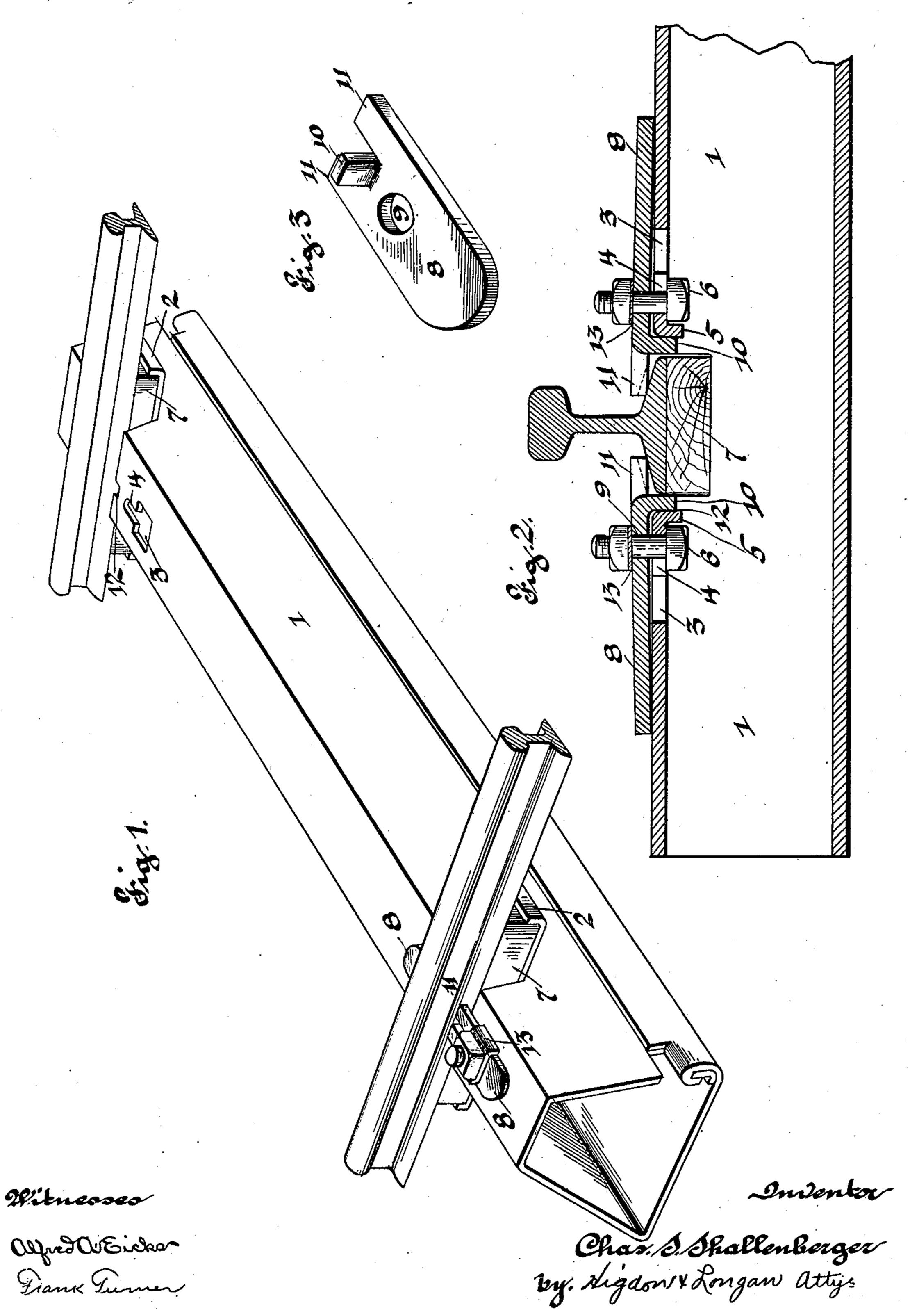
## C. S. SHALLENBERGER. RAIL FASTENER FOR METALLIC TIES.

(Application filed Feb. 18, 1902.)

(No Model.).



## United States Patent Office.

CHARLES S. SHALLENBERGER, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO EDWARD S. MARSHALL, OF ST. LOUIS, MISSOURI.

## RAIL-FASTENER FOR METALLIC TIES.

SPECIFICATION forming part of Letters Patent No. 710,371, dated September 30, 1902.

Original application filed August 19,1901, Serial No. 72,537. Divided and this application filed February 18, 1902. Serial No. 94,658. (No model.)

To all whom it may concern:

Be it known that I, Charles S. Shallen-Berger, of the city of Milwaukee, Milwaukee county, State of Wisconsin, have invented certain new and useful Improvements in Rail-Fasteners for Metallic Ties, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to a rail-fastener for metallic ties; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and

claimed.

The object of my invention is to provide an improved rail-fastener which shall be cheap and simple in construction and very efficient in use.

In the drawings, Figure 1 is a perspective view showing my improved rail-fastener in use. Fig. 2 is a section through the parts at one end of the tie shown in Fig. 1. Fig. 3 is a detail perspective view of the fastener detached and inverted.

My improved rail-fastener is designed for use especially in connection with the tie shown and described in my concurrent application filed August 19, 1901, Serial No. 72,537, wherein the tie is formed of a sheet of metal 1, cut

to form two tongues 2 near each end. Boltholes 3 are also formed in the tie adjacent to said tongues, and a slot 4 intercepts said boltholes. A lug 5 is also produced by bending the metal downwardly adjacent said slot 4, the purpose of which is to prevent the bolt-

head 6 from turning.

7 indicates a rail-seat, preferably of wood, but it may be of any desired material and which is located upon the tongues 2. Bolts are passed through the openings 3 and moved toward the rail until they occupy the slots 4, as shown in Fig. 2. The fasteners 8 are provided with an opening 9, through which the bolt is passed, and an integral tongue 10 is formed at one end by bending downwardly the central portion of the metal, and thereby leaving the two remaining fingers 11 in normal position, with the said tongue between

In operation the fastener S is placed in position, with its fingers 11 bearing upon the

base of the rail and with its depending tongue 10 received within an additional hole 12, which was previously formed in the top of the tie by bending downwardly the lug 5 in the 55 manner described. Then the usual nuts and nut-locks are placed upon the bolt and secured in position, thereby holding all the parts in a very safe manner. The said tongue 10 will prevent the fastener 8 from becoming 60 displaced by vibration and will also prevent the fastener from turning upon the bolt which holds it.

The fingers 11 may be beveled, as indicated in dotted lines in Fig. 2, for the purpose of 65 more closely fitting the base of the rail.

13 indicates the usual nut-lock.

What I claim is—

1. The improved rail-fastener 8, provided with a bolt-opening 9, and an integral central 70 tongue 10 formed at one end by bending downwardly the central portion of the metal and thereby leaving two fingers 11 one at each side of said tongue alined with the body of the fastener, substantially as specified.

75

2. The combination with the sheet-metal tie 1, having the two tongues 2 near each end, and having bolt-holes 3 adjacent to said tongues, and having slots 4 leading from said bolt-holes, and having the lugs 5 produced by 80 bending the metal downwardly adjacent the slots 4 to lock the bolt-heads against turning, and having the wooden rail-seats 7 upon the tongues 2; of metallic fasteners 8 provided with the bolt-openings 9, and having the in- 85 tegral tongues 10 formed by bending the central portions downwardly, thereby leaving the fingers 11 to engage the flanges of the rail, said tongues 10 being inserted into the openings formed by bending down the lugs 5; 90 bolts inserted through said bolt-holes 3 in the tie, and slid into the slots 4, and inserted through the bolt-openings 9 in the fasteners; and nuts upon said bolts; substantially as specified.

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

## CHARLES S. SHALLENBERGER.

Witnesses:

ALFRED A. EICKS, JOHN C. HIGDON.