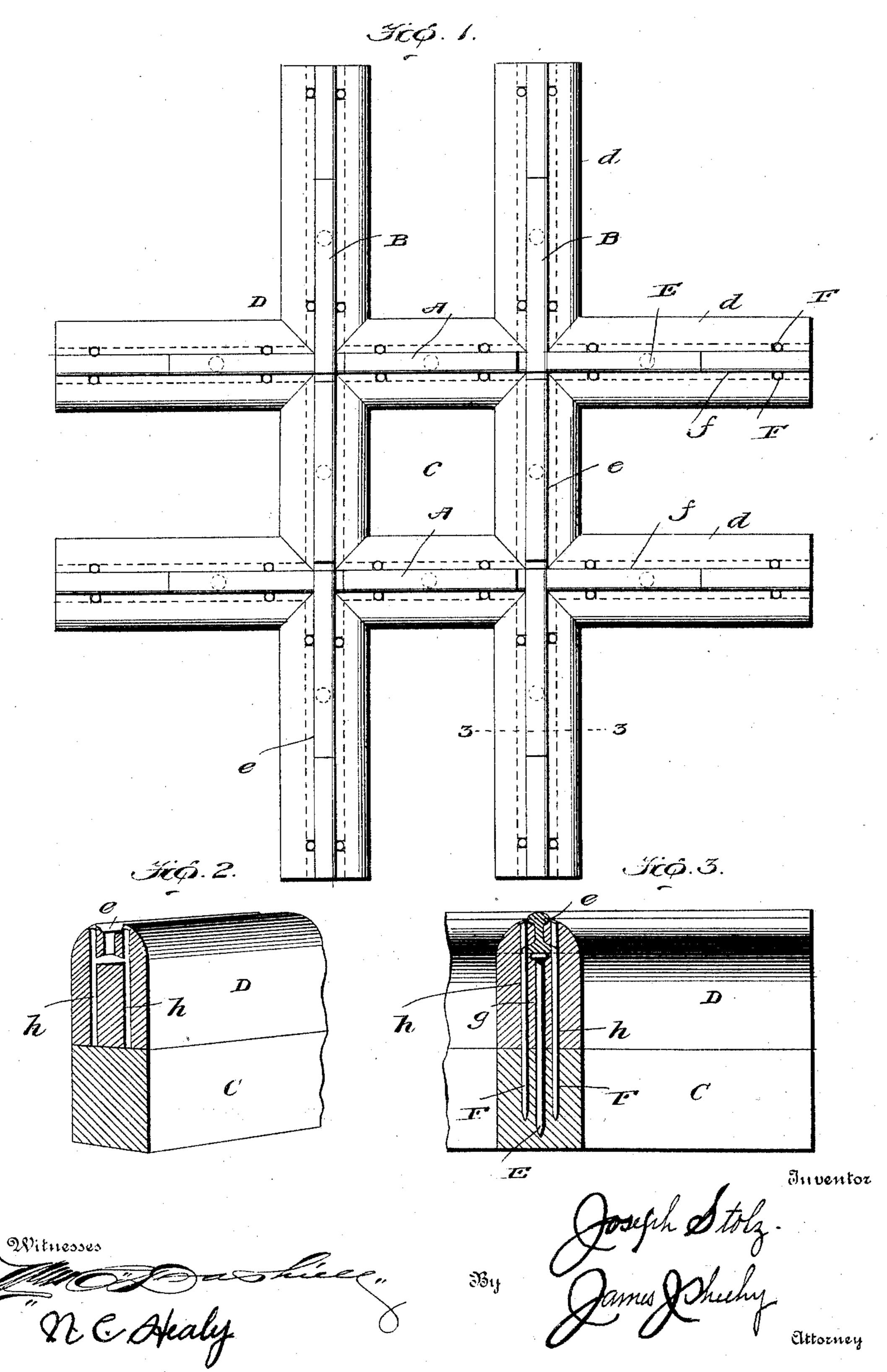
J. STOLZ. BOLTLESS CROSSING. APPLICATION FILED SEPT. 15, 1904.



UNITED STATES PATENT OFFICE.

JOSEPH STOLZ, OF NEW ORLEANS, LOUISIANA.

BOLTLESS CROSSING.

SPECIFICATION forming part of Letters Patent No. 784,189, dated March 7, 1905.

Application filed September 15, 1904. Serial No. 224,623.

To all whom it may concern:

Be it known that I, Joseph Stolz, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, bave invented new and useful Improvements in Railway-Crossings, of which the following is a specification.

My invention pertains to railway-crossings, and its novelty, utility, and practical advantages will be fully understood from the following description and claims when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view illustrating my novel crossing as the same appears when in use. Fig. 2 is a detail broken section illustrative of a part of the crossing as the said part appears precedent to the placing and securing of a rail therein, and Fig. 3 is a detail transverse section taken in the plane indicated by the line 3 3 of Fig. 1.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A A and B B are the rails of intersecting railways. The said rails may be and preferably are of the conventional type, except that they are provided in the edges of their bases a at intervals in their lengths with notches b for a purpose presently set forth.

C is a foundation, preferably though not essentially of wood, disposed below the rails A and B at the intersection of the railways.

D is the body of my novel crossing, which is cast or otherwise suitably formed in one piece of metal, preferably steel. E E are spikes connecting the said body D and the foundation C, and F F are spikes connecting the body, rails, and foundation, and arranged to hold the rails against creeping or casual endwise movement.

The body D preferably comprises a rectangular central portion c and arms d, extending from said portion c, and it is provided in the upper sides of the portion c and arms d with alined channels e and f of a shape in cross-section to snugly receive the bases, the webs, and the lower portions of the heads of the rails. Said body is also provided in the portion c and arms d with vertical bores g, which

extend downwardly from the bottoms of the channels, and are designed to receive the spikes E, and it is further provided with vertical bores h, which extend downwardly from its upper portion at opposite sides of the chanter of the and are designed to receive the spikes F.

As best shown in Fig. 3, the spikes E serve to connect the body D and the foundation C, while the spikes F connect the body and foundation and serve the additional function of 60 holding the rails against creeping or casual endwise movement. This latter is due to the fact that the last-mentioned spikes extend through the notches b in the rail-bases a, as shown by dotted lines in Fig. 1 and full lines 65 in Fig. 3.

In the practical use of my novel crossing the body D is spiked to the foundation C and the rails are placed endwise in the channels of the body, after which the spikes F are driven 7° through the body and rail-bases and into the foundation. With this done, the body D will house and support the rails and practically preclude accidents incident to trains passing the crossing. It will also be observed that 75 the support which the body D lends to the rails is continuous and unbroken except at the points h, where the body is kerfed for the free passage of wheel-flanges, and, further, that the crossing includes no bolts, joints, or 80 other parts such as are likely to be worked loose by the shock and jar incident to the passing of trains. In this latter connection it will be noticed that the rails rest over the spikes E, the heads of which are countersunk in the 85 bottoms of the channels, Fig. 3, and consequently there is no liability of the said spikes working loose.

Notwithstanding the material practical advantages of which my novel crossing is possessed, it will be noted that the same is inexpensive and is calculated to facilitate rather than render difficult the construction of a rail-way-crossing.

I have entered into a detailed description of 95 the construction and relative arrangement of the parts included in the present and preferred embodiment of my invention in order to impart a definite understanding of the said embodiment. I do not desire, however, to be 100

understood as confining myself to the said specific construction and relative arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the 5 scope of my invention as claimed.

Having described my invention, what I claim, and desire to secure by Letters Patent,

is-

1. In a railway-crossing, the combination of 10 the rails of intersecting railways, and a body formed in one piece and having channels shaped in conformity to and snugly receiving the bases, the webs and the lower portions of

the heads of the rails.

2. In a railway-crossing, the combination of the rails of intersecting railways; said rails having notches in the edges of their bases at intervals in their lengths, a foundation, a body arranged on the foundation and having chan-20 nels shaped in conformity to and snugly receiving the bases, the webs and the lower portions of the heads of the rails, and also having vertical bores disposed at opposite sides of the channels, and spikes extending through 25 said bores and the notches in the rail-bases and into the foundation.

3. In a railway-crossing, the combination of the rails of intersecting railways, a foundation, a body arranged on the foundation and hav-30 ing channels shaped in conformity to and snugly receiving the bases, the webs and the lower portions of the heads of the rails, and

also having vertical bores extending downwardly from the bottoms of the channels, and spikes extending through said bores and into 35 the foundation.

4. In a railway-crossing, the combination of the rails of intersecting railways; said rails having notches in the edges of their bases at intervals in their lengths, a foundation, a body 40 arranged on the foundation and having channels shaped in conformity to and snugly receiving the rails and also having vertical bores disposed at opposite sides of the channels, and vertical bores extending downwardly from 45 the bottoms of the channels, spikes extending through the first-mentioned bores and the notches in the rails and into the foundation, and spikes extending through the secondmentioned bores and into the foundation.

5. The combination of a foundation, a rail, a body having a channel shaped in conformity to and receiving the lower portion of the rail and also having a bore or aperture extending downwardly from the bottom of the channel, 55 and a connecting device disposed in said bore

or aperture and the foundation.

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

JOSEPH STOLZ.

Witnesses:

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Edward Töltzer, PAUL BACHELIER.