eye *e*, and the other nut is then screwed to its place, when the branch *f* should be beat down flat upon the body, so that it will lie snugly against the adjacent flat sides of the respective nuts, thereby preventing said nuts from being turned in either direction.

In operation the opposite ends of the tie are adjusted in the slots of the asphalt blocks with the securing yokes or loops on the bent ends thereof. The rails are then placed upon these seats *a*, so that they will also bear upon the upper flat sides of the blocks, with their outer base-flanges in the bent ends of the ties. The plates D are then placed over the threaded ends of the yokes and the nuts screwed up so as to tightly secure the ties and rails to the blocks, when the locking devices will prevent the nuts from turning.

Having described my invention, what I claim is—

1. The blocks having openings therein, in combination with the cross-tie having its ends elevated and passing into said openings, the yokes embracing the elevated ends of the tie within the blocks, and means for securing the yokes in position, substantially as specified.

2. The cross-tie formed from a bar of metal with its ends bent in elevated positions and terminating in inwardly-directed hooks, in combination with asphalt blocks receiving

said elevated ends and suitable means for securing the tie therein, substantially as specified.

3. The combination, with a railway-tie and
5 a railway-rail, of blocks receiving the ends of the tie so as to seat the rail, a yoke embracing the tie within the blocks, a plate receiving the threaded ends of the yoke, nuts on said threaded ends, and the angular plate for

securing the nuts on the ends of the yoke, so substantially as specified.

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

WILLIAM M. HEWITT.

Witnesses:

R. D. WHITIER,

A. T. TABER.