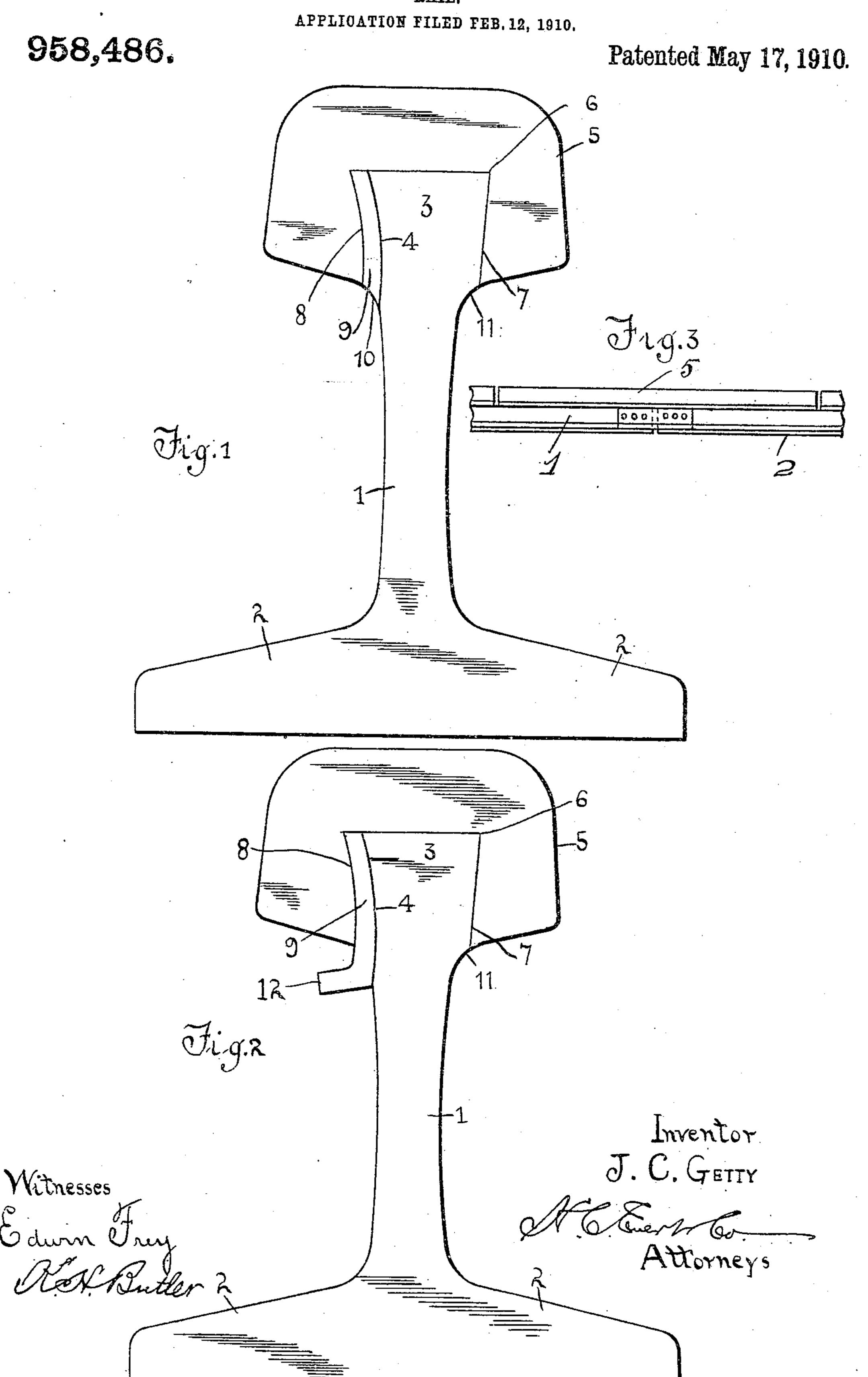
J. C. GETTY.

BAIL.

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UNITED STATES PATENT OFFICE.

JOHN C. GETTY, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOSEPH H. DITTMAN, OF PITTSBURG, PENNSYLVANIA.

RAIL.

958,486.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, John C. Getty, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rails, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rails, and the primary object of my invention is to provide a rail with a detachable head or tread, thereby permitting of the head or tread being removed, repaired, or renewed, without dispensing with the remainder of the rail.

Another object of this invention is to provide rails with detachable heads that can be arranged relatively to the base flanges and webs of the rails whereby practically a continuous tread will be provided for the rolling stock of a railroad, thereby eliminating jarring and bumping of rolling stock incurred by passing over joints.

A further object of this invention is to provide rails with detachable heads that can be made of a higher grade of steel than the remainder of the rails, thus reducing the cost of manufacture.

A still further object of this invention is to provide a two-part rail, the parts of which can be easily rolled similar to the present type of rail.

A still further object of this invention is to accomplish the above results by a rail that is designed to reduce the expense of maintenance in connection with track construction, to increase the longevity of the track, and to reduce the amount of labor heretofore necessary for installing and maintaining rails in a useful condition.

These and such other objects as may hereinafter appear are attained by the novel construction and arrangement of parts to be hereinafter specifically described and claimed.

Reference will now be had to the drawing forming a part of this specification wherein:

Figure 1 is an end view of a rail constructed in accordance with my invention. Fig. 2 is a similar view illustrating a modification of the invention, and Fig. 3 is a side elevation, on a small scale, of assembled rails.

In the accompanying drawings the refer-55 ence numeral 1 denotes a web having the

lower edge thereof provided with lateral base flanges 2 extending from one end of the web to the opposite end thereof. The upper edge of the web 1 is enlarged to provide a dovetail tongue 3 from one end of the web 50 to the opposite end thereof. The tongue 3 is of a greater thickness than the web 1 and has one side thereof recessed or concaved, as at 4 and its other side inclining upwardly and outwardly.

5 denotes a head or tread-piece having the lower face thereof provided with a dovetail groove 6 receiving the dovetail tongue 3 of the web 1. One of the walls of the groove 6 is inclined, as at 7, to correspond to the in- 70 clination of and engage the inclined side of the tongue 3, while the opposite wall of the groove 6 is swelled or convexed, as at 8, the curvature of the convex portion of the groove 6 corresponding to the curvature of 75 the concave portion 4 of the tongue 3, thereby providing a slot having curved walls extending from one end of the head to the opposite end thereof. The groove 6 is of greater width than the tongue 3 whereby 80 the wall 8 of the groove 6 will be spaced from the side 4 of the tongue 3.

Fitted in the space between the tongue 3 and the convex wall of the groove 6 is a key or locking piece 9 corresponding in length 85 to the web 1. This key or locking piece is curved whereby the sides thereof will conform to the concavity of the tongue 3 and the convexity of the head or tread-piece 5, the key or locking piece being designed to 90 retain the head or tread-piece 5 upon the tongue 3. The lower edge of the key or locking piece 9 is shaped, as at 10, to provide a filler corresponding to the filler 11 at the juncture of the web 1 and the tongue 3. 95

The heads or tread-pieces 5 can be arranged upon the tongue 3, whereby the ends of the heads or tread-pieces 5 will be flush with the ends of the rail, but it is preferable to arrange the heads or tread-100 pieces 5 alternately relatively to the webs of adjoining rails. By reference to Fig. 3 of the drawings, it will be observed that one head or tread-piece bridges the confronting ends of two webs, thereby providing a practically continuous tread for rolling stock adapted to pass over the rails.

In Fig. 2 of the drawings I have shown the lower edge of the key or locking piece 9 as provided with a longitudinal outwardly 110

extending flange 12, thus permitting of a suitable instrument, as a crow-bar, being used for withdrawing the key or locking piece from between the tongue 3 and the 5 head or tread-piece 5. By curving the key or locking piece 9 it is prevented from becoming accidentally disengaged from the tongue 3 and the head 5 and when in position is adapted to prevent a displacement 10 of the head or tread-piece.

The three pieces of my improved rail can be easily rolled and assembled by unskilled

labor.

What I claim, is:

1. The combination of a rail web having the upper edge thereof provided with a longitudinal dovetail tongue, one side of the said tongue being concave and the other side inclined, a head having the lower face there-20 of provided with a dovetail groove receiving the tongue of said web and having one wall inclined and engaging the inclined side of the tongue throughout, the other wall of said groove confronting the concave side of 25 said tongue being convex and spaced therefrom, and a key fitting between the concave and convex walls of said tongue and said head and snugly engaging throughout said wall.

2. The combination of a rail web having the upper edge thereof provided with a dovetail enlargement constituting a tongue and extending from one end of the web to | in the presence of two witnesses. the opposite end, one side of the said tongue 35 inclined and the other side having a concavity formed therein extending from one end of said tongue to the opposite end thereof, a head having the under face thereof pro-

vided with a dovetail groove extending from one end of said head to the opposite 40 end thereof and having one wall inclined and engaging the inclined side of the tongue and its other wall convex and confronting and spaced from the concave side of said tongue, and a curved key between and en- 45 gaging throughout the concave side of said tongue and the convex wall of said head.

3. The combination of a rail web having the upper edge thereof provided with a dovetail enlargement constituting a tongue 50 extending from one end of the web to the opposite end, one side of the said tongue being inclined and its other side having a concavity formed therein extending from one end of said tongue to the opposite end thereof, 55 a head having the lower face thereof provided with a dovetail groove extending from one end of said head to the opposite end thereof, and having one wall inclined and engaging throughout the inclined side of 60 the tongue and its other wall convex and confronting and spaced from the concave side of said tongue, a curved key fitting between and engaging throughout the concave side of said enlargement and the convex wall 65 of said head, and a flange carried by the lower edge of said key and extending from one end of said key to the opposite end thereof.

In testimony whereof I affix my signature 70

JOHN C. GETTY.

Witnesses:

KARL H. BUTLER, Eva A. MILNE.