

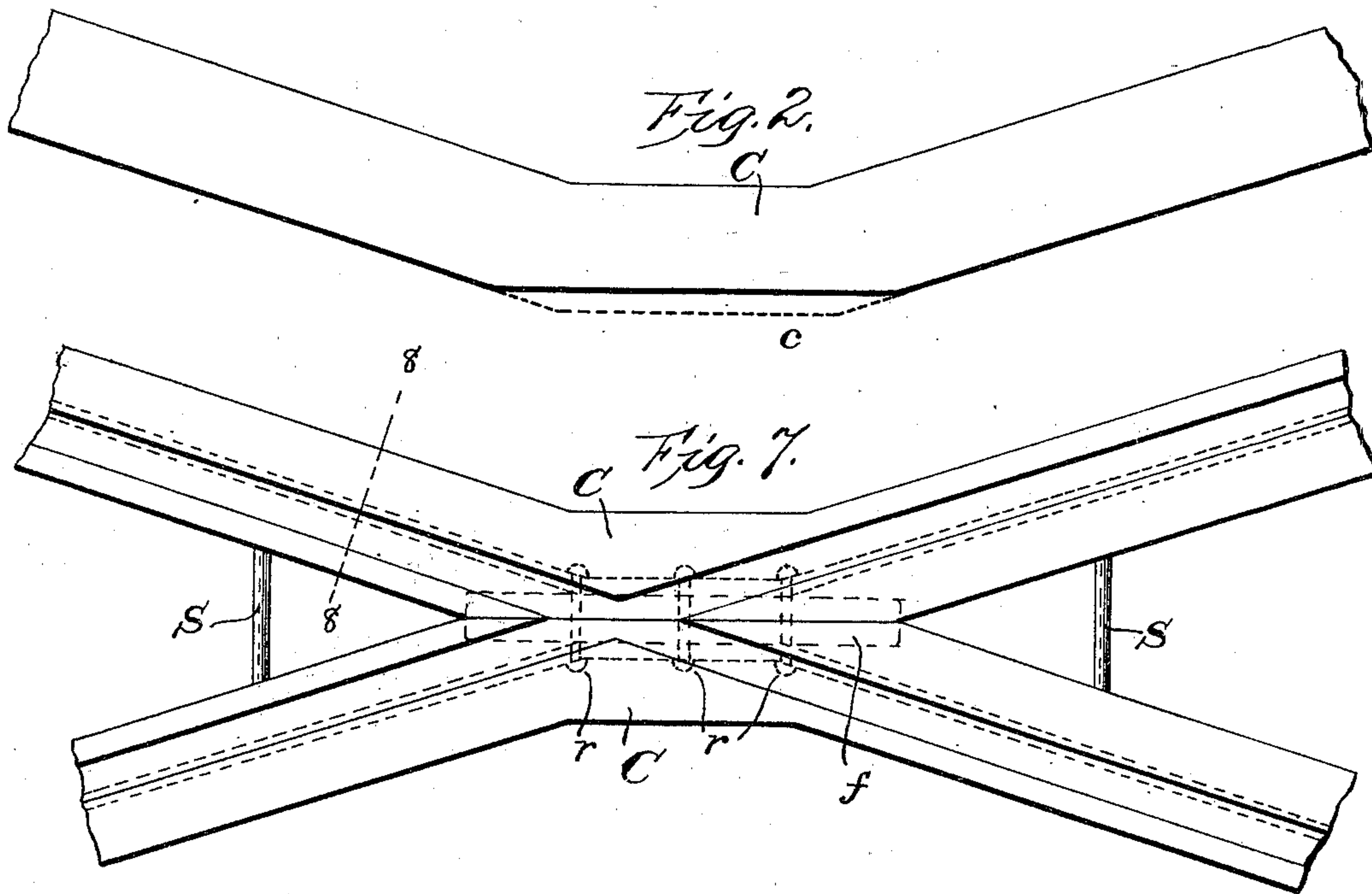
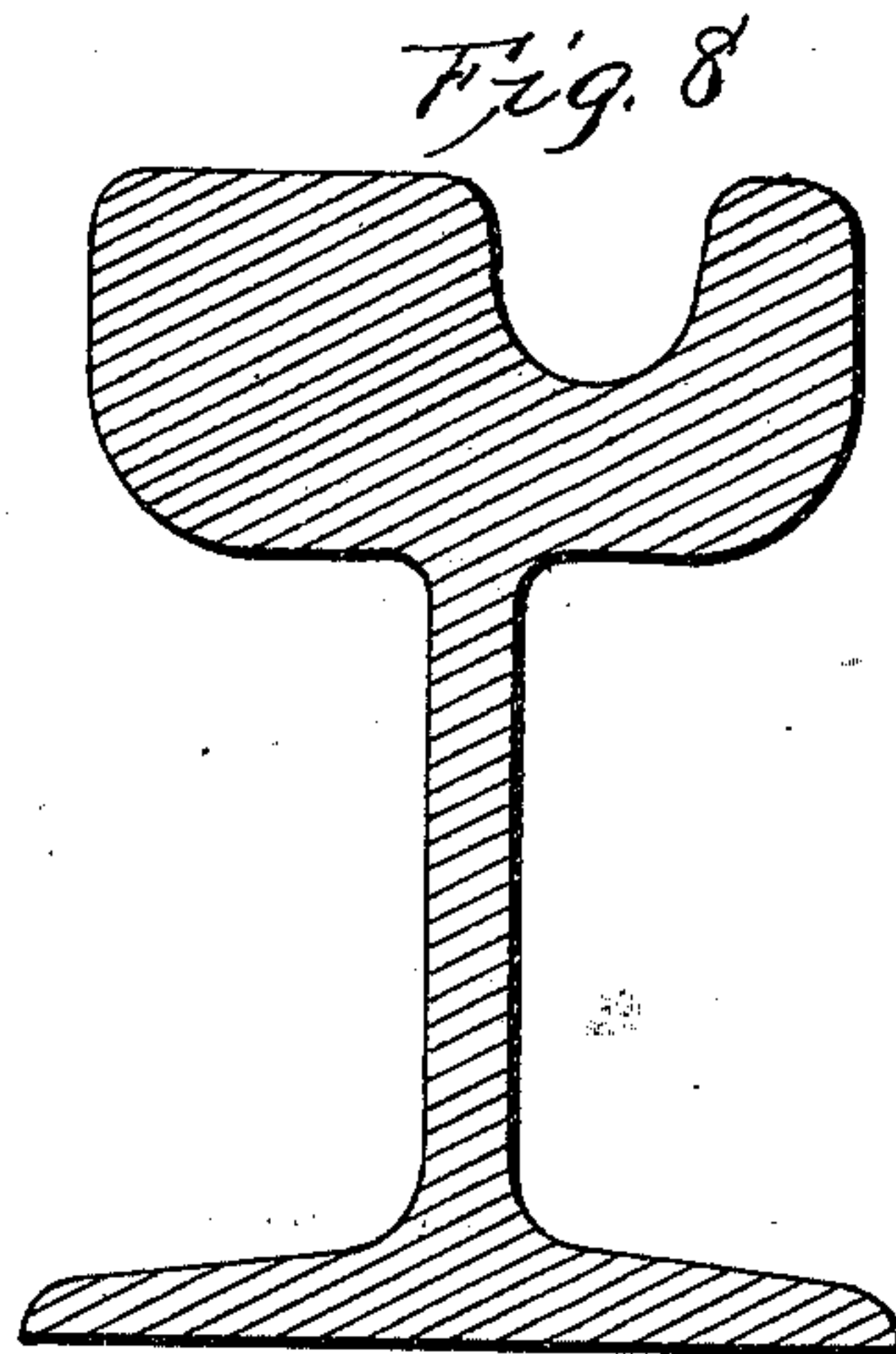
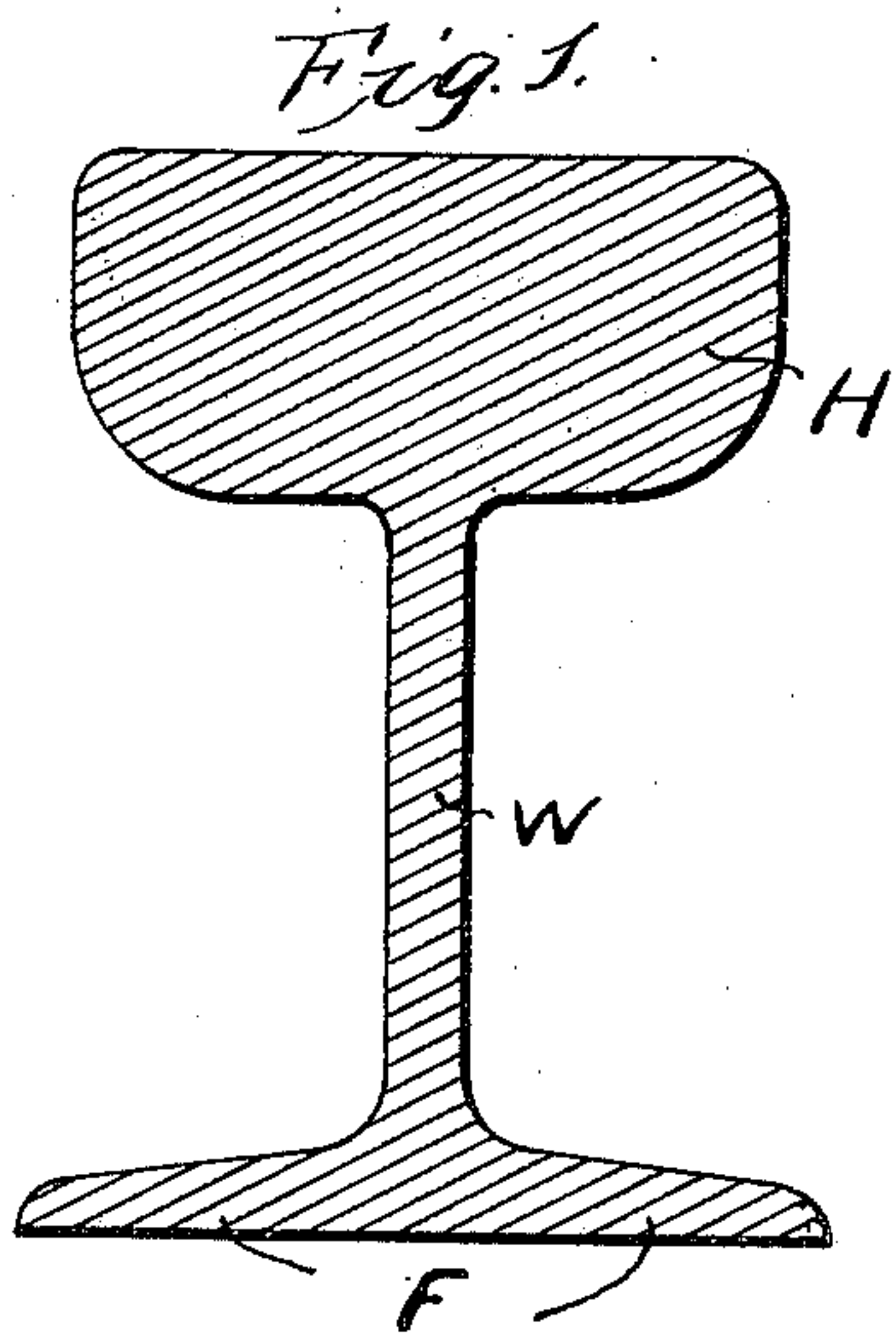
(No Model.)

2 Sheets—Sheet 1.

P. G. STORMER.
RAILROAD FROG.

No. 554,320.

Patented Feb. 11, 1896.



Witnesses:
Gen. Mott
Milton J. Constable.

Inventor:
Peter G. Stormer
per Warner Raymond
Attorney

(No Model.)

2 Sheets—Sheet 2.

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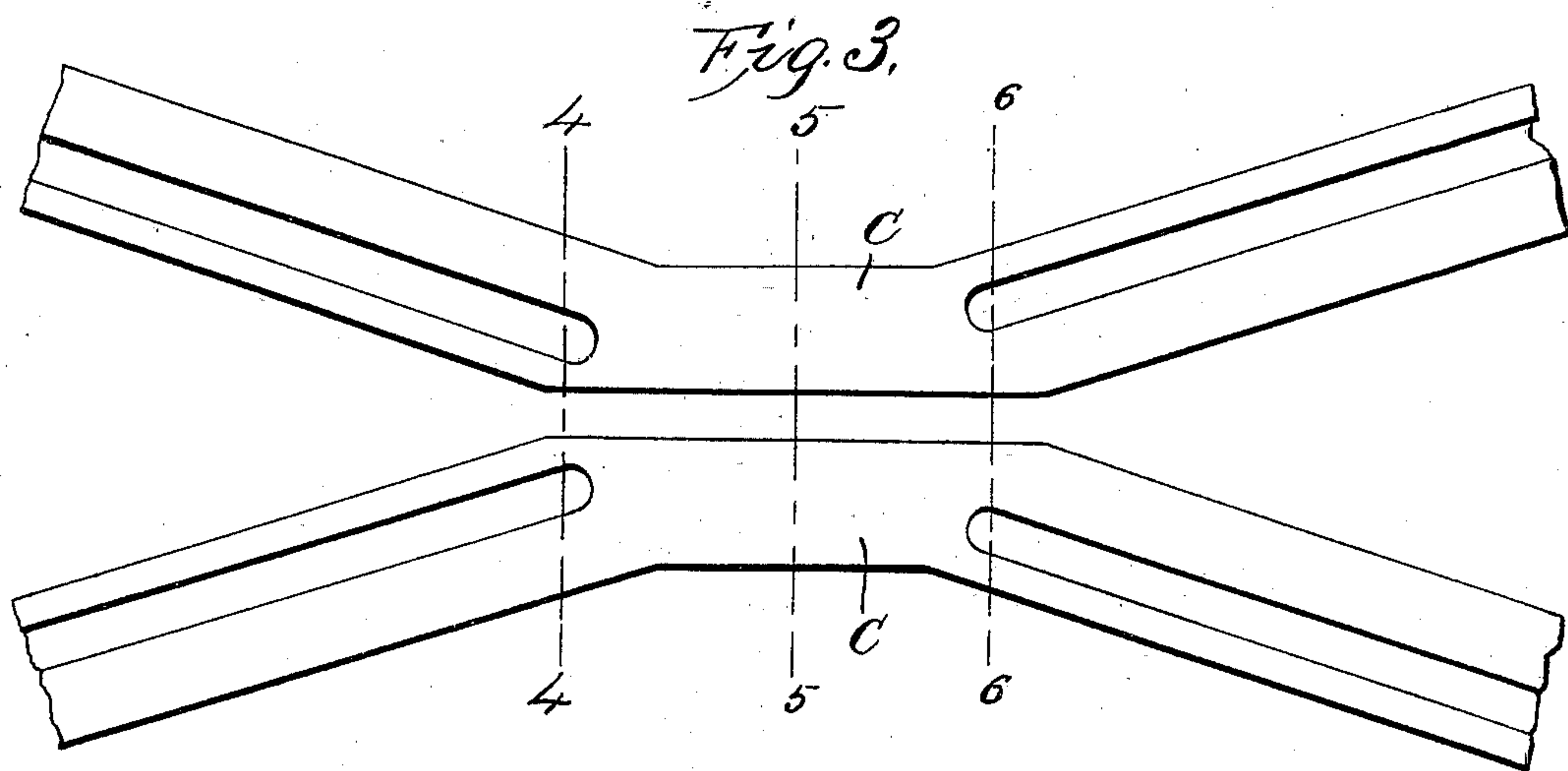


Fig. 4.

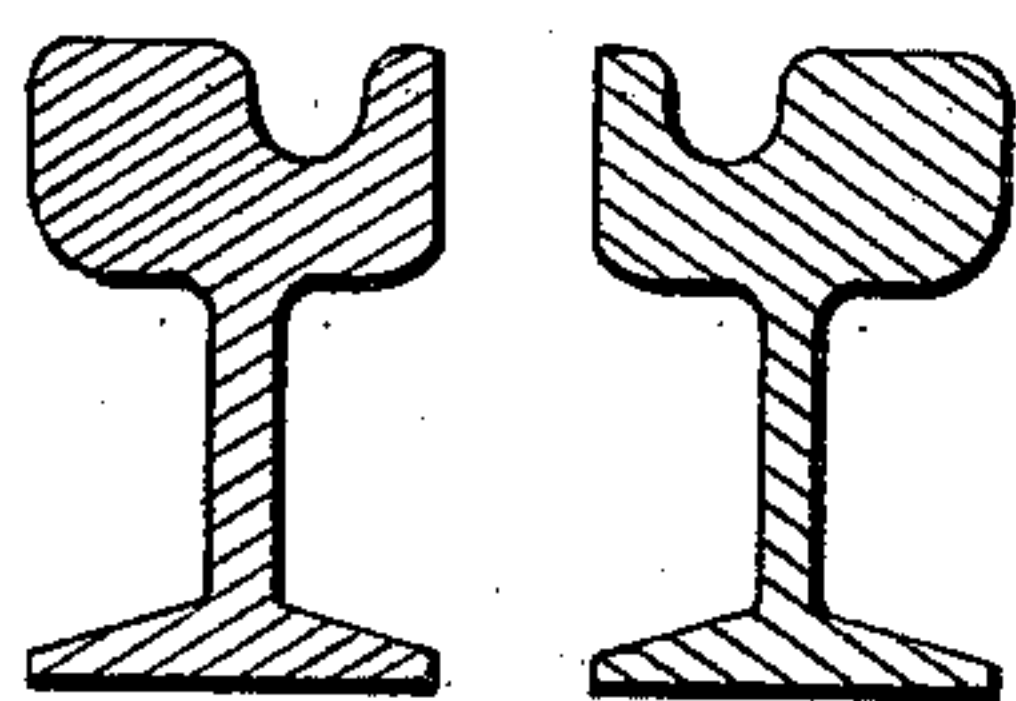


Fig. 5.

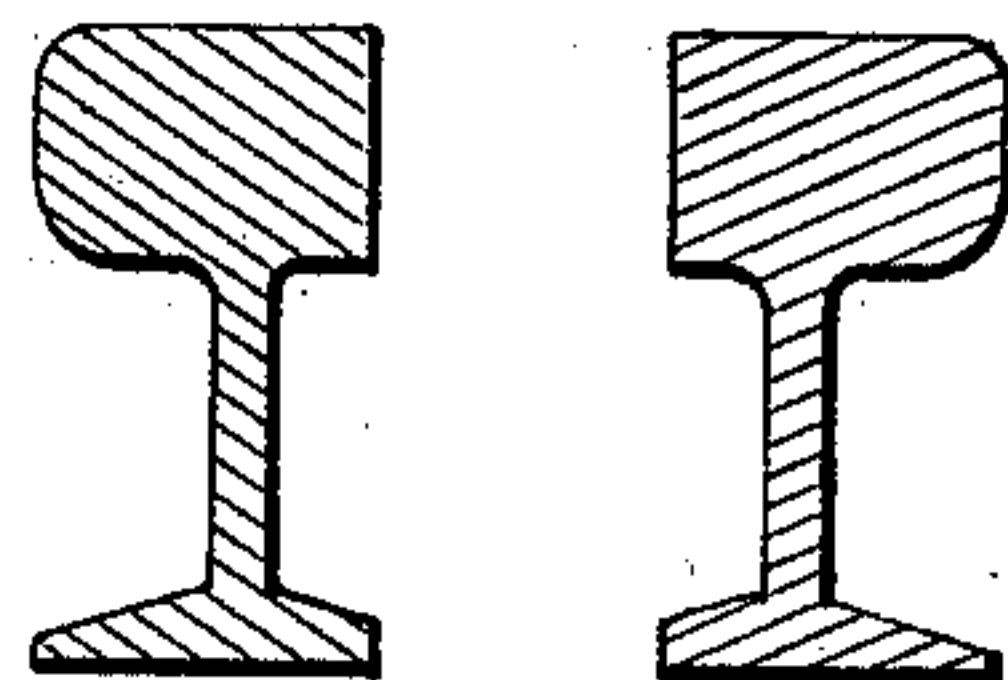
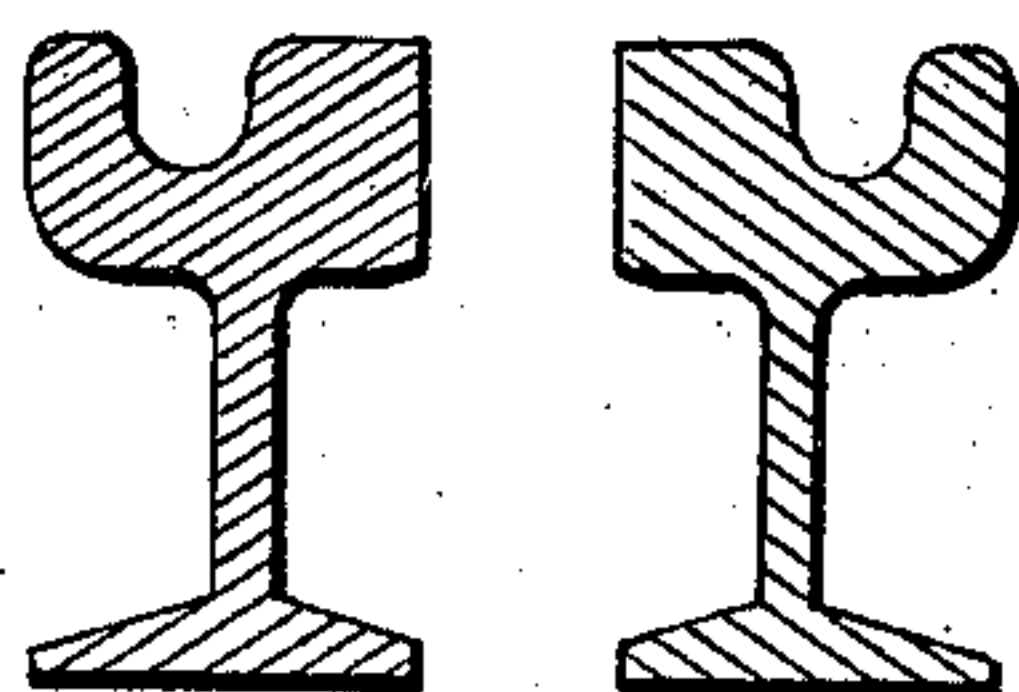


Fig. 6.



Witnesses:

George Mott
Milton J. Constable.

Inventor:

Peter G. Stormer
per *Ward Raymond*
Attorney

UNITED STATES PATENT OFFICE.

PETER G. STORMER, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE
JOHNSON COMPANY, OF SAME PLACE.

RAILROAD-FROG.

SPECIFICATION forming part of Letters Patent No. 554,320, dated February 11, 1896.

Application filed January 23, 1895. Serial No. 535,877. (No model.)

To all whom it may concern:

Be it known that I, PETER G. STORMER, of Johnstown, county of Cambria, State of Pennsylvania, have invented a new and useful Improvement in Railroad-Frogs, of which the following is a full and exact description, due reference being had to the accompanying drawings.

My invention relates to certain improvements in railway frogs and crossings and in the construction and component parts thereof.

Referring to the drawings, Figure 1 represents a sectional end view of a rail intended for use in a crossing embodying my invention. Fig. 2 represents a top view of a rail in process of preparation for the crossing. Fig. 3 is a top view of two rails of a crossing in process of construction. Figs. 4, 5, and 6 are sections, respectively, on lines 4, 5, and 6 of Fig. 3. Fig. 7 shows a top view of a completed crossing embodying my invention. Fig. 8 is a section on line 8 of Fig. 7.

I am aware that it has been customary to form frogs and crossings out of the ordinary T-rail by securing them together at the center and bending the ends outward to form the diverging rails, but where it has been desired to provide the rails with guards or grooves this has been done either by bolting a separate guard against the rail or by a large amount of cutting and fitting and, in cases, of welding separate rails together.

It is to the formation of frogs or crossings provided with grooves and guards integral with the rail itself that my invention is specially applicable.

My method of constructing these frogs or crossings is as follows: I provide in suitable lengths the rail shown in Fig. 1. This rail has a head H of the width equal to the combined width of the head, groove, and guard in the finished frog. The head is supported by the web W, the bottom of which has the customary flanges, F, the whole being symmetrical about a vertical axis through the two.

To form a crossing, I take two pieces of this rail, of suitable length, and bend them, as shown in Figs. 2 and 3, so that when the central portions C are secured together the arms

shall diverge at the proper angles. If desired, a portion of the center C may be machined off, as at c, Fig. 2, to insure a more perfect fit between the two rails than would be possible with the surface produced in rolling the rail. These rails are then secured together by bolts or rivets r, and the diverging arms may be further stiffened by stay-bolts S. The grooves may be formed either by planing or otherwise machining after the crossing is otherwise completed, the two grooves being then planed through from end to end, passing from one rail to the other at the crossing-point, or they may be formed in each rail separately. If they be formed in each rail separately, they may be formed in each end before bending, leaving the center C uncut, as in Fig. 3, until afterward, or they may be formed after the rails are bent and before the crossing is assembled. For the purpose of further stiffening the joint between the two rails, I may insert a chock or filler f between them at the central portion C.

It will be seen that I thus provide a rail upon one end of which the position of head, groove, and guard is reversed from that which they occupy at the other end, and that a frog or crossing composed of these rails is very strong and substantial and well adapted for use in connection with the guard-rails customary in curves and switches.

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

The improvement in the method of forming the component parts of railroad frogs and crossings composed of guard-rails, which consists in forming a rail-blank having a head adapted to form the head and guard in the finished structure, grooving said head throughout its length to form flangeways, and bending said blank to the desired shape, either before or after grooving.

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

PETER G. STORMER.

Witnesses:

W. E. FLUM,
WM. T. GRAY.