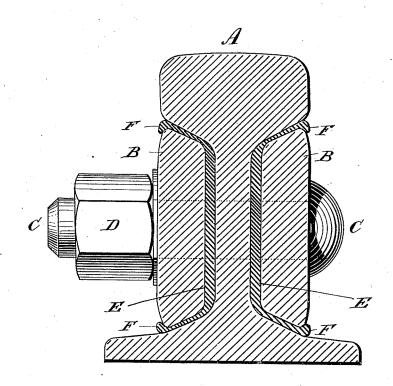
(No Model.)

## J. J. FREUND.

## MOLDED PACKING FOR RAIL JOINTS.

No. 307,385.

Patented Oct. 28, 1884.



Witnesses Yufecher Arthur F. Miller, Jean Jacques Freund

Louis Bagger + Or attorneys

## United States Patent Office.

JEAN JACQUES FREUND, OF PARIS, FRANCE.

## MOLDED PACKING FOR RAIL-JOINTS.

SPECIFICATION forming part of Letters Patent No. 307,385, dated October 28, 1884.

Application filed April 7, 1884. (No model.) Patented in France November 8, 1883, No. 158, 433.

To all whom it may concern:

Beit known that I, Jean Jacques Freund, a resident of Paris, in the French Republic, and a citizen of said French Republic, have invented certain new and useful Improvements in Molded Packing for Rail-Joints; 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 drawing, which forms a part of this specification, and which represents a cross-section of a railjoint provided with my improved molded packing.

My invention has relation to packings for railway rail-joints, consisting of a layer of felt or similar fibrous material treated with tar or a tar compound; and it consists in the improved construction of such a packing, as hereinafter

more fully described and claimed.

In the accompanying drawing, A denotes the rail; B B, the fish-plates; C, the bolt which is inserted through the fish-plates and rail,

25 and D the nut of the bolt.

My improved packing, which is shown at F, is made by soaking felt or a similar fibrous fabric in boiling tar, pitch, or a compound of tar and pitch, and, before hardening, the 30 felt is cut into strips of proper length and width, which are placed in molds or dies and subjected to heavy pressure to give them the configuration shown in the drawing. When the felt has become hardened, it is removed from the mold, of the shape shown in the drawing, forming a thick straight part or body, E, and outwardly-flaring flanges F, the thick part E being placed between the web of the rail and the fish-plates, while the flanges

40 F F overlap the beveled top and bottom edges of the fish-plates, bearing against the beveled

under side of the tread or head of the rail and the bottom flange.

By molding the packing in the manner described I make a perfect-fitting packing which 45 is absolutely water-proof, and by setting up the edges of the flanges F so as to increase their thickness I prevent fraying or unravel-

ing of these edges.

Where the packing consists simply of flat 50 pieces of felt, which are bent into shape by being inserted between the fish-plates and rail, experience has shown that this packing always breaks or gives out at the bent corners where it overlaps the inner corners or 55 edges of the fish-plates; but by molding this packing between dies in the manner described, waterproofing it at the same time, it is made much more durable, as well as efficient in its operation.

I am aware that felt or similar fibrous material treated with tar or tar compounds has been used for packings for rail-joints, and I do not claim such packing, broadly; but I am not aware that such packings have been 65 molded in the afore-described manner; and

I therefore claim-

As an article of manufacture, the herein-described molded packing for rail-joints, constructed of felt or analogous material treated with tar or a tar compound and molded between suitable dies to form the central thick part or body, E, and outwardly-flaring thinner flanges F F, substantially as and for the purpose shown and specified.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of

February, 1884.

JEAN JACQUES FREUND.

Witnesses:

EDWARD P. MACLEAN, LOUIS TOUSSAINT.