

(No Model.)

F. MULVILLE.
RAIL JOINT.

No. 493,939.

Patented Mar. 21, 1893.

Fig. 1.

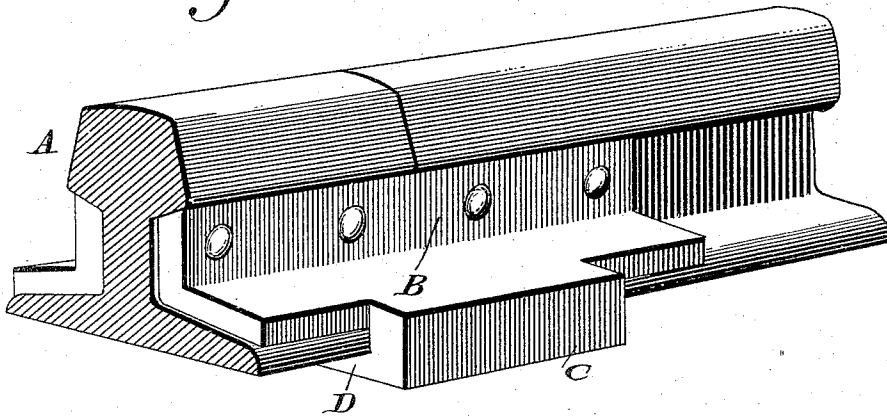


Fig. 2.

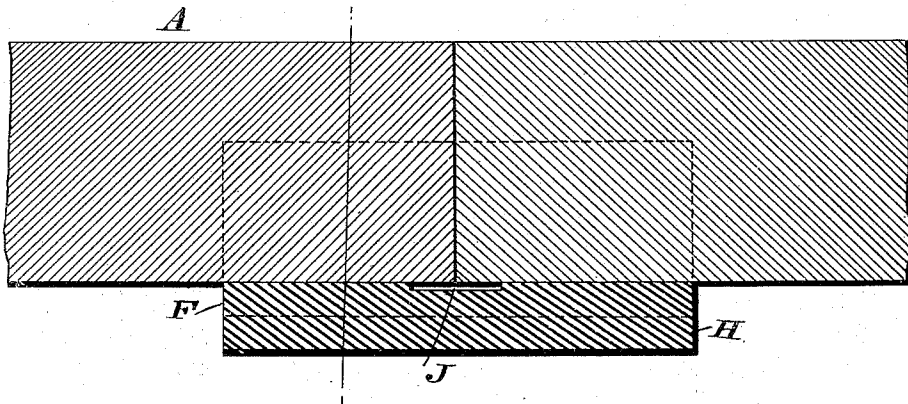
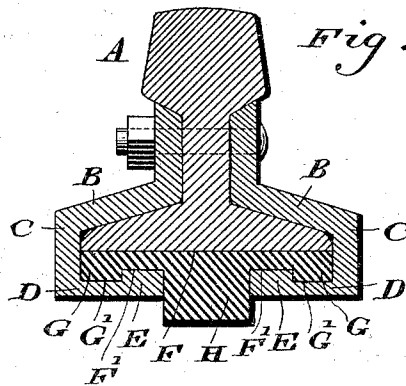


Fig. 3.



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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 493,939, dated March 21, 1893.

Application filed April 25, 1892. Serial No. 430,459. (No model.)

To all whom it may concern:

Be it known that I, FRANK MULVILLE, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Rail-Joints, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a rail joint formed as hereinafter set forth and claimed.

Figure 1 represents a perspective view of a rail joint embodying my invention. Fig. 2 represents a central longitudinal section thereof. Fig. 3 represents a transverse vertical section thereof.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings:—A designates a railroad rail of usual construction. B designates cheek pieces which embrace the neck or web and base of the rail. Depending from the outer sides of the cheek pieces and continuous thereof, are vertical plates C, from which latter there project inwardly the horizontal plates D, which are beneath the base of the rail. On the inner ends of the horizontal plates D are upwardly extending tongues E, it being noticed that the said ends are separated, as will be seen in Fig. 3.

F designates a key which is inserted between the base of the rail and the horizontal plates D, the same being formed on its sides with depending tongues G, which enter grooves G' in said plates, at the side of the tongues E, said key being also formed on its underside with grooves F', at the side of the tongues G, to receive the tongues E. Depending from the center of the key is a tongue H, which enters the space between the tongues E or inner ends of the plates D.

The operation is as follows:—The cheek pieces are located on the rail, and the key slipped into position between the base of the

rail and the underneath plates D of said cheek pieces, it being seen that the tongues G and E engage with each other, and the tongue H enters between the ends of the plates D, by which provision the key controls the cheek pieces, and while holding the latter firmly on the rail, prevents lateral and vertical displacement of the same.

It is evident that when the cheek pieces are to be removed, the key is longitudinally driven or moved out of position, whereby the several tongues are disengaged, and as the cheek pieces are no longer controlled by the key, they are disconnected from each other and free of the rail. In the key, on the upper face thereof, is a recess J which is located beneath the joint of adjacent rails, thus permitting the said rails to spring when weight of an engine or a car is superimposed thereon.

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

1. A rail joint having cheek pieces embracing the sides of the web and the top of the base of the rail, vertical plates connected with said pieces having horizontal plates projecting inwardly, and a key having a longitudinal tongue fitting between the inner ends of the said horizontal plates, the said inner ends in contact with the key tongue being thickened forming bearings for said tongues and fitting in grooves in the underface of the key, said parts being combined substantially as described.

2. A rail joint having cheek pieces with a key therefor, said key having a recess in its top between the end of adjoining rails, substantially as and for the purpose set forth.

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