Oct. 8, 1935. P. J. GILLEN 2,016,326

TRACK TOOL

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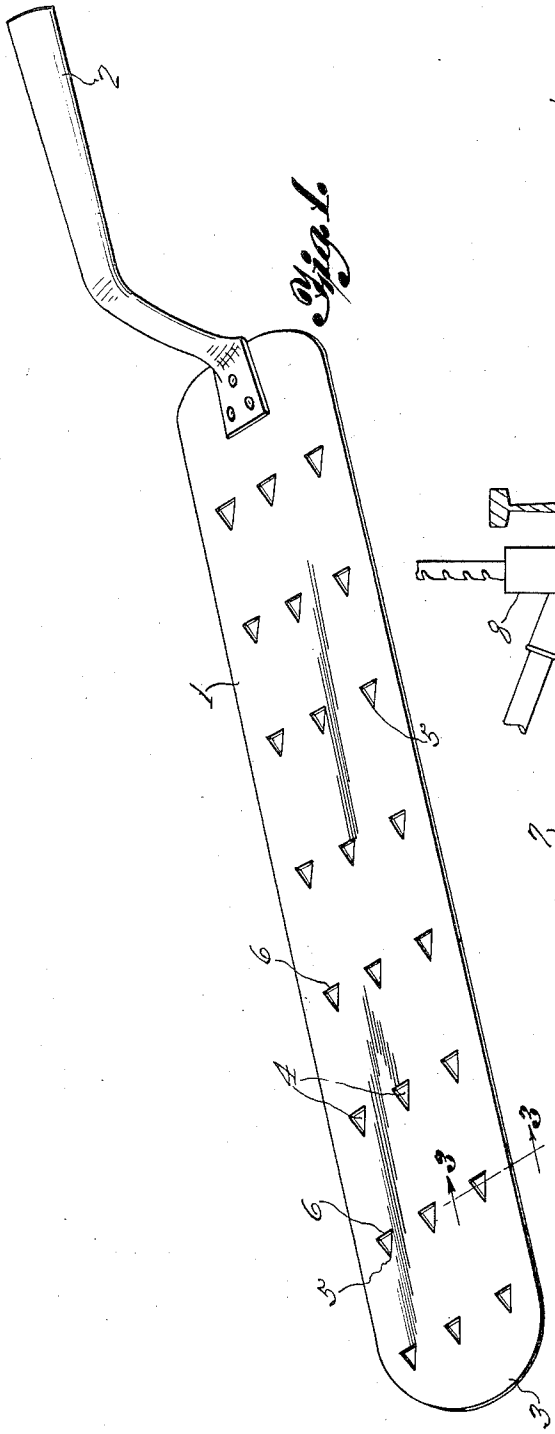


Fig. 1.

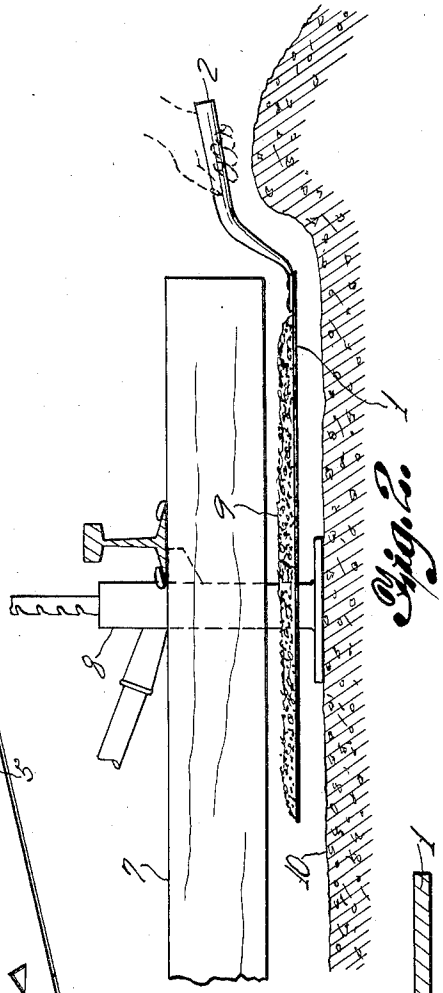


Fig. 2.

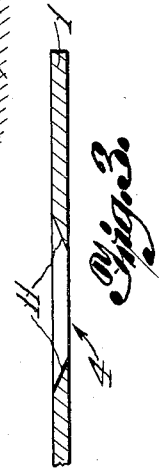


Fig. 3.

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TRACK TOOL

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4 Claims. (Cl. 104—13)

This invention relates to railroad track tools and more particularly to tools for placing and locating ballast such as cinders, gravel, dirt or the like, underneath the ties of a railroad track for the purpose of leveling up the track.

This work is ordinarily done by jacking up the track and tie at the low point and then forcing and tamping gravel or ballast down beneath the tie by the use of a shovel or tamping bar along the sides of the tie. In this operation the old road bed as well as the solid bed under the tie is disturbed to a considerable degree making it necessary to redress and clean up the bed and trim the track back to normal. This not only requires additional time for the work itself but provides greater latitude for the track settling in its disturbed bed as will be understood. By the use of my invention it is only necessary to jack up the track and then place the ballast directly under the bottom of the tie where needed, this action being carried out without disturbing in the least either the road bed as a whole or the solid bed already formed under the tie.

It is the primary object of my invention to provide a long bladed track tool upon which a layer of ballast may be placed and then the blade and ballast inserted lengthwise in under the tie and there deposited.

It is a further object to provide a long bladed track tool of the kind referred to, the blade being perforated at spaced intervals with small holes or perforations through which the load of ballast upon the blade may be shaken to its bed, after the blade has been inserted under the tie.

Still another object is to provide a track tool of the kind referred to, the same having a relatively long, thin and narrow blade, the said blade being perforated with a plurality of triangular perforations with points thereof turned directly forward, for facilitating the working of ballast in under a railroad tie, and for sifting the ballast evenly over its bed under the tie.

With these and such other objects and advantages in view as may be developed in the following specification, attention is directed to the accompanying drawing, wherein is embodied a practical form of my invention, and wherein

Figure 1 is a perspective view of my improved track tool.

Figure 2 is a side elevation on a reduced scale, showing the tool as in use for laying ballast under a railroad tie, a portion of the tie being broken away and the road bed being shown in section.

Figure 3 is a fragmental enlarged cross section along the line 3—3 in Figure 1 showing the sharpened or beveled margins of the apertures in the blade.

The invention comprises a long, narrow and thin blade 1 of tempered steel or any other suitable material, and to which is secured at one end the offset handle 2. The blade is rounded or arcuate at its forward end 3, and is pierced with a plurality of apertures 4. These apertures are preferably triangular in plan with points or apices 5 thereof directed forwardly and bases 6 rearwardly, and are preferably spaced regularly over the entire surface of the blade, all as shown in the drawing. The blade 1 may be of any desired length and width. A length of three feet and a width of one-half foot have been found in practise to constitute very convenient dimensions.

In the use of the tool, the tie 7 is jacked up by means of a jack 8. A layer of ballast 9 is then spread along the blade 1, after which the blade is thrust lengthwise or endwise under the tie. By then shaking the tool, the ballast is caused to fall or sift evenly down through the aperture 4 onto the bed 10. After a sufficient quantity of ballast has thus been deposited under the tie, same may be very conveniently tamped back in place under the tie by reciprocating the tool endwise for this purpose. In such operation the triangular formation of the aperture 4 is of advantage, in that the bases 6 of the apertures being disposed transversely of the line of movement of the tool, serve to catch the particles of ballast and shove same forwardly upon the forward movement of the blade, whereas upon the reverse or rearward movement of the blade, those same particles will ride up over the inclined margins of the apertures. In order to facilitate such action, those inclined or converging margins may be sharpened or beveled as shown at 11, the bases 6, however, being left blunt. The arcuate forward end 3 of the blade serves to force and tamp the ballast both forwardly and laterally, so as to fill all crevices and provide a solid bearing for the tie.

While I have herein described a certain specific manner and method of constructing and assembling the elements of my invention, it is understood that I may vary from the same in minor details, not departing from the spirit of my invention, so as best to construct a practical device for the purpose intended, as defined in the appended claims.

I claim:

1. A tool for placing and locating ballast underneath the ties of a railroad track, comprising

a thin elongated blade of sufficient length to extend for a considerable distance under a railway tie, said blade being pierced with a plurality of triangular apertures through which the ballast is adapted to pass upon oscillation of the blade, and a handle secured to the rear end of the blade, said handle being offset and positioned at a higher elevation than said blade, whereby oscillation of the blade is effected.

2. A tool for placing and locating ballast underneath the ties of a railroad track, comprising a thin elongated blade of sufficent length to extend for a considerable distance under a railway tie, said blade being pierced throughout substantially its entire length with series of triangular apertures through which the ballast is adapted to pass upon oscillation of the blade, and a handle secured to the rear end of the blade, said handle being offset and positioned at a higher elevation than said blade, whereby oscillation of the blade is effected.

3. A tool for placing and locating ballast underneath the ties of a railroad track, comprising an elongated flat blade of sufficient length to extend for a considerable distance under a railway tie, said blade having series of apertures extending throughout substantially the length thereof, through which the ballast is adapted to pass upon oscillation of the blade, and a handle secured to one end of said blade and having a portion arranged at a higher elevation than the blade and extending substantially parallel to the blade, whereby oscillation of the blade is effected.

4. A tool for placing and locating ballast underneath the ties of a railroad track, comprising a thin elongated blade of sufficient length to extend for a considerable distance under a railway tie, said blade being pierced with a plurality of triangular apertures through which the ballast is adapted to pass upon oscillation of the blade, marginal edges of said apertures being beveled and terminating in sharp edges, and a handle secured to one end of said blade and having a portion arranged at a higher elevation than the blade and extending substantially parallel to the blade, whereby oscillation of the blade is effected.

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