

April 7, 1925.

1,533,043

M. SMITH

SPIKE SUPPORTER

Filed Sept. 2, 1924.

2 Sheets-Sheet 1

Fig. 1.

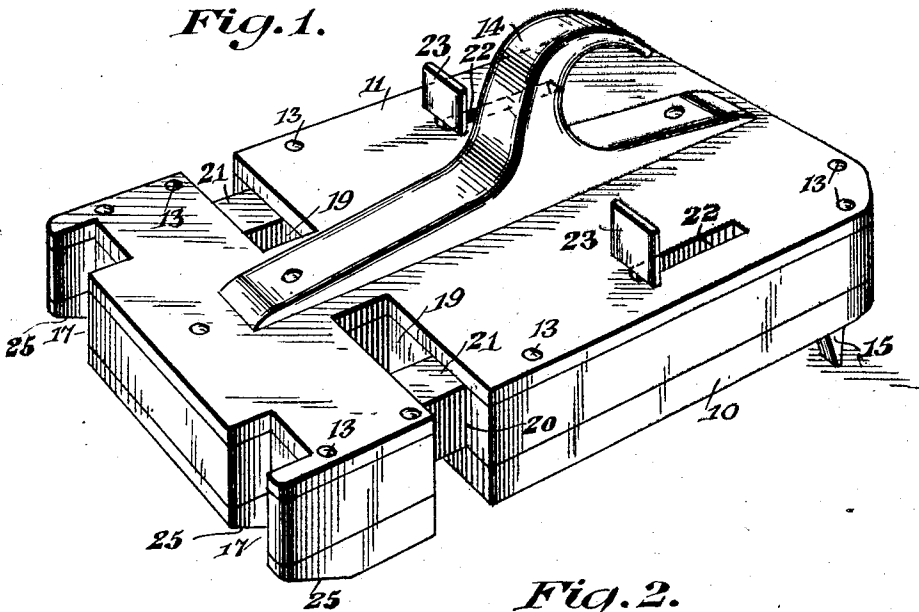
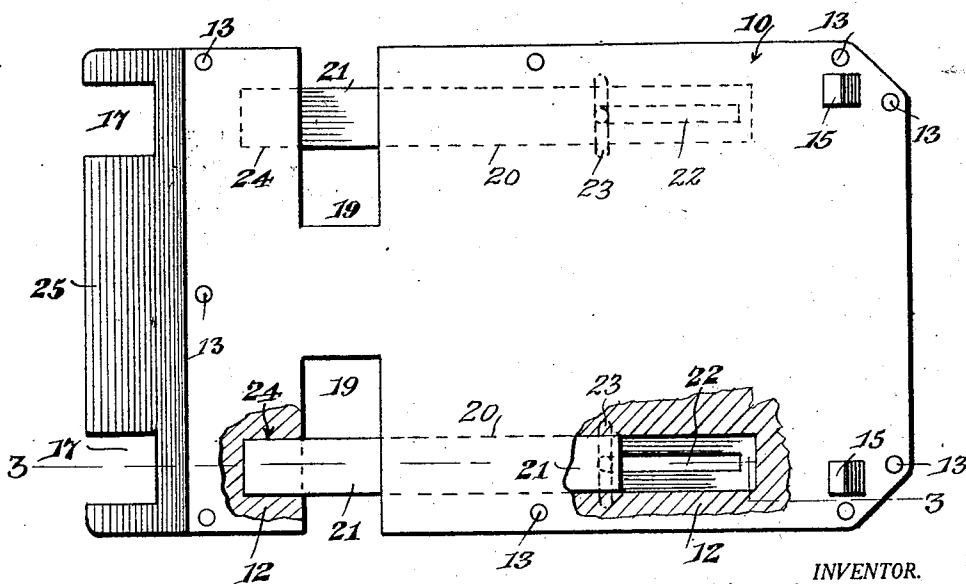


Fig. 2.



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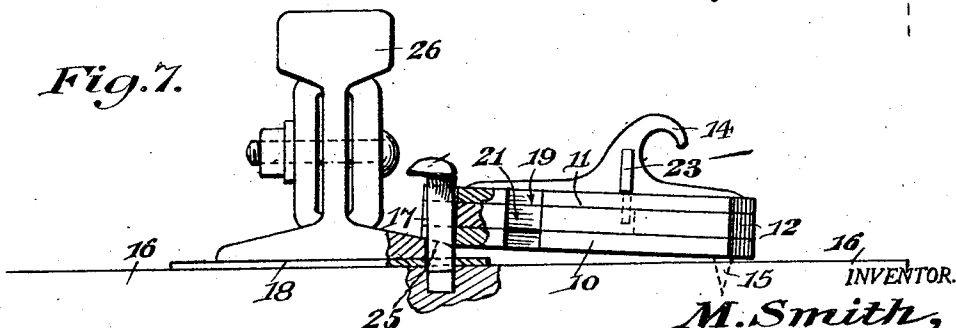
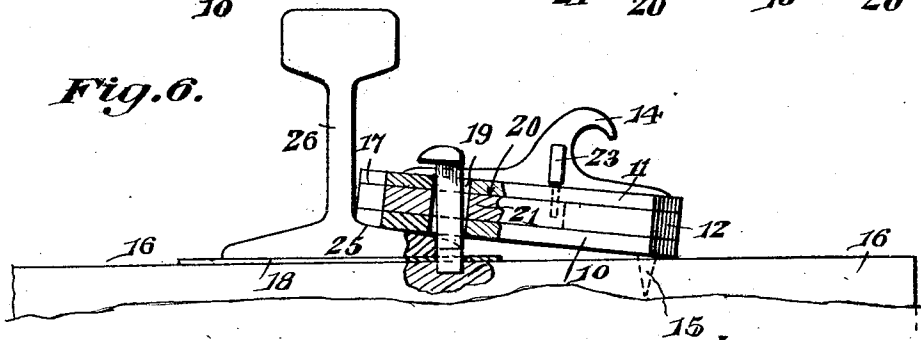
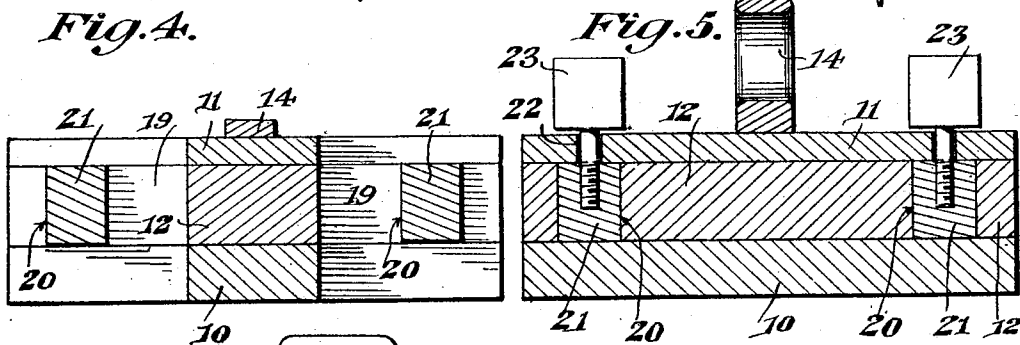
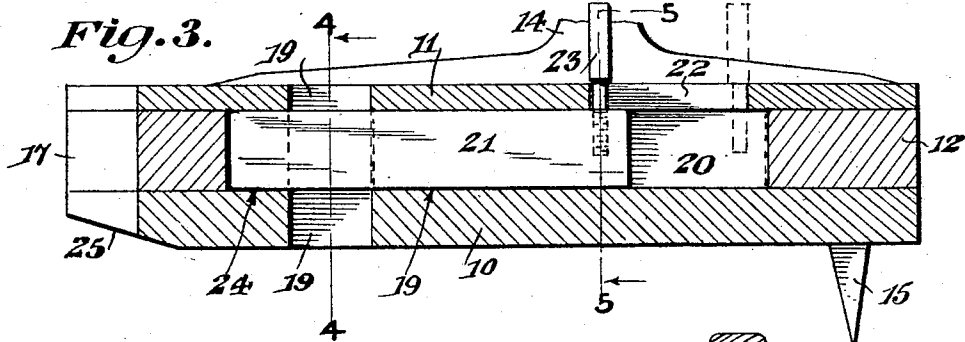
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UNITED STATES PATENT OFFICE.

MATTHEW SMITH, OF WINOKUR, GEORGIA.

SPIKE SUPPORTER.

Application filed September 2, 1924. Serial No. 735,455.

To all whom it may concern:

Be it known that I, MATTHEW SMITH, a citizen of the United States, residing at Winokur, in the county of Charlton and State of Georgia, have invented certain new and useful Improvements in Spike Supporters, of which the following is a specification.

This invention relates to devices for supporting spikes when starting the driving operation, more particularly railway rail spikes, and has for one of its objects to improve the construction and increase the efficiency and utility of devices of this character.

With these and other objects in view the invention consists in certain novel features of construction as hereinafter shown and described and then specifically pointed out in the claim, and in the drawings illustrative of the preferred embodiment of the invention.

Figure 1 is a perspective view of the improved device.

Figure 2 is a bottom plan view, partly in section.

Figure 3 is a longitudinal section on the line 3—3 of Figure 2.

Figure 4 is a transverse section on the line 4—4 of Figure 3, looking in the direction of the arrow.

Figure 5 is a transverse section on the line 5—5 of Figure 3, looking in the direction of the arrow.

Figure 6 is a view on a reduced scale and partly in section, illustrating the operation when employed at points beneath the fish or clamp plates, and

Figure 7 is a like view illustrating the operation when employed opposite the fish or clamp plates.

In the present day railway construction a tie plate is employed between each tie and the rail, and each plate is provided with two holes for the holding spikes on each side of the rail, and the heads of the spikes wear out after a comparatively short time and must be renewed, and the renewal operation requires that the new spike must be driven through the same hole in the plate. This operation requires that the spike be held in place during the first blows of the driving hammer, otherwise the hammer is

liable to glance from the spike, frequently causing the spike to fly off laterally and injuring the workman.

The device herein illustrated effectually holds the spike in position during the preliminary blows of the hammer, and thus obviates the necessity of employing an extra man to hold the spike when starting to drive.

By employing the improved device, one man can do the work of a number and enables a plurality of men to work in close proximity without danger from flying spikes.

The improved device comprises a base or sole member 10, an upper or guide member 11, and an intermediate member 12, the three members being superimposed and riveted or otherwise firmly united as at 13, and the upper member provided with a lifting handle 14, as shown.

The members 10 and 11 will be of relatively tough steel, while the intermediate member may be of hard wood to decrease the weight, while not impairing the efficiency.

The base member is provided with spurs 15 depending therefrom near one end, to enter the tie 16, as illustrated in Figures 6 and 7, to prevent lateral displacement of the device.

Formed through the members 10, 11 and 12 at the end opposite to the spurs 15 and opening through the ends are vertical guide slots 17 spaced to correspond to the distances between one set of the spike holes in the plates, the latter indicated at 18.

Formed through the three members 10, 11 and 12 near the guide slots 17 are other vertical guide slots, indicated at 19, and opening through the opposite sides of the body members as shown, the contiguous portion of the guide slots 19 being out of longitudinal alinement with the end guide slots 17, as shown in Figure 2 to prevent splitting the ties.

Formed within the intermediate body member 12 are guideways indicated at 20, and slidable in each guideway is a plunger 21. Formed in the member 11 is a longitudinal slot 22 connecting with the guideway 20, and an operating pin or stud 23

is attached to the plunger and extends through slot to provide means for actuating the plunger.

5 The guideway 20 extends for a distance into the intermediate member 12 as shown at 24 in Figure 2, and forms a guard transversely of the laterally opening slots 19 in one part of the latter, as illustrated in Figure 2.

10 The end of the base member 10 which contains the guide slots 17 is beveled as shown at 25, to correspond to the bevel of the upper face of the tie flange of the rail, represented at 26, as shown.

15 The guide slots 17 are located to correspond to and aline with the spike recesses in the flanges of the rail and the inner spike holes in the tie plate, and the contiguous portions of the laterally opening guide slots 19, are located to correspond to and aline with the outer holding spike holes of the tie plate.

25 When the improved device is to be used, the latter is located with its guide slots 17 in position to support the inner or rail holding spikes, and when the latter have been entered into the tie by a few blows of the driving hammer, the device is withdrawn and the driving of the rail spike completed. The device is then replaced with the guide slots 19 located in alinement with the outer spike or bolt holes of the tie plate. One of the bolts 21 is then moved longitudinally of the body with its outer end in the seat 24. This provides a recess entirely through the body corresponding to the spike transversely, and when the latter is inserted therein, it will be held in position and prevented from lateral displacement under the first few blows of the driving hammer, or until the spike is sufficiently entered into the tie to prevent danger of being displaced laterally. The bolt 21 is then withdrawn by pressure applied to

the finger stud 23 and the device removed laterally from engagement with the partly driven spike and the driving of the spike completed. 45

The improved device is then replaced with the other guide slot 19 in alinement with the other spike opening of the tie plate, and the operation repeated. 50

The improved device may be readily adapted to the plates having spike or bolt openings variously located, and the improved device may be employed for holding spikes while being entered into the tie or other material directly where no tie plate is employed, and it is not desired to limit the use or application to any specific structure with which it is adapted to be employed. 55 60

The improved device is simple in construction, can be inexpensively manufactured, and of any desired size or material and operates effectually for the purposes described. 65

The preferred embodiment of the invention is disclosed in the drawings and set forth in the specification, but it will be understood that modifications within the scope of the claimed invention may be made in the construction without departing from the principle of the invention or sacrificing any of its advantages. 70 75

Having thus described my invention what I claim is:

A device of the class described comprising a body having a vertical guideway extending therethrough at one side thereof and a longitudinal guideway disposed entirely therein and transecting a portion of the vertical guideway, depending tie engaging spurs on said body, and a plunger movable in said longitudinal guideway. 80 85

In testimony whereof, I affix my signature hereto.

MATTHEW SMITH.