

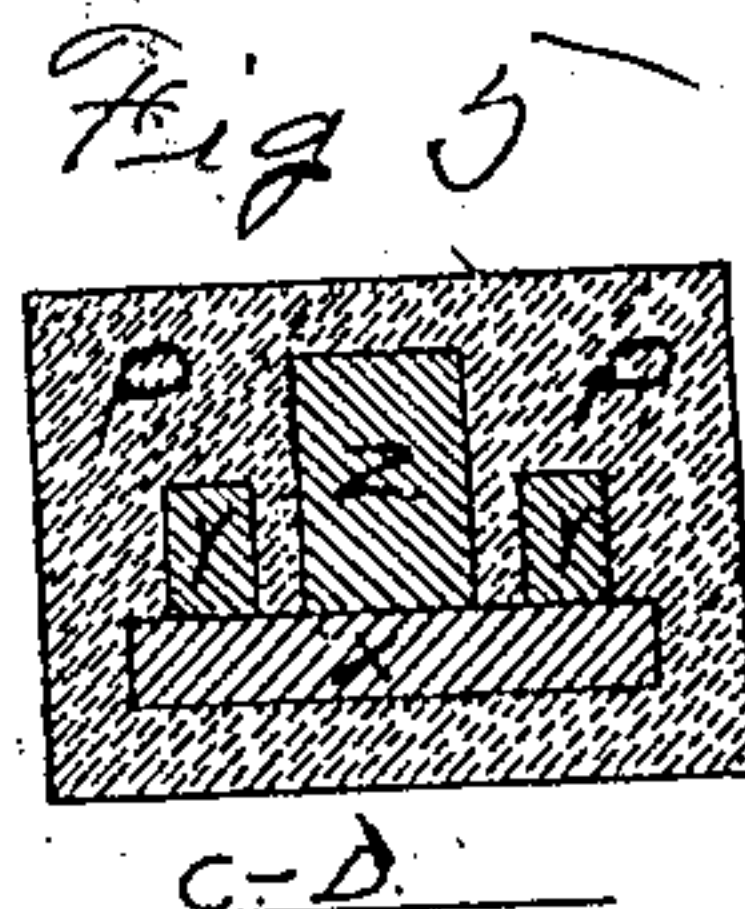
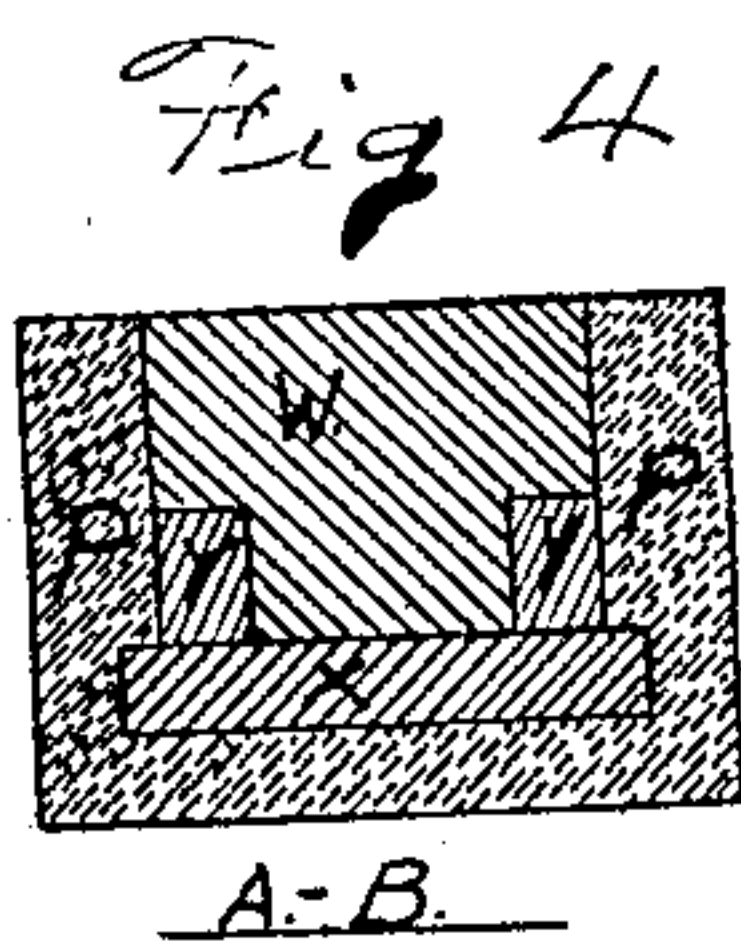
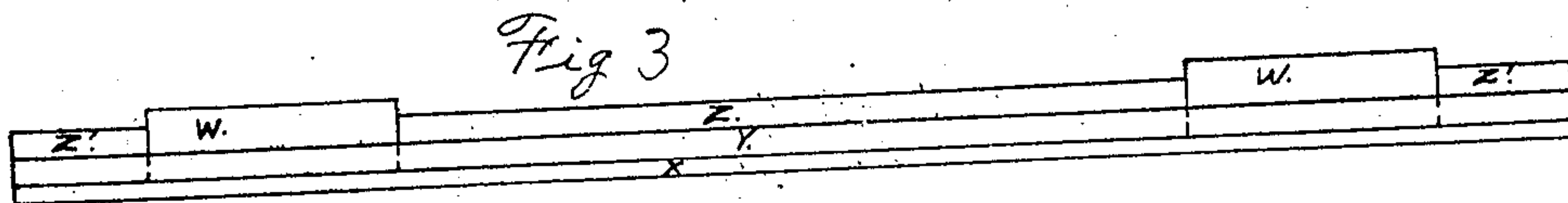
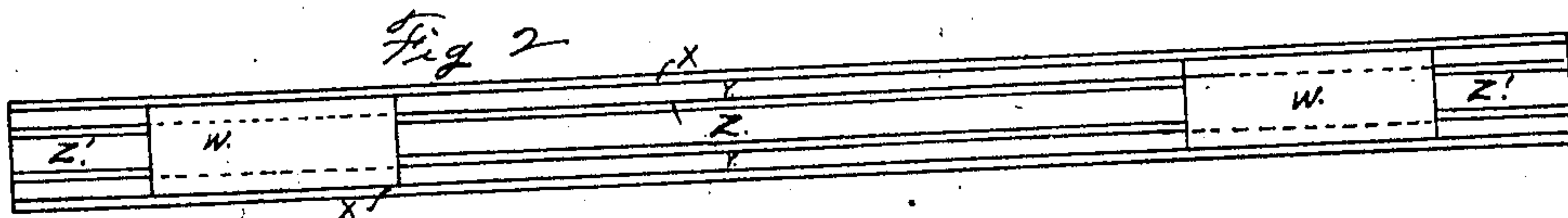
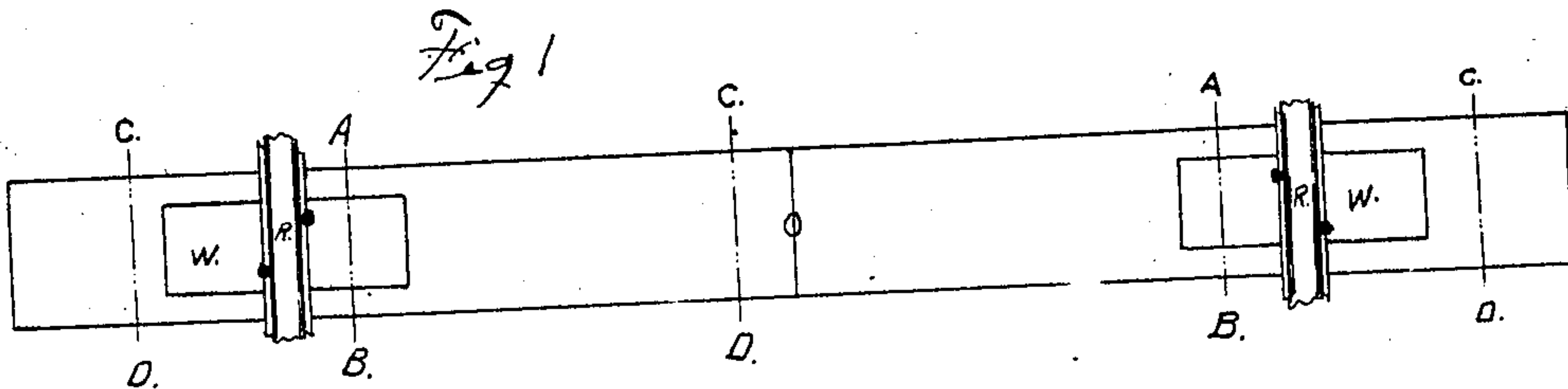
No. 885,555.

PATENTED APR. 21, 1908.

S. C. NEWLIN & G. W. WILLIAMS.

RAILWAY TIE.

APPLICATION FILED APR. 19, 1907.



WITNESSES.

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RAILWAY-TIE.

No. 885,555.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed April 19, 1907. Serial No. 369,189.

To all whom it may concern:

Be it known that we, STANLEY C. NEWLIN and GEORGE W. WILLIAMS, citizens of the United States of America, and residents of Anderson, Madison county, and State of Indiana, have jointly invented the Hoosier Railway-Tie, of which the following is the specification.

Figure 1 shows the Hoosier railway tie complete with the rails resting upon it.

Fig. 2 is a plan view of the skeleton of the tie before the cement has been applied. X is a piece of wood one inch thick, six inches wide and as long as necessary for ties of different lengths to accommodate two or more rails. W is a piece of hard wood four by five inches square and fourteen inches long in standard ties (for the rails to rest upon) to different lengths as may be necessary to accommodate two or more rails at switches. Z is a piece of wood, two by three inches square, by three feet and nine inches long connecting pieces W in standard ties. Z' is a piece of wood two by three inches square by seven and one half inches long in standard ties extending from the outer end of W to the end of ties or longer or shorter for different length ties. Y designates two pieces of wood one inch thick by one and one half inches wide extending the full length of the ties.

Fig. 3 is a side view of the skeleton of the Hoosier tie before the cement is applied to the cavities and to the external surfaces.

Fig. 4 shows a section through the tie at the resting place of the rails W being the piece of hardwood, four by five inches square mentioned above, to which rails are spiked by ordinary iron railroad spikes.

Fig. 5 shows a section through the tie at its middle portion. P is cement which fills all cavities and envelops the tie in its entirety except upon the face of W which is left bare to accommodate the rails.

All wooden parts are to be placed in direct

apposition and securely fastened to each other by firmly nailing them together. All cavities except an interval O one sixteenth inch wide in the middle of the tie and all external surfaces except O one sixteenth inch wide in middle of tie should be covered with cement; this space O is left vacant of cement in order to accommodate the upward and downward bending of the tie while trains of cars are passing over them.

It will be seen that by the conjunction or combination of the wooden frame composed of a wooden base X and superposed bars or strips Y, Y, Z, spaced apart, and the cement covering or envelop; we produce a tie which is cheap and light, but strong and rigid, and possesses great durability.

The tie is much stronger and more rigid than one having a single wooden bar whose cross section equals the aggregate cross section of the several smaller parallel bars, X, Y, Y, and Z, for the reason that the latter are spaced apart and secured together so that they form a skeleton frame.

What we claim is—

1. The improved tie composed of a wooden base X, and three wooden strips Y, Y and Z, secured thereon and spaced from each other laterally, the central strip Z being the larger, and an inclosing body of cement applied as shown and described.

2. The improved tie composed of a wooden skeleton formed of a base piece, parallel strips Y, Y and Z, secured thereon and spaced apart laterally, and rail-supporting wooden blocks W resting on the base and the outside strips Y, and the body of cement covering all the frame, save the said blocks, as shown and described.

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