

(No Model.)

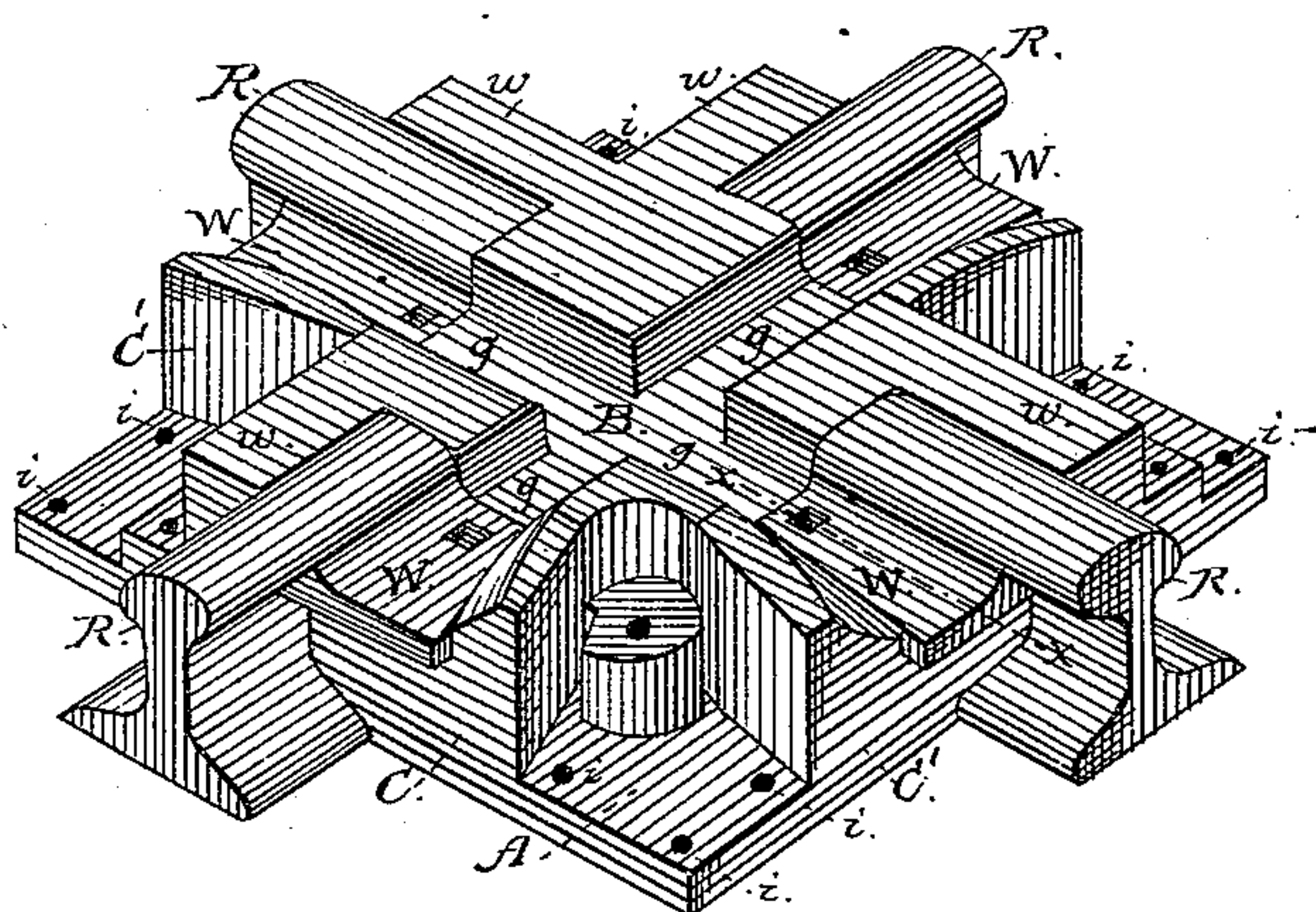
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D. C. PIERCE.  
RAILWAY CROSSING.

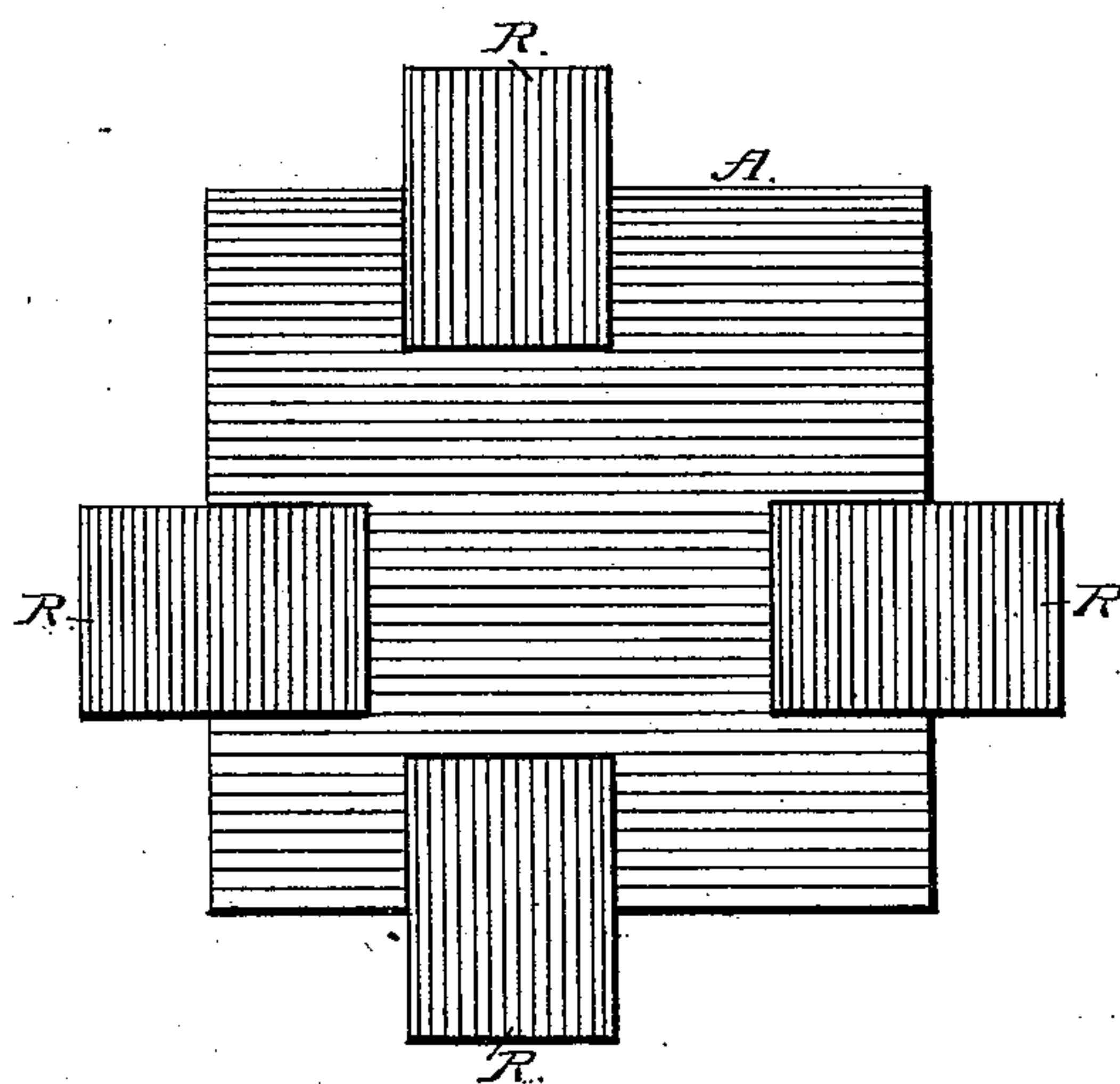
No. 255,811.

Patented Apr. 4, 1882.

*Fig. 1.*



*Fig. 2.*



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H. W. Howard  
J. B. Houghton.

Inventor;  
Denison C. Pierce,  
By his Attorneys,  
Stansbury & Munro

(No Model.)

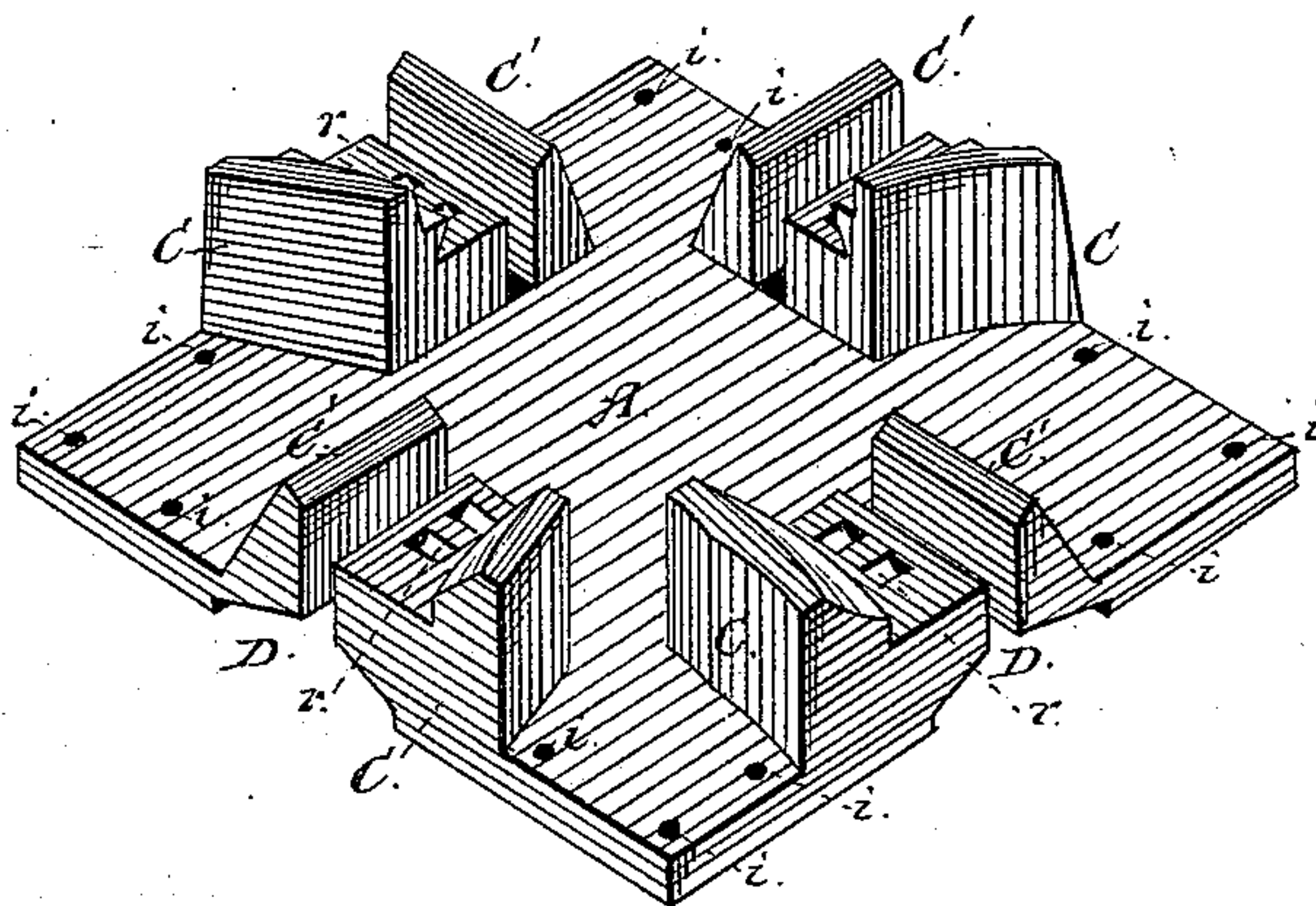
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D. C. PIERCE.  
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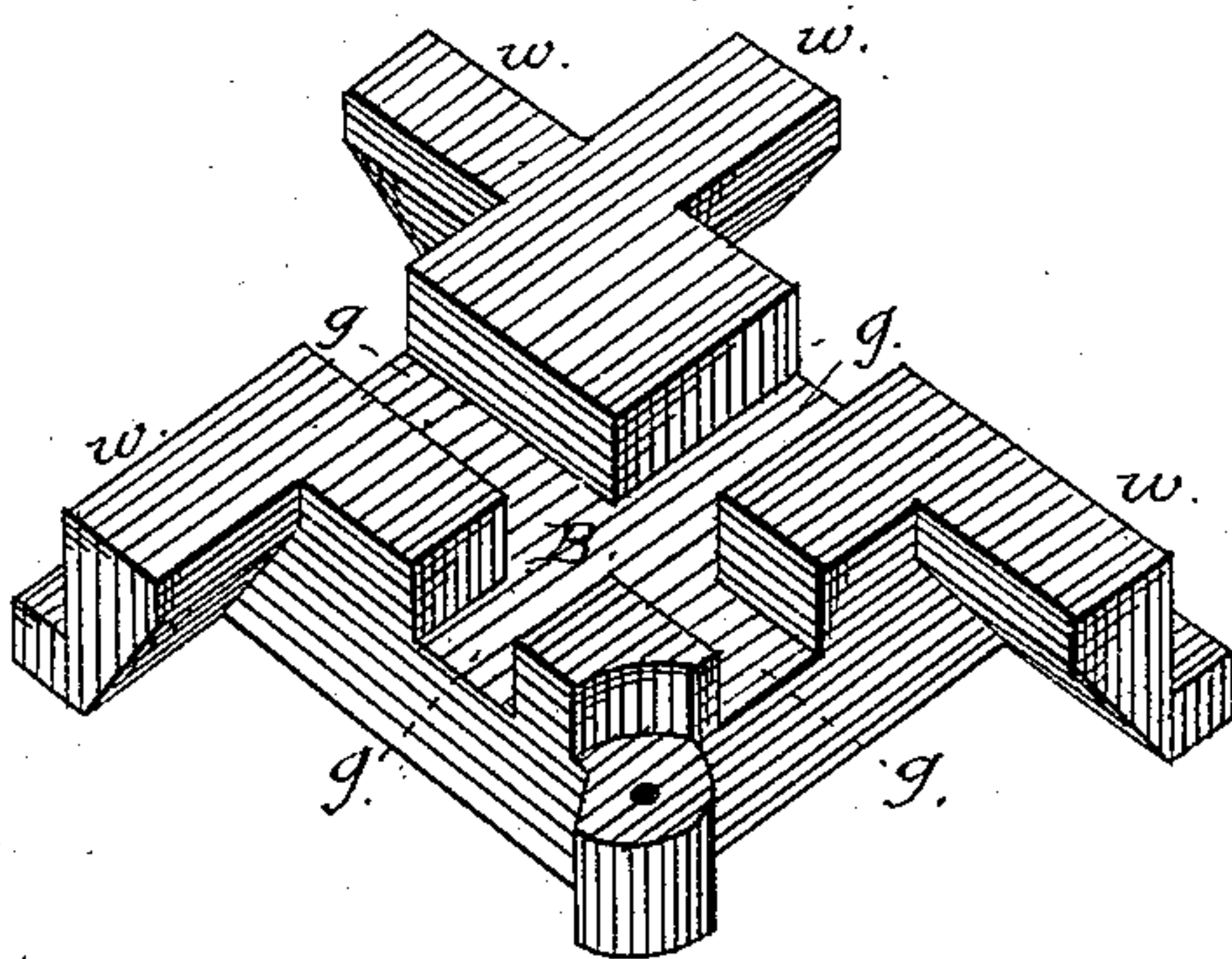
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*Fig. 3.*



*Fig. 4.*



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3 Sheets—Sheet 3.

D. C. PIERCE.  
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Fig. 5.

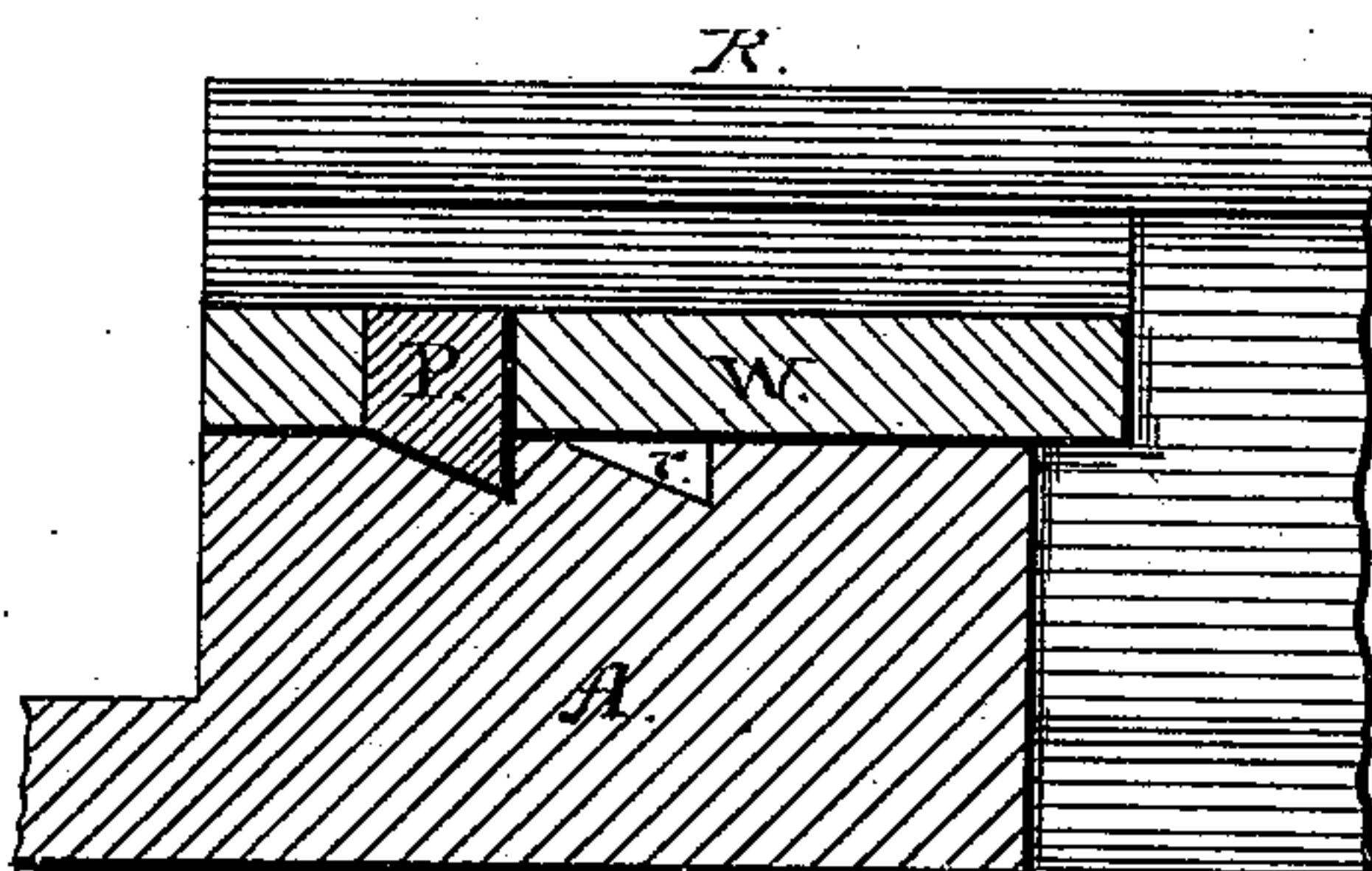


Fig. 6.

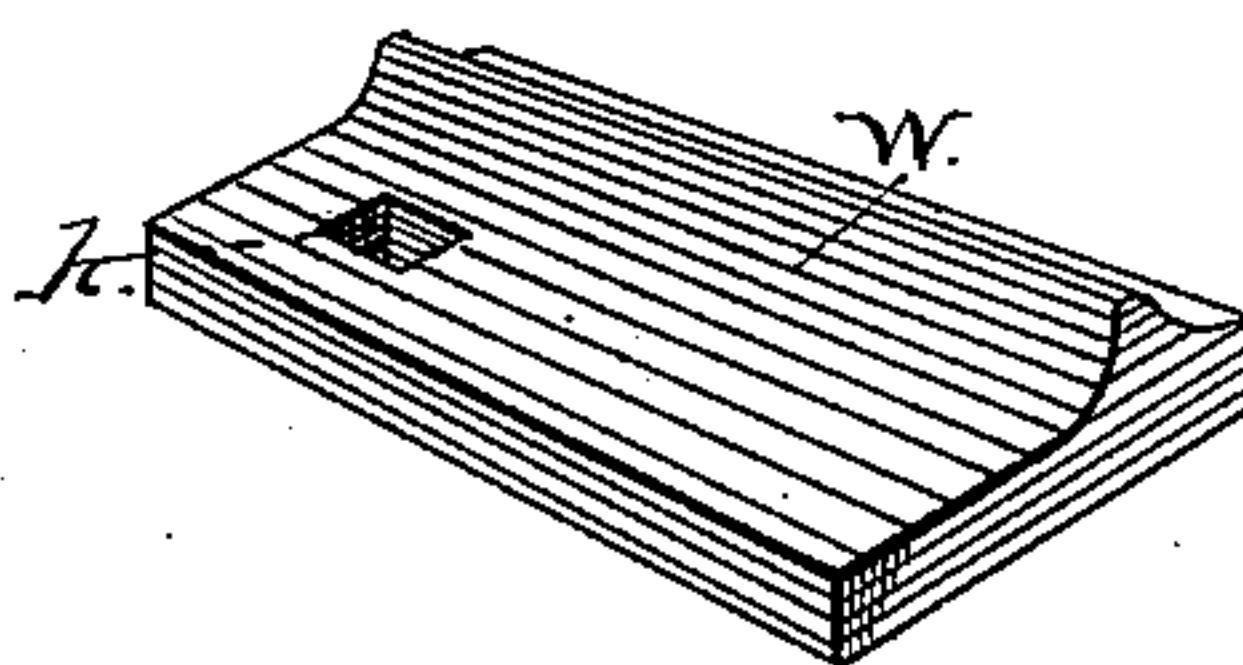
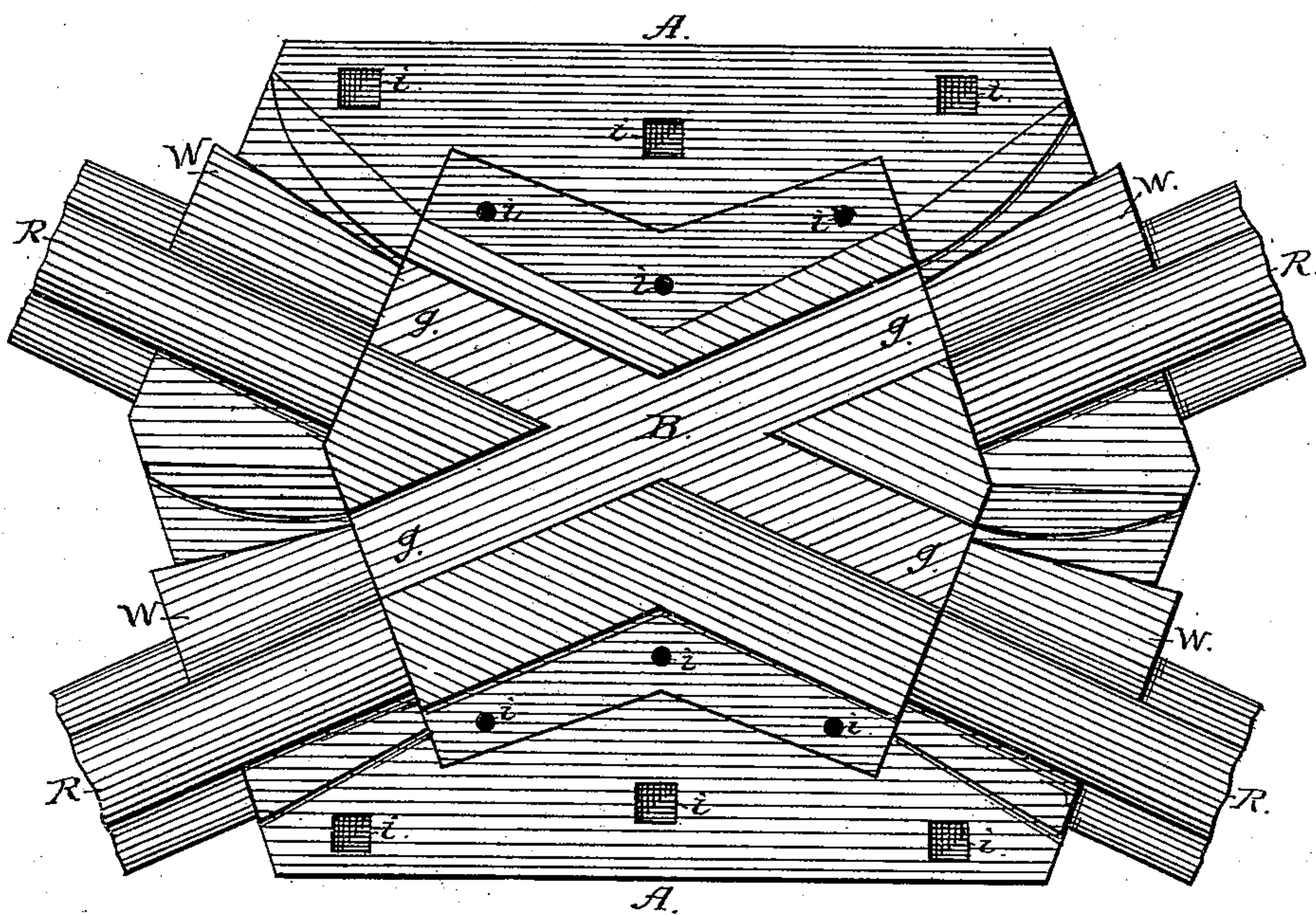


Fig. 7.



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# UNITED STATES PATENT OFFICE.

DENISON C. PIERCE, OF CHICAGO, ILLINOIS.

## RAILWAY-CROSSING.

SPECIFICATION forming part of Letters Patent No. 255,811, dated April 4, 1882.

Application filed August 2, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, DENISON C. PIERCE, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Railway-Crossings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of my improved corner-piece for railway-crossings with the plate, blocks, rails, and wedges in place. This figure represents the invention applied to a rectangular crossing. Fig. 2 is a bottom view of the plate with the ends of the rails in place. Fig. 3 is a perspective view of the top of the plate with the block, rails, and wedges removed. Fig. 4 is a perspective view of the block. Fig. 5 is a vertical section through the center of one of the wedges. Fig. 6 is a perspective view of one of the wedges. Fig. 7 is a top view or plan of a plate and block modified in form from that shown in Fig. 1 to adapt it to an oblique crossing.

The same letter indicates the same part wherever it occurs in the drawings.

The object of my invention is to provide a cheap, convenient, and secure device for attaching the rails of railways to the ties at the crossings or turn-outs; and it consists in forming the attachment by means of a cast bottom plate of the form shown in Fig. 3, in combination with a block adapted to be received by the plate and form with it a clamp for the ends of the rails by the aid of a ratchet-wedge of peculiar form, the bottom of the rails being flush with the bottom of the plate, and the whole resting on the top of the ties and held to them by spikes or bolts without requiring any recesses to be cut in the ties for its reception, all as hereinafter more specifically set forth.

In the drawings, A marks the bottom plate, cast in the form shown in Fig. 3, flat on the bottom, as shown in Fig. 2, and provided with the lugs C C', between which the ends of rails R are received and held fast by the wedges W, adapted in form to support the under side of the rail-head, as shown in Fig. 1. The wedges W are provided with holes h, Fig. 6, for the

reception of ratchet-pins P, which enter notches r of a ratchet cut in the upper face of lug C' to receive them. By this arrangement the wedges are held securely in place. The plate A is provided with recesses beneath lugs C C' for the reception of the ends of the rails, as shown in Fig. 2, and with holes i for the spikes which fasten the plate to the ties.

A cast block, B, (shown in Fig. 4,) is adapted in form to fit and fill the space in the middle of the plate A. It has grooves g for the passage of the wheel flanges and wings w, which aid in supporting the lugs and rails. The rail ends abut against this block, as shown in Fig. 1, in which it is represented in place on the plate and the rails wedged to the lugs. The wings w are not indispensable, but contribute to the solidity of the structure and I prefer to make the block with them.

The plate and block shown in Fig. 7 do not differ in principle of construction from those shown in the other figures. That figure is intended to illustrate the application of the invention to oblique crossings, the other form being adapted to rectangular crossings.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The plate A, having the lugs C C' and the recesses D for the reception and attachment of the rails, as set forth.
2. The combination, with the plate A, of the block B, constructed as described, and operating in the manner and for the purpose stated.
3. The combination of the plate A, block B, wedges W, and rails R, in the manner and for the purpose specified.
4. The combination, with the lugs C, provided with the ratchet-notches r, of the wedges W and pins P, all as and for the purpose described.
5. A corner-plate for a railway-crossing in which the rails abut against a central block and are supported and held between lugs by ratcheted wedges, substantially in the manner set forth and shown.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

DENISON C. PIERCE.

Witnesses:

HENRY B. MUNN,  
CHAS. F. STANSBURY.