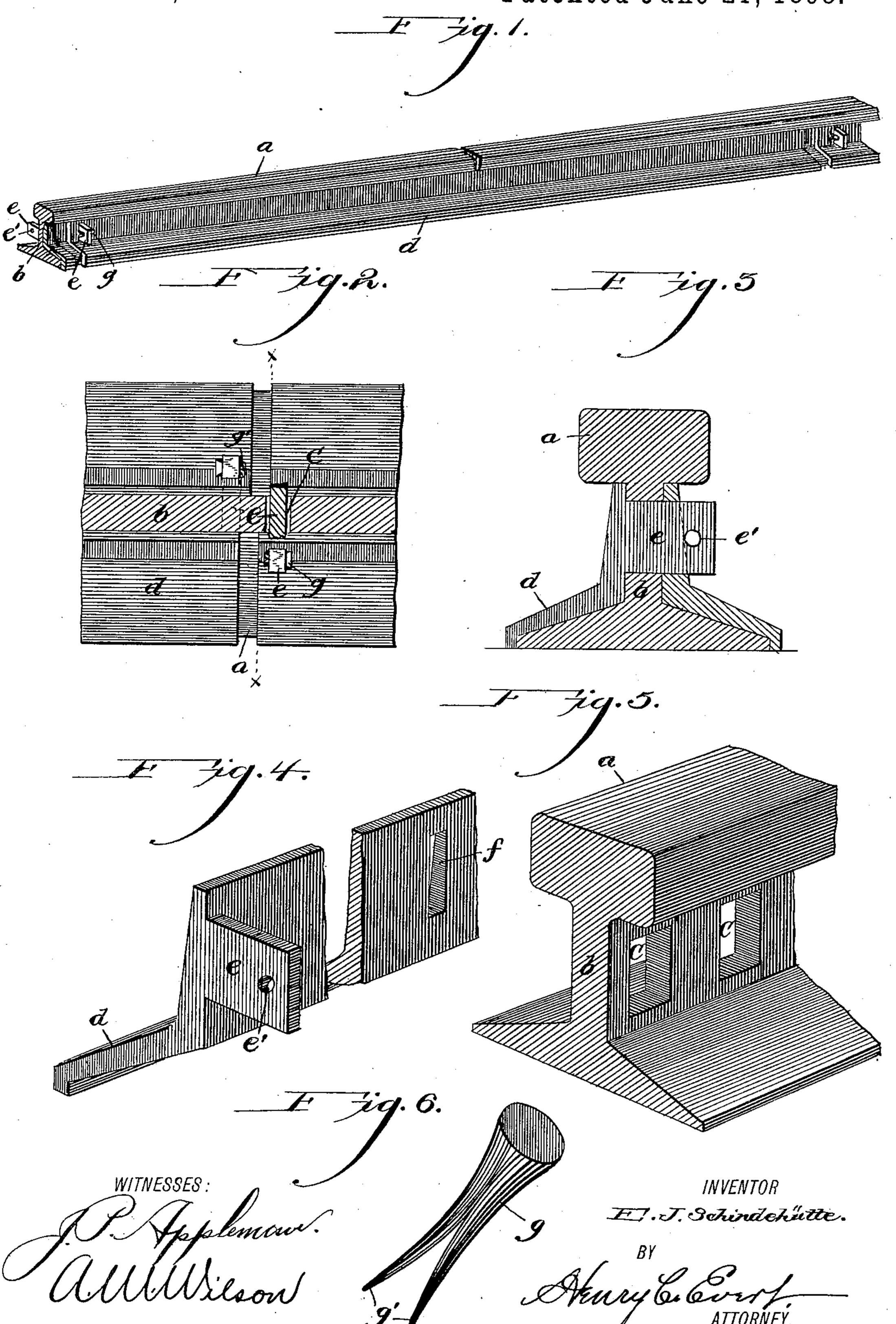
(No Model.)

## E. J. SCHINDEHÜTTE, RAIL JOINT.

No. 606,089.

Patented June 21, 1898.



## United States Patent Office.

ERNST JOHN SCHINDEHÜTTE, OF MCKEE'S ROCKS, PENNSYLVANIA.

## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 606,089, dated June 21, 1898.

Application filed December 7, 1897. Serial No. 661,062. (No model.)

To all whom it may concern:

Be it known that I, ERNST JOHN SCHINDE-HÜTTE, a citizen of the United States of America, residing at McKee's Rocks, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in rail-joints, and has for its object to connect two rails together in such a manner that the same will be prevented from sagging at the joint and a perfectly smooth and even joint will be thereby attained.

The principal features of my invention reside in the connecting-bars or fish-plates that are rolled to conform to the side of the rail 20 and extend the entire length of the same. These connecting-bars or fish-plates are provided near their one end with a transverselyextending lug, which passes through an aperture provided therefor in the rail, while at 25 their other end they are provided with an aperture to receive a corresponding transversely-extending lug formed on the fishplate of the opposite side of the rail; and to this end the invention consists in the novel 30 construction, combination, and arrangement of parts to be hereinafter more specifically described, and particularly pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a perspective view of a portion of the two rails joined together in accordance with my invention. Fig. 2 is a longitudinal sectional view of the rail with a portion of the fish-plates in position. Fig. 3 is a transverse vertical sectional view taken through the rail and fish-plate on the line X X of Fig. 2. Fig. 4 is a perspective view of a portion of one of the fish-plates partly broken away. Fig. 5 is a perspective view of a portion of the rail. Fig. 6 is a perspective view of the locking-key employed for holding the

fish-plates in engagement with the rails.

Referring now to the drawings by reference-letters, a indicates the rail, which may be rolled in any of the well-known forms and 55 the web b of which is provided at or near its center with two openings cc. The fish-plates d are adapted to extend almost or the full length of the rails and are of course rolled to conform to the design of rail that is used. 60 These fish-plates are formed on their inner face and at the one end with a transverselyextending lug e, which passes through the aperture c provided therefor in the web of the rail, and at their other end they are pro- 65 vided with an oblong slot f, that is adapted to receive the corresponding lug e on the opposite end of the fish-plate on the opposite side of the rail. These lugs e are provided with an aperture e' to receive the key or 70 wedge q, which is provided with a prong end g', so that these prongs may be bent outwardly after the key or wedge has been placed in its position, and thereby prevent accidental disengagement of the same. The slots c 75 provided in the web of the rail are made of a greater width than the lug e or slots f to allow for the expansion and contraction of the rail. In this construction the rails may be secured to the cross-ties by spiking in the 80 ordinary manner, and by the formation of the lugs on the fish-plates to engage the rails the ordinary bolts employed for such use are dispensed with. The rail is also made perfectly strong at the joint and is materially 85 strengthened throughout its length by reason of the fish-plate being the same length as the rail.

While the construction as herein shown and described appears to embody the prefer- 90 able form of my invention, yet I do not wish to limit myself to this specific construction, but reserve the right to vary and change the same at will as may be required and as is within the scope of the protection prayed for. 95

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

In a rail-joint, the combination of a rail, of fish-plates engaging the web of the rail, 100 said fish-plates being provided with a flange conforming to the base of the rail, said fish-plate being also provided on one end with an aperture, the opposite end with a trans-

versely-extending lug, said lug passing through an aperture formed in the web of the rail at or near the center thereof and through the aperture of the fish-plate on the 5. opposite side of the rail, and a wedge or key for securing the fish-plates in position, substantially as shown and described.

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

ERNST JOHN SCHINDEHÜTTE.

Witnesses:

H. C. EVERT, WILLIAM E. MINOR.