

(No Model.)

2 Sheets—Sheet 1.

J. SCHMIDT, Dec'd.
J. C. PENNIE, Administrator.
JOINT FOR RAILWAY RAILS.

No. 501,159.

Patented July 11, 1893.

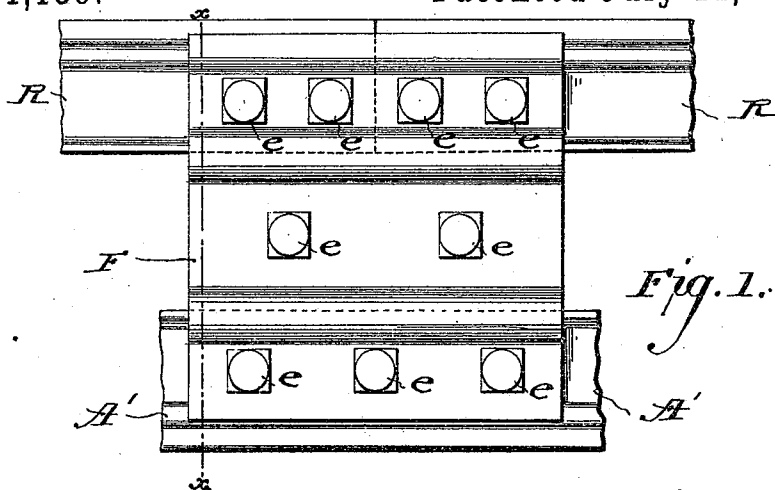


Fig. 1.

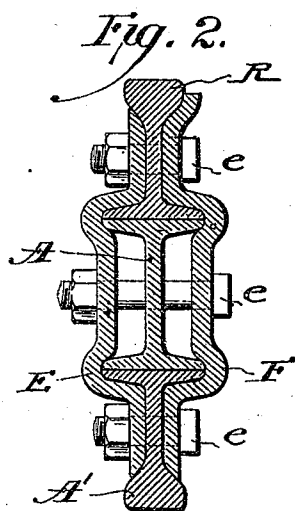


Fig. 2.

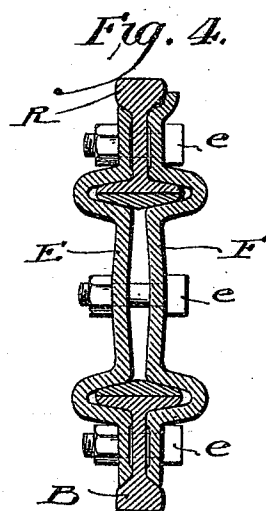


Fig. 4.

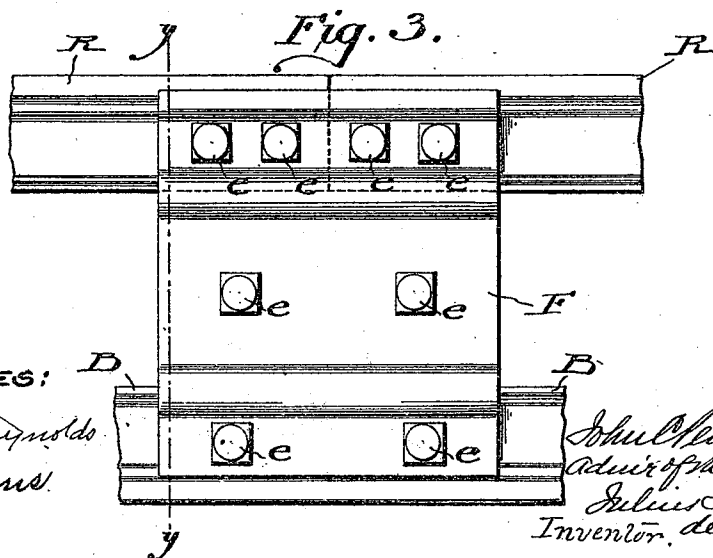


Fig. 3.

WITNESSES:

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A. M. Perkins.

John Pennie,
Admin'r of the estate of
Julius Schmidt,
Inventor, deceased.

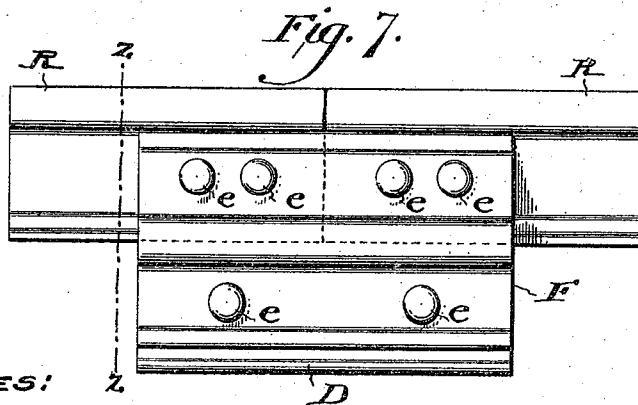
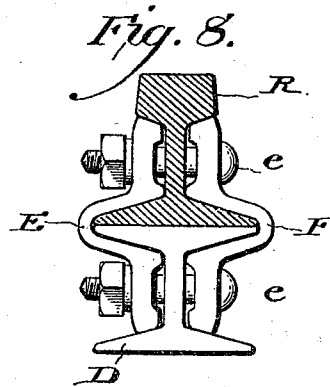
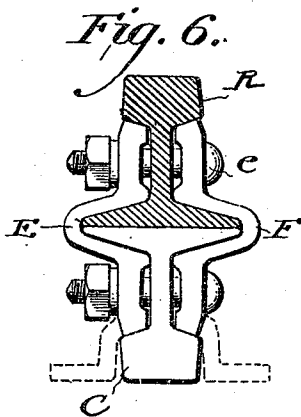
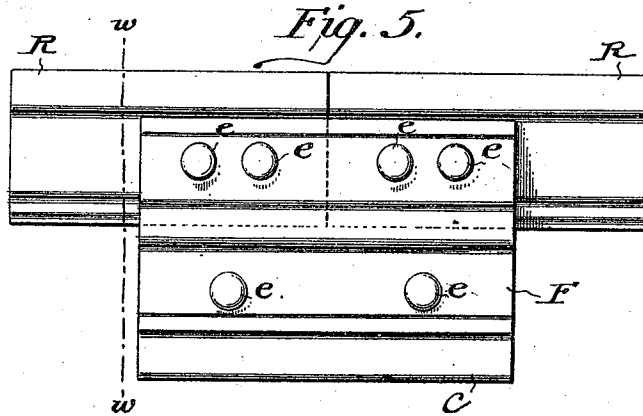
(No Model.)

2 Sheets—Sheet 2.

J. SCHMIDT, Dec'd.
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JOINT FOR RAILWAY RAILS.

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WITNESSES: z

Willis H. Reynolds
A. M. Parkins.

John Pennie
Admin of the estate of
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deceased.

UNITED STATES PATENT OFFICE.

JOHN C. PENNIE, OF WASHINGTON, DISTRICT OF COLUMBIA, ADMINISTRATOR OF JULIUS SCHMIDT, DECEASED.

JOINT FOR RAILWAY-RAILS.

SPECIFICATION forming part of Letters Patent No. 501,159, dated July 11, 1893.

Application filed August 13, 1892. Serial No. 442,962. (No model.) Patented in Germany November 13, 1888, No. 45,206.

To all whom it may concern:

Be it known that JULIUS SCHMIDT, deceased, a subject of the Emperor of Germany, late of Cologne, Prussia, German Empire, did, during his lifetime invent certain new and useful Improvements in Joints for Railway-Rails, (for which he obtained Letters Patent in Germany, dated November 13, 1888, No. 45,206,) of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention has for its object to obviate the shock arising in passing from one rail to another. To accomplish this, is placed, under the main or track rails, a girder member, having flanges and a web projecting downward from the flange portion upon which said main or track rails may directly rest; or said girder member may be at a point below said track rails, and the main rails and girder member connected together by splice plates, which engage both the main rail and girder member and are connected to both the main rail and girder member, the web of the girder member being formed continuous beneath the joint.

In the drawings, Figure 1 is a side elevation of one form of the improved joint. Fig. 2 is a section on line $x-x$, Fig. 1. Fig. 3 is a side elevation of another form of the improved joint. Fig. 4 is a section on line $y-y$, Fig. 3. Fig. 5 is a side-elevation of another form of the improved joint. Fig. 6 is a section on line $w-w$, Fig. 5. Fig. 7 is a side elevation of another form of the improved joint. Fig. 8 is a section on line $z-z$, Fig. 7.

R is the main or track rail. Throughout the drawings this rail is shown as what is known as a T-rail, but any other form of girder rail may be used with equal force and effect. Of the splice rail or main rail support, various forms are shown. In Fig. 2 it consists of the girder members, A, A', one above the other, and in Fig. 4 it consists of the girder member B, which is placed some distance below the main rail. In Fig. 6 it consists of the girder member C, upon which the rail directly rests; and in Fig. 8 it con-

sists of the girder member D, upon which the rail directly rests. The girder member D has flanges at top and bottom, the lower flanges being used to secure the girder member in the track.

E and F are splice-plates which are secured to the main rail by bolts e passing through the web of the main rail, and passing around the flanges of the main rail and of the upper portion of the girder member. In Fig. 6 these splice plates may be continued, as shown in dotted lines, to form a means of connecting the structure in the track.

The length of the main rail support may vary to the desired and necessary extent, and is to be so chosen that the said under-rail shall not permit a noticeable flexure with the greatest contemplated load.

Having now fully described the invention, what is claimed, and desired to be protected by Letters Patent, is—

1. The combination of two abutting rails, a girder member having flanges and a web projecting downward from the flanged portion and formed continuous beneath the joint, and splice bars engaging the rail and girder member and secured thereto by bolts passing through the webs of the respective members.

2. The combination of two abutting rails, a girder member having flanges upon which said rails rest and a web projecting downward from the flanged portion and formed continuous below the joint, splice bars engaging the flanges of the girder member and secured to said rails, and girder member by bolts passing through the webs of the respective members whereby the web of the girder member acts as a brace or truss to the flanged portion, resting directly under the joint of the rail.

3. The combination of two abutting rails, a girder member having flanges, and a web projecting downward from the flanged portion and formed continuous beneath the joint, said girder member having projections from its lower end and splice bars engaging the rail and girder member and secured thereto by bolts passing through the webs of the respective members, the end of said splice bars rest-

ing against the projection from the lower end of the web of the girder member.

4. The combination of two abutting rails, a girder member having flanges upon which said
5 rails rest, and a web projecting downward from the flanged portion and formed continuous below the joint, said web having projections from its lower end and splice bars engaging the flanges and resting against projection at the lower end of the girder member and secured to said rail and girder mem-

ber by bolts passing through the webs of the respective members.

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

JOHN C. PENNIE,
Administrator of the estate of Julius Schmidt, deceased.

Witnesses:

WILLIS H. REYNOLDS,
A. M. PARKINS.