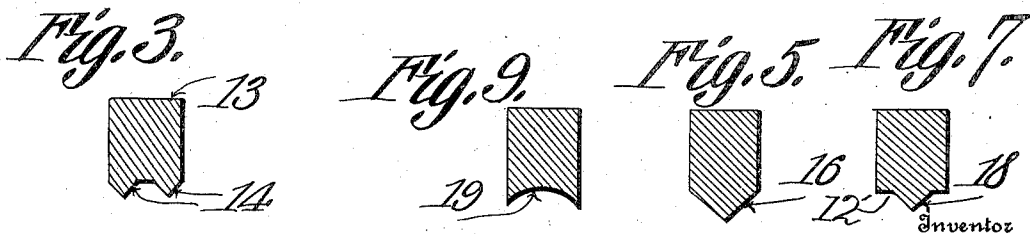
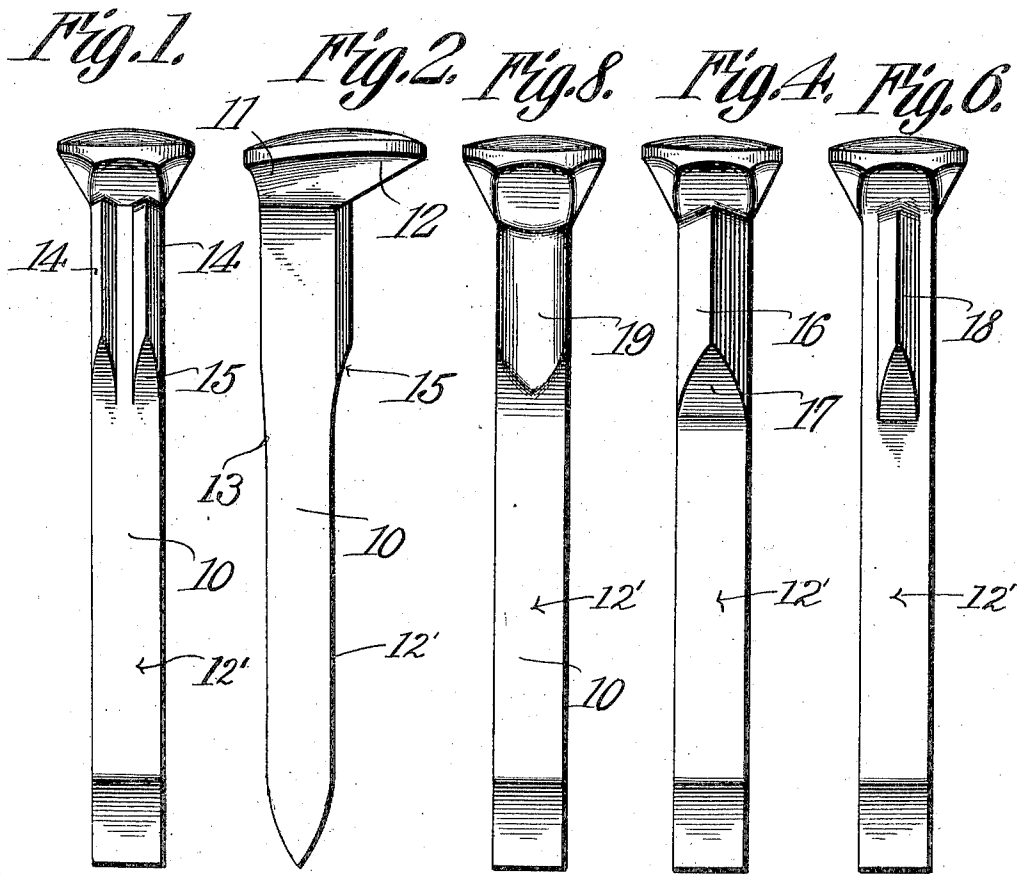


J. DELLWO.
RAILROAD SPIKE.
APPLICATION FILED MAY 24, 1909.

947,887.

Patented Feb. 1, 1910.



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RAILROAD-SPIKE.

947,887.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN DELLWO, a citizen of the United States, residing at Grantsburg, in the county of Burnett and State of Wisconsin, have invented a new and useful Railroad-Spike, of which the following is a specification.

It is the object of the present invention to provide an improved construction of spike and the invention relates more particularly to that form of spike which is commonly employed in securing rails upon ties, the object of the invention being primarily to obviate creeping of the rail.

More specifically, it is the aim of the invention to provide a spike which when driven into place will bite into the edges of the base flanges of the rail and will in this manner firmly hold the rails against creeping in the direction of their length and in either direction.

The invention contemplates, broadly speaking, the provision of a spike, the shank of the spike having a head at one end which has a portion projecting beyond one face thereof, the shank being formed upon its said face with a rib, the lower end of which is beveled and which rib is substantially in the form of a triangle, in cross section, the plane of the said face of the shank forming one side of the triangle.

In the accompanying drawings:—Figure 1 is a front elevation of one form of spike embodying the present invention. Fig. 2 is a side elevation thereof. Fig. 3 is a horizontal sectional view therethrough. Fig. 4 is a view similar to Fig. 1 showing another form of spike. Fig. 5 is a view similar to Fig. 3 but of the form shown in Fig. 4 of the drawings. Fig. 6 is a view similar to Figs. 1 and 4, but showing a still further modification of the invention. Fig. 7 is a view similar to Figs. 3 and 5 of this last mentioned form of the invention. Fig. 8 is a view similar to Fig. 1 showing a further modification of the invention. Fig. 9 is a horizontal section through this form.

Referring now to the drawings, and more specifically to Figs. 1, 2 and 3 thereof, the spike embodying the present invention is illustrated as comprised of a shank 10 having formed at its upper end a head 11, a portion 12 of which projects beyond the vertical plane of the forward face of the said shank. Adjacent its upper end the shank

10 is increased in thickness from front to rear, the forward face of the shank being indicated by the numeral 12', and the rear face by the numeral 13.

In the form of the invention shown in Figs. 1, 2 and 3 of the drawings, the forward face 12' of the shank of the spike is illustrated as formed with parallel ribs 14 which are preferably two in number and which extend downwardly, parallel to the side faces of the shank, from a point immediately beneath the overhanging portion 12 of the head 11 of the spike to a point above the middle thereof and these ribs are illustrated in Fig. 3 of the drawings as triangular in cross section, one side of the triangle described by each rib being the plane of the said forward face of the spike shank. At and adjacent their lower ends, the ribs 14 are both beveled as indicated by the numeral 15 whereby the entrance of the shank of the spike into the material of the ties and the biting of the edges of its ribs 14 will be rendered so easy as to permit of the spike being readily driven into place.

It will be readily understood from the foregoing description of this form of the invention that upon driving the spike into place through the openings in the ordinary tie plate, the edges of the ribs 14 will bite or cut into the edges of the base flanges of the rails which the spikes are designed to secure in place upon the tie plate and this biting of the ribs into the said edges of the base flanges of the rails will serve effectually to obviate creeping of the rails in either direction, in the general direction of their extent.

It will further be observed, from inspection of Figs. 1 and 3 of the drawings that the ribs 14 are located one at each side of the forward face 12' of the spike shank and are spaced from each other and extend parallel.

In the form of the invention shown in Figs. 4 and 5 of the drawings, the said forward face 12' of the shank of the spike is formed with but a single rib which is of a width equal to the width of the said forward face of the spike shank and is triangular in form like the rib 14 just described, this single rib being indicated by the numeral 16. This rib 16, is, as in the case of the ribs 14, beveled at its lower end as indicated by the numeral 17 and when the spike

formed with such a rib is driven into a tie upon which is disposed a rail, the edge of this single rib will bite into the edge of the base flange of the rail in the same manner as will the ribs 14 of the form of the invention first described.

In the form of the invention shown in Figs. 6 and 7 of the drawings, there is provided upon the said forward face of the spike shank, also but a single rib but in this form of the invention the side edges of the rib do not coincide with the side edges of the forward face of the shank upon which it is formed and are spaced therefrom and extend parallel with respect thereto, this rib also being triangular in cross section as shown in Fig. 7 of the drawings and being beveled at its lower end, as shown in Fig. 6. This rib is indicated by the numeral 18.

In the form of the invention shown in Fig. 8 of the drawings the spike shank is formed with a concave face 19 which at its edges bites into the base flanges of the rails which it secures in place.

The fact will be appreciated, from the foregoing description and from inspection of the several figures of the drawings that while several forms of the invention are shown and described, the principle of the invention remains the same and one form will act as effectually as another although it may be desired under some conditions to use one form and under other conditions to use another form or it may be found expedient, in manufacturing the spike, to manufacture one or another of the several forms, in economizing in material and labor.

What is claimed is:—

1. A spike comprising a shank having a head at one end projecting beyond one face thereof, a rib formed upon said face of the shank and merging at its upper end into the said projecting portion of the head, said rib having a sharp edge adapted to bite into

the edge of a base flange of a rail secured by the spike.

2. A spike comprising a shank having a head at one end projecting beyond one face thereof, and a rib formed upon the said face of the shank and merging at its upper end into the under side of the said projecting portion of the head, said rib being triangular in cross section and having one side of the triangle in the plane of the said face of the shank of the spike, the said rib having a sharp edge adapted to bite into the edge of the base flange of a rail secured by the spike.

3. A spike comprising a shank having a head at one end projecting beyond one face thereof, and a rib formed upon the said face of the shank and merging at its upper end into the under side of the said projecting portion of the head, the opposite face of the shank being bulged, the said rib having a sharp edge adapted to bite into the edge of the base flange of a rail secured by the spike.

4. A spike comprising a shank having a head at one end projecting beyond one face thereof, and a rib formed upon the said face of the shank and merging at its upper end into the under side of the said projecting portion of the head, the rib at its lower end being beveled, the said shank throughout that portion whereon the rib is formed, being bulged from front to rear, the said rib having a sharp edge adapted to bite into the edge of the base flange of a rail secured by the spike.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN DELLWO.

Witnesses:

AND A. ANDERSON,
ANNA WILD.