Feb. 24, 1953 ALBERT ROSENBERG OF MICHAEL 2,629,557

RAILROAD SPIKE AND RETAINER FOR THE SAME

Filed Oct. 11, 1947

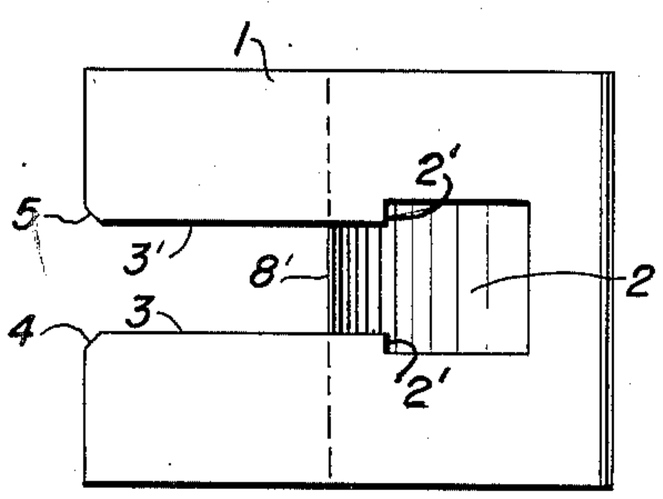

FIG. 1.

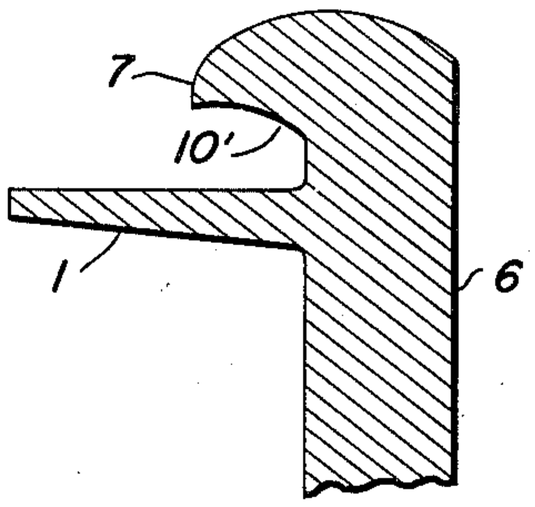

FIG. 3.

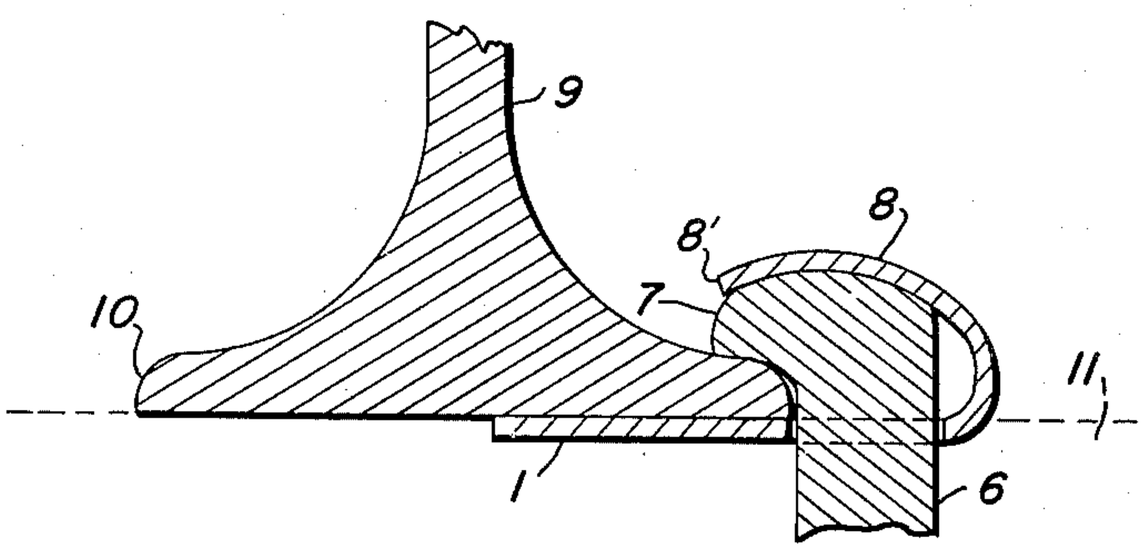

FIG. 2.

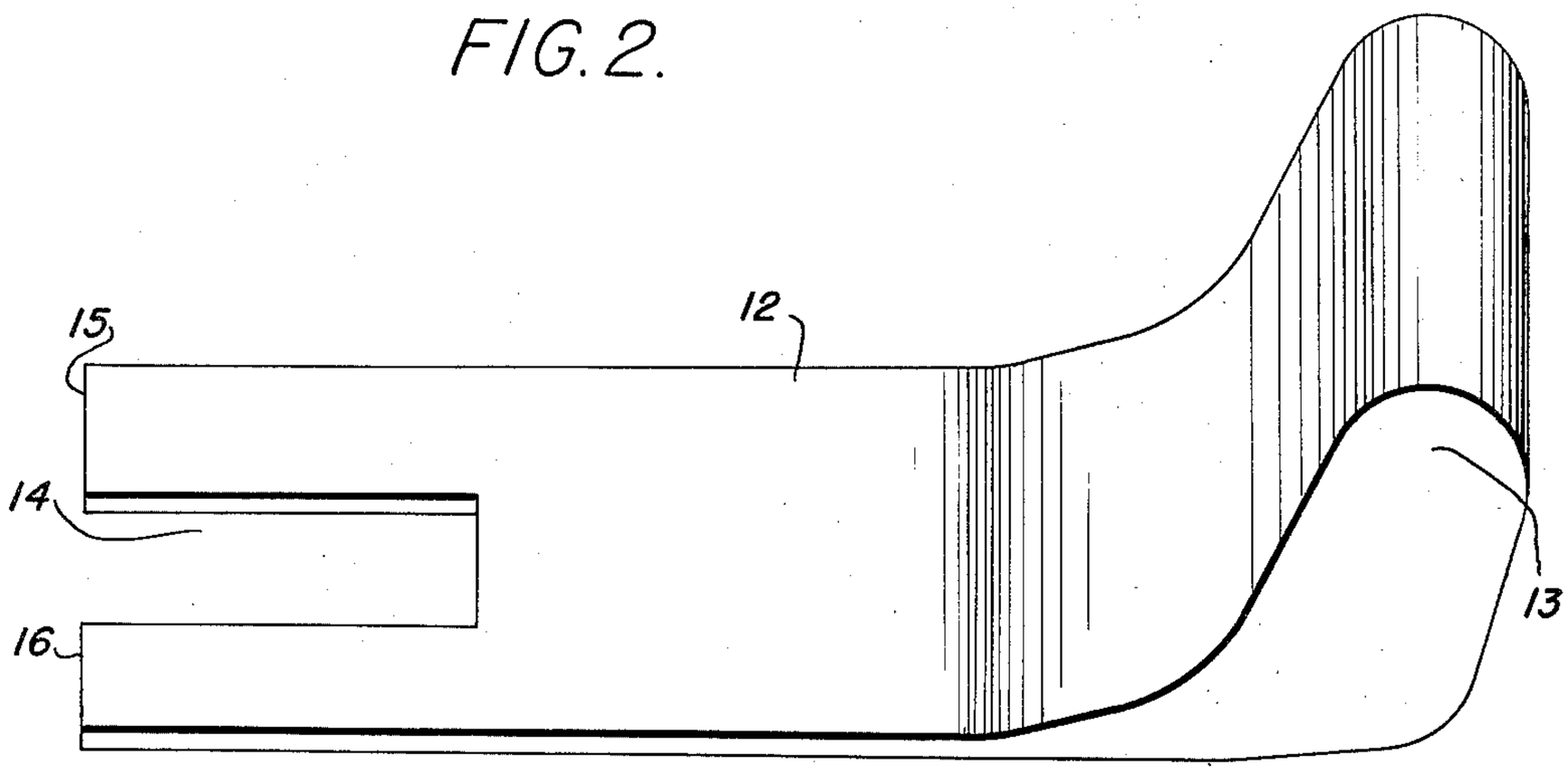

FIG. 4.

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RAILROAD SPIKE AND RETAINER FOR THE SAME

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2 Claims. (Cl. 238—310)

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My invention relates to retainers for spikes particularly used in building railroads, especially those transportation systems which use or have used wood-cross-ties for spacing and securing rails to the roadbeds; but may have other uses for my invention.

The objects of my invention are:

(1) To provide a new article of manufacture;

(2) To provide novel means for holding spikes in railroad cross-ties;

(3) To provide automatic means for holding spikes into cross-ties;

(4) To provide integral means with spikes for holding the spikes in cross-ties;

(5) To provide detachable means for holding spikes into cross-ties or other devices.

(6) To provide means for resting upon cross-ties by which said means can be held down by the base of T-rails or other devices which said spikes are used to secure said T-rails or other devices to cross-ties or other devices.

(7) To provide means for sliding under T-rails or other devices, for holding spikes into cross-ties or other devices;

(8) To provide a device with means for engaging the spike comprising a forked or pronged device spanning the spike to grip it with sprung shoulders after being driven into place under the head of said spike.

(9) To provide an accessory tool or chisel for spanning a spike under its head whereby to provide a channel to receive my retaining device.

These objects I attain by the devices illustrated in the accompanying drawings, in which:

Fig. 1 illustrates my detachable retainer looking at it from its underside.

Fig. 2 is a sectional view of a section of a T-rail with its holding spike in position to hold the base of said T-rail to the cross-tie indicated by dotted lines, and said retainer held under said base onto said cross-tie, which retainer is seen to grip the two sides of said spike with a spanning fork or prongs which can be seen to be sprung into place after being driven under said base of said T-rail.

Fig. 3 illustrates my retainer being made integral with the spike.

Fig. 4 illustrates a slightly perspective view plan of my tool or chisel, for conveniently providing the channels for entering the fork of my retainer, after the T-rails or other devices have been properly spaced upon the cross-ties and their respective spikes driven "home" to secure the rail to said cross-tie.

Similar numerals refer to similar parts

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throughout the several views in which 1 shows the underside of my retainer which rests upon wood cross-ties or other device for spacing rails to the road-bed, illustrating how the spike is inserted in the cut-out section 2 after the retainer has been driven under the head of said spike, the forked spanners 3 and 3' sliding past the spike body 6; 4 and 5 are the ends of my retainer fork, cut away to permit springing the prongs of the said fork apart sufficiently to permit said fork to slide past the body of the said spike 6 whereby after passing under the head 7 of said spike 6 will spring tightly to said spike 6 to prevent vibrations from loosening said retainer.

8 is the top of my retainer which can be of any shape but is shown curved to rest upon the head 7 of the spike 6. 8' is the end of the retainer which may have sufficient spring to tightly clutch the head 7 of said spike, but is shown slightly above said head 7 whereby to permit slight rocking of rails due to passing railroad trains, or other device rolling stocks.

10 is the base of a T-rail 9 which rests upon the wood-cross-tie indicated by the lines 11.

Fig. 3 shows the modification of a spike showing a similar retainer 1 which passes under the T-rail base, made integral with said spike.

It will be readily seen that this modified spike 6 will be required to be spaced upon the wood-tie 11 prior to placing the T-rail or other device under the head 10' of said spike 6.

By making the shank of the spike 6 cylindrical or round, below the lower retaining part 1, said spike can be driven into the tie subsequent to spacing the rails, and rotated in said tie until the retainer 1 is under the rail base 10, whereby said rail will be gripped by both the head 7 underside 10 and said retainer 1.

In Fig. 4, 13 is the head of my chisel 12 showing the space 14 between the two cutting edges 15 and 16 of said chisel 12, said forked cutting edges 15 and 16 to be driven under the head of the spikes 6 to provide a channel in the wood cross-tie to be channelled to receive the retainer 1 whereby it is held onto said wood cross-tie by the T-rail itself and the head of the said spike 6 is thereby enabled to automatically retain the spike in its housing in the wood cross-tie, thereby preventing the spike from being vibrated or jacked up out of the said wood-cross-tie.

I do not care to limit my retainer to any particular design or material from which it is to be made.

Having described my invention, what I claim is:

1. The combination with a tie and a rail provid-

ed with a base engaging the upper surface of said tie, a spike provided with a head and a shank driven into said tie adjacent said rail, the undersurface of said head engaging the upper surface of said base of said rail, a plate like element provided with integral means for securing it to said shank below the head of said shank of said spike and in alignment with the upper surface of said tie, and the upper surface of said plate like element engaging the underside of said base of said rail and lying in a recess in said tie just below the underside of said base of said rail and extending under said base of said rail for a distance greater than said underside of said head of said spike overlaps the upper surface of said base of said rail and engaging both the underside of said base of said rail and said tie.

2. The combination with a tie and a rail provided with a base seated in a predetermined position on the upper face of said tie, a spike provided with a head and a shank below said head, said shank driven into the upper face and vertically into said tie to permit the underside of said head of said spike to engage the upperside of said base of said rail, and a horizontal retainer means for said spike to hold it in its predetermined position in said tie, and said retainer means being detachably secured to said shank of said spike and below said head of said spike, said retainer means comprising a flat upper surface horizontal plate like element provided with integral shoulder means whereby to secure itself to said shank of said spike and extending under said rail and in cooperation with said rail for a distance greater than the underside of said head of said spike overlaps the upperside of said base of said rail, said plate like element being provided with a bifurcated part having an enlongated slot therein open at the end adjacent to said tie and a closed end at the opposite end of said slot, the first portion of said slot adjacent the closed end having an area substantially equal to the cross section of said shank of said spike, a second portion of said slot having a width less than the width of said shank of said spike, thereby providing the aforesaid integral shoulder means for rigidly securing the retainer element horizontally to said shank of said spike, said retainer element adapted to be driven under said base of said rail and crosswise of said tie to engage the underside of said base of said rail, said bifurcated slot spanning the shank of said spike and automatically securing said retainer element to said shank of said spike, and a second part of said retainer element extending beyond the outer face of said spike on the side opposite said rail and thence upwardly, inwardly and downwardly above and adjacent the top of said head of said spike.

ALBERT ROSENBERG OF MICHAEL.

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