

July 5, 1932.

W. W. WARD

1,865,807

BALLAST CUTTING SHOE FOR RAILWAY TRACKS

Original Filed April 19, 1930 2 Sheets-Sheet 1

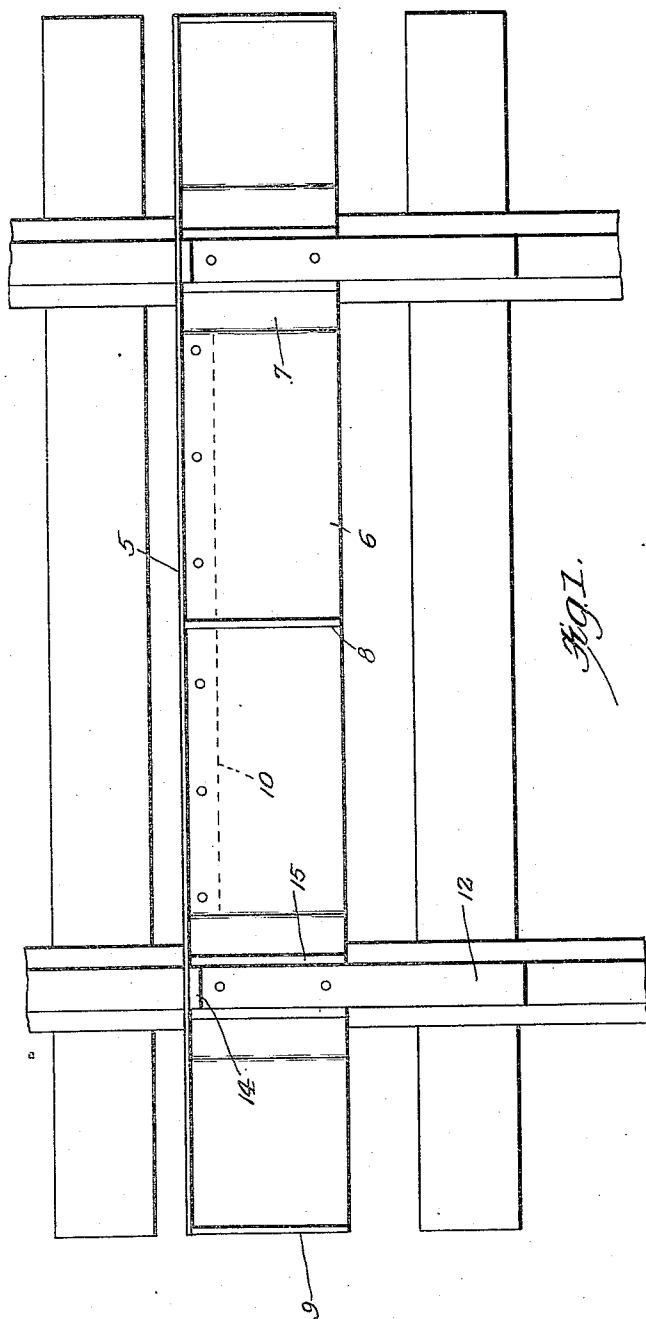


Fig. 1.

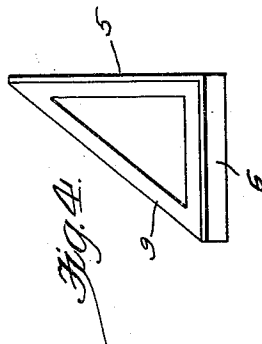


Fig. 4.

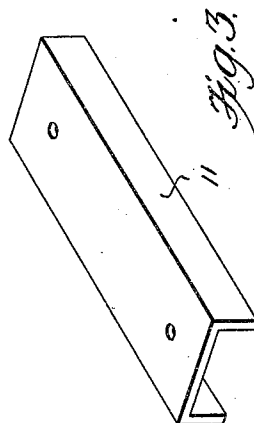


Fig. 3.

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Fig. 2.

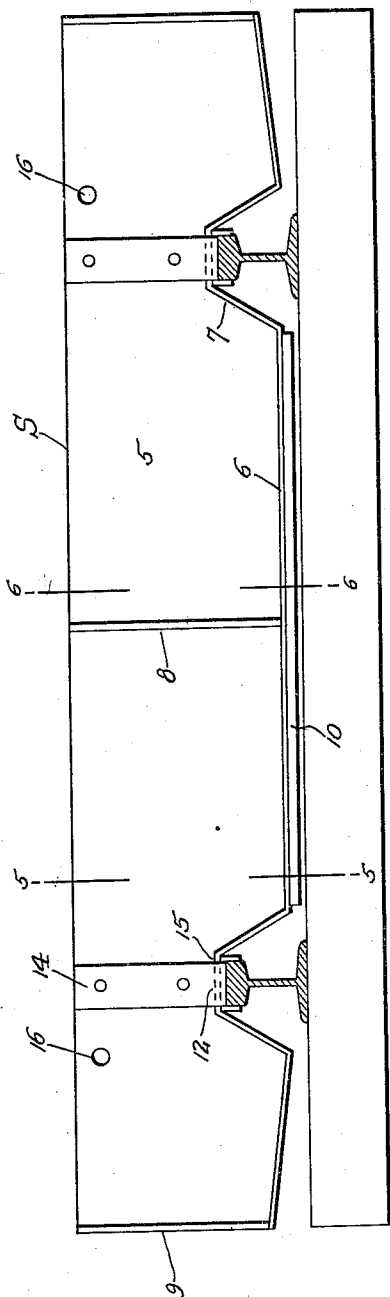


Fig. 6.

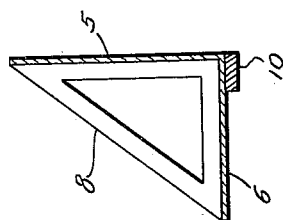
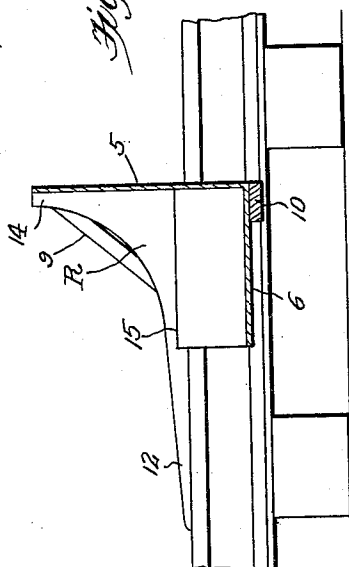


Fig. 5.



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BALLAST CUTTING SHOE FOR RAILWAY TRACKS

Application filed April 19, 1930, Serial No. 445,702. Renewed December 3, 1931.

The present invention relates to a ballast cutting shoe for railroad tracks and has for its prime object to provide means for cutting the ballast from the rails and distributing it between the rails and also making a burm on the outside of the rails if desired.

Another very important object of the invention resides in the provision of a shoe of this nature which may be adjusted to cut at any desired depth.

A still further very important object of the invention resides in the provision of a device of this nature which is simple in its construction, inexpensive to manufacture, strong and durable, efficient and reliable in operation, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawings:

Figure 1 is a top plan view of the shoe embodying the features of my invention,

Figure 2 is a rear elevation thereof,

Figure 3 is a perspective view of one of the rail slides,

Figure 4 is an end elevation of the shoe,

Figure 5 is a vertical transverse section taken substantially on the line 5—5 of Figure 2, and

Figure 6 is a vertical section taken substantially on the line 6—6 of Figure 2.

Referring to the drawings in detail it will be seen that the letter S denotes generally the shoe which may be formed of front plate 5 and a bottom plate 6 welded or otherwise secured to the under edge thereof. This bottom plate 6 has upwardly disposed portions 7 to extend over the rail and, of course, the front plate 5 is notched in conformity therewith.

A central right triangular brace 8 and a pair of end right triangular braces 9 are fixed in the shoe being welded or otherwise secured in place so as to brace the bottom in respect to the plate 5. A cutting bar 10 is secured under the bottom 6 at the front edge thereof between the portions 7. Inverted channel shaped slides 11 are riveted in the crotches of the portions 7 to rest on the rails.

These slides 11 may be riveted or otherwise secured in place. Rail receiving mem-

bers R have constructions somewhat similar to chucks. Each rail receiving member comprises a bottom arm 12 merging into an upright arm 14.

The bottom edge of the arm 12 is slightly offset as at 15 to fit on the crown of the portion 7 and to be riveted or otherwise secured thereto. The front edge of the arm 14, of course, is in abutment with the plate 5. The plate 5 has openings 16 arranged one to each side of the pair of rail receiving members R.

With this device, when ballast is placed on the railroad track, the apparatus is placed on the track with the slides on the rails and then a car is backed on to the device so that the rearmost truck wheels ride up on the rail receiving members R and then the engine pushes the device along the track. The device in its movement pushes the ballast away from the rails, distributing it between the rails and also making a burm on the outside of the rails if desired.

It is thought the construction, utility and advantages of this invention will now be quite apparent to those skilled in this art without a more detailed description thereof.

The present embodiment of the invention has been described in considerable detail merely for the purposes of exemplification since in actual practice it attains the features of advantage enumerated as desirable in the statement of the invention and the above description.

It will be apparent that changes in the details of construction, and in the combination and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described my invention, what I claim as new is:

1. A device of the class described comprising a front plate rising from the front edge of the bottom and secured thereto, said bottom having upwardly disposed portions to receive rails, slide members secured in the crotches of said portions to slide on the rails.

2. A device of the class described comprising a front plate rising from the front edge

of a bottom and secured thereto, said bottom having upwardly disposed portions to receive rails, inverted channel shaped slide members secured in the crotches of said portions to slide on the rails, and wheel receiving members secured to the tops of said portions.

3. A device of the class described comprising a front plate rising from the front edge of a bottom and secured thereto, said bottom having upwardly disposed portions to receive rails, slide members secured in the crotches of said portions to slide on the rails, and wheel receiving members secured to the tops of said portions, each member comprising an elongated bottom arm having its bottom edge offset to fit the top of said portion and an upstanding arm to abut the plate.

4. A device of the class described comprising a front plate rising from the front edge of a bottom and secured thereto, said bottom having upwardly disposed portions to receive rails, inverted channel shaped slide members secured in the crotches of said portions to slide on the rails, and wheel receiving members secured to the tops of said portions, each member comprising an elongated bottom arm having its bottom edge offset to fit the top of said portion and an upstanding arm to abut the plate, a plurality of right triangular braces between the plate and the bottom.

5. A device of the class described comprising a front plate rising from the front edge of a bottom and secured thereto, said bottom having upwardly disposed portions to receive rails, slide members secured in the crotches of said portions to slide on the rails, wheel receiving members secured to the tops of said portions, and a cutting bar fixed along the front edge of the bottom plate between said portions.

In testimony whereof I affix my signature.
WILLIAM W. WARD.